SEQUENCE LISTING

<110> BAUM, JAMES A.
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<120> METHODS FOR GENETIC CONTROL OF INSECT INFESTATIONS IN PLANTS AND COMPOSITIONS THEREOF

<130> MNDE:002US

<140> 11/522,307
<141> 2006-09-15

<150> 60/718,034
<151> 2005-09-16

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<170> PatentIn Ver. 2.1

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gttacagtag taaactccac caaacaaaag gatgaactta tcattgaagg aaactcattg 480
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<210> 21
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<212> DNA
<213> Diabrotica virgifera

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<210> 22
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<212> DNA
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gatgggcttt atgtatctg 499

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aatgaaatca acgaaattgc caacactaac tcaagacaga acatccgtaa gttgataaag 180
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tgactatatt aaaaattt 678

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<213> Diabrotica virgifera

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<210> 25
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<212> DNA
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<400> 25
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<210> 26
<211> 554
<212> DNA
<213> Diabrotica virgifera

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<212> DNA
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<210> 29
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 29

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<210> 30
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<212> DNA
<213> Diabrotica virgifera

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<212> DNA
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<210> 32
<211> 29
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<213> Diabrotica virgifera

<400> 32
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<210> 33
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 33
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<210> 34
<211> 733
<212> DNA

<213> Diabrotica virgifera

<400> 34

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<212> DNA
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<210> 36
<211> 31
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<213> Diabrotica virgifera

<400> 36
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<210> 37
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 37
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<210> 38
<211> 672
<212> DNA
<213> Diabrotica virgifera

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<212> DNA
<213> Diabrotica virgifera

<400> 40
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<210> 41
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 41
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<210> 42
<211> 684
<212> DNA
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<210> 43
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<212> DNA
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gngaagaatg aaaaaggtac cgag 864

<210> 44
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 44
caaggactat tgccagatca ttttgtcc 28

<210> 45
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 45
gatttttgt tctctttgag ttttcatttc ctc 33

<210> 46
<211> 790
<212> DNA
<213> Diabrotica virgifera

<400> 46
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cggtgtctta gaaaccctaa ataaagtttt aggttcagtt acttacttgg ttgctaaaag 180
aattactgtt gctgatttcg ttgtttttgg tagcttatat acaaacaaac actggaatga 240
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acaagaagct gttatgaaca ttttaaataa cctaccccaa gatgtagcag cttcgttgac 360
acaagcagaa aaacaagtta gtcaagagaa aaatactaat attggtaatc gaaatcaaga 420
gggaaaattt gtcgatttgc cttttgcaca ggtgggtaaa gttattgtca ggtttccacc 480
agaagcatca ggttatttgc acatcggcca cgccaaagct gcccttctca accaacacta 540
tcaggaagct ttccagggga aacttatttt acgtttcgat gatactaatc ctgccaaaga 600
aaatgtgcat tttgaaaacg ttattctgga agatgtagca atgttacaga ttaaacccga 660
catattcaca tatacctcag attactttga acttatgtta gagttatgtg aaaaaatgat 720
gaaagaagga aatgcctatg tagatgatac tgaaccagag gaaatgaaaa ctcaaagaga 780
acaaaaaatc 790

<210> 47
<211> 1491
<212> DNA
<213> Diabrotica virgifera

<400> 47
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tcaataaaga acaagacatc cttaatcttg gtgagaaata taaaaaggag ggcaaggcaa 180
aggaactcgc agagcttata aaggccacca ggccttttct tgagtttaat aagcaaagca 240
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ggtatcgaag tacaactctg caaagaatgt atagaatggg caaaggaaga gagaagaact 360
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agcgaagcgc tacaactgga atcgaccttа ctgaaagagt taaaaaagtt ggatgacaaa 480
aatttgttgg tggaagtaca actacttgaa agcaaaacat atcatgcttt aagtaattta 540
ccgaaggcta gagctgcact aacttcagca cgaaccacag ctaacgctat ctattgccct 600
ccaaagatgc aggcagcttt agatttacaa tccggagtat tacacgctgc agatgagaag 660
gatttcaaaa cagcttattc ttatttttat gaagcttttg aaggttttga tagtgttgaa 720
tccccaaaag ccctcacagc ccttaaatac atgcttttgt caaaaatcat gataaacagt 780

ccggaagacg tccaacaaat cgttagtggt aaattggcct ttaaatacgc tggtcaagat 840
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caagctgtaa aacagtttaa acatgaatta gaagatgatg ttattgttag agcacattta 960
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<210> 48
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 48
gcaaagaatg tatagaatgg gcaaaggaag agag 34

<210> 49
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 49
ggttctgctc caacatattg tcatacaacg 30

<210> 50
<211> 675
<212> DNA
<213> Diabrotica virgifera

<400> 50
gcaaagaatg tatagaatgg gcaaaggaag agagaagaac ttttctacgt cagtcccttg 60
aagccaggct gattgctctt tattttgaca ctggaatgta cagcgaagcg ctacaactgg 120
aatcgacctt actgaaagag ttaaaaaagt tggatgacaa aaatttgttg gtggaagtac 180
aactacttga aagcaaaaca tatcatgctt taagtaattt accgaaggct agagctgcac 240
taacttcagc acgaaccaca gctaacgcta tctattgccc tccaaagatg caggcagctt 300
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cttatttta tgaagctttt gaaggttttg atagtgttga atcccaaaa gccctcacag 420
cccttaaata catgcttttg tcaaaaatca tgataaacag tccggaagac gtccaacaaa 480
tcgttagtgg taaattggcc tttaaatacg ctggtcaaga tatagaggct atgaaatcag 540
ttgcacaggc tgcacacaaa agatcactag cagatttcca acaagctgta aaacagttta 600
aacatgaatt agaagatgat gttattgtta gagcacattt aggaacgttg tatgacaata 660
tgttggagca gaacc 675

<210> 51
<211> 942
<212> DNA
<213> Diabrotica virgifera

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gatatcaatt gttacacacg cgctttggaa cgatgacaga gttttagtaa ttggttaatg 180
agtttataaa tcttcgtcat catcgggcag tgcagtttct gaggcttctt taagatcctt 240
ttcgatttgt tgctgccatt ggggatccat ctggacttct ggaggaagca aggcaggtgc 300
agctacgaat tctaagttgg gatctccaat gagtttccta gccaaccaca agaagggttt 360
ttcaaagttg tagttggatt ttgcagagat gtcatagtat tgtaaattct tcttcctatg 420
gaagacaatg ctctttgcct taactttcct atctttgatg tcaactttgt taccacacaa 480
tacaattggg atattttcac aaactctaac aagatctctg tgccagtttg gaacattttt 540
gtaagtgact ctagatgtaa catcaaacat aattatggca cattgtcctt ggatgtagta 600

tccatcacgc agaccaccaa acttttcttg gcctgctgtg tcccatacgt taaaacgaat 660
ttgtcctcta tttgtgtgga aaactaaagg gtgaacttct actcctaagg ttgctacata 720
tttcttttcg aattcaccag tcatgtgtct ttttacaaag gtagttttgc cagtacctcc 780
atctccgacc aagacgcatt tgaaggtggg catatcttgt tcgccagcca tgatttttg 840
aatttaaact tgtgaataaa aagtactagg aaacaccgat ggcacaaaaa atcacggatt 900
acttcagctt ggttccaaag tcgttagagt tcacaatggc gt 942

<210> 52
<211> 22
<212> DNA
<213> Diabrotica virgifera

<400> 52
cttcgtcatc atcgggcagt gc 22

<210> 53
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 53
cgtcttggtc ggagatggag gtactg 26

<210> 54
<211> 605
<212> DNA
<213> Diabrotica virgifera

<400> 54
cttcgtcatc atcgggcagt gcagtttctg aggcttcttt aagatccttt tcgatttgtt 60
gctgccattg gggatccatc tggacttctg gaggaagcaa ggcaggtgca gctacgaatt 120
ctaagttggg atctccaatg agtttcctag ccaaccacaa gaagggtttt tcaaagttgt 180
agttggattt tgcagagatg tcatagtatt gtaaattctt cttcctatgg aagacaatgc 240
tctttgcctt aactttccta tctttgatgt caactttgtt accacacaat acaattggga 300
tattttcaca aactctaaca agatctctgt gccagtttgg aacatttttg taagtgactc 360
tagatgtaac atcaaacata attatggcac attgtccttg gatgtagtat ccatcacgca 420
gaccaccaaa cttttcttgg cctgctgtgt cccatacgtt aaaacgaatt tgtcctctat 480
ttgtgtggaa aactaaaggg tgaacttcta ctcctaaggt tgctacatat ttcttttcga 540
attcaccagt catgtgtctt tttacaaagg tagttttgcc agtacctcca tctccgacca 600
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<210> 55
<211> 763
<212> DNA
<213> Diabrotica virgifera

<400> 55
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taacaaaaca acagagtgat tttccaacaa gaataactta tttattagtt tcattaattt 120
gataaacaat aaaatggata gacttcttcg actaggaggt ggaatgccag gtttaactca 180
ggcaccgccg ccttctgatg ctcctgttgt ggatactgcc gaacaagtat acatatcctc 240
cttagcacta ttaaaaatgt tgaagcacgg ccgagctgga gtacccatgg aagtaatggg 300
tcttatgtta ggagaattcg tagatgacta taccgttcgt gtaatcgatg tatttgctat 360
gcctcagact ggtaccggtg tcagtgtaga agctgttgat ccagtttttc aagcaaaaat 420
gcttgacatg ttaagacaga ctggtaggcc agaaatggtt gtggggtggt atcattccca 480
tccaggtttc ggatgttggt tgtctggagt ggatatcaac acccagcaaa gttttgaggc 540
tctctcggaa agagctgtag cagtagtagt tgatccaatc cagtcagtga aaggcaaagt 600
cgttattgat gcctttaggt taataaatcc gaatatgatg gtattgggcc aagaaccgcg 660
ccaaactaca tccaacttag gacatctaca gaaaccatca gtccaggctt tgattcatgg 720
tctcaatcgg cattactact ccatcagtat taattacaga aag 763

<210> 56
<211> 23

<212> DNA
<213> Diabrotica virgifera

<400> 56
cgactaggag gtggaatgcc agg 23

<210> 57
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 57
caaagcctgg actgatggtt tctgtag 27

<210> 58
<211> 564
<212> DNA
<213> Diabrotica virgifera

<400> 58
cgactaggag gtggaatgcc aggtttaact caggcaccgc cgccttctga tgctcctgtt 60
gtggatactg ccgaacaagt atacatatcc tccttagcac tattaaaaat gttgaagcac 120
ggccgagctg gagtacccat ggaagtaatg ggtcttatgt taggagaatt cgtagatgac 180
tataccgttc gtgtaatcga tgtatttgct atgcctcaga ctggtaccgg tgtcagtgta 240
gaagctgttg atccagtgtt tcaagcaaaa atgcttgaca tgttaagaca gactggtagg 300
ccagaaatgg ttgtggggtg gtatcattcc catccaggtt tcggatgttg gttgtctgga 360
gtggatatca acacccagca aagttttgag gctctctcgg aaagagctgt agcagtagta 420
gttgatccaa tccagtcagt gaaaggcaaa gtcgttattg atgcctttag gttaataaat 480
ccgaatatga tggtattggg ccaagaaccg cgccaaacta catccaactt aggacatcta 540
cagaaaccat cagtccaggc tttg 564

<210> 59
<211> 1156
<212> DNA
<213> Diabrotica virgifera

<400> 59
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accgtcaaga ggatatgatt tttagtgctg aaggtattac gccagacatt atcattaatc 120
ctcacgctat cccctcccgt atgacgattg gtcacttgat cgagtgcatc caaggtaagg 180
tatcatccaa taaaggagaa atcggtgatg ctacaccttt caacgatgcc gtcaacgtac 240
agaaaatctc cactttgtta caagaatatg gttatcaact cagaggcaac gaagtaatgt 300
acaacggcca tactggacgt aagataaatg ctcagatttt cttaggacct acctattatc 360
aaagattgaa gcacatggtg gacgataaga ttcattcaag agctagagga ccgttgcaga 420
ttctcgtcag acagcctatg gagggtcgtg caagagacgg cggtctacgt ttcggtgaga 480
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aagtttccga tccttataga atccatattt gcaacttctg tggtttgata gctatcgcca 600
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ttagactgcc ttatgctgcg aaattactgt ttcaagagct aatgtcgatg aatatagcgc 720
cgagacttat ggtactgtag tgtttttaag taaataaata aatgtcctta tctaagagga 780
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tctccccccc cctccc 1156

<210> 60
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 60

gtctaggcac ggacaaaagg gaacg 25

<210> 61
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 61
gacaatctcg ttccatctca ccgaaac 27

<210> 62
<211> 677
<212> DNA
<213> Diabrotica virgifera

<400> 62
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gacgattggt cacttgatcg agtgcatcca aggtaaggta tcatccaata aaggagaaat 180
cggtgatgct acacctttca acgatgccgt caacgtacag aaaatctcca ctttgttaca 240
agaatatggt tatcaactca gaggcaacga agtaatgtac aacggccaca ctggacgtaa 300
gataaatgct cagattttct taggacctac ttactatcaa agattgaagc acatggtgga 360
cgataagatc cattcaagag ctagaggacc gttgcagatt ctcgtcagac agcctatgga 420
gggccgtgca agagacggtg gtctacgttt cggtgagatg gaacgagatt gtcaaatttc 480
acacggtgct gcacaattct taagagagag gctgtttgaa gtttccgatc cttatagaat 540
ccatatttgc aacttctgtg gtttgatagc tatcgccaat ttgcgtaaca acacctttga 600
atgtaagggt tgcaaaaata agacacagat atcgcaagtt agactgcctt atgctgcgaa 660
attactgttt caagagc 677

<210> 63
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<212> DNA
<213> Diabrotica virgifera

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ctcacgctat cccctcccgt atgacgattg gtcacttgat cgagtgcatc caaggtaagg 180
tatcatccaa taaaggagaa atcggtgatg ctacaccttt caacgatgcc gtcaacgtac 240
agaaaatctc cactttgtta caagaatatg gttatcaact cagaggcaac gaagtaatgt 300
acaacggcca tactggacgt aagataaatg ctcagatttt cttaggacct acctattatc 360
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tggaacgaga ttgtcaaatt tcacacggtg cggcacaatt cttaagagag aggctgtttg 540
aagtttccga tccttataga atccatattt gcaacttctg tggtttgata gctatcgcca 600
atttgcgtaa caacaccttt gaatgtaagg gttgcaaaaa taagacgcag atatcgcaag 660
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cgagacttat ggtactgtag tgtttttaag taaataaata aatgtcctta tctaagagga 780
ttttatattg aaataaacca ttaaaatttt cccaccacac cccaccacca ccacccacac 840
aaaccaacaa acaaaaaaaa aacaaaggaa gaaaaaacaa aacgggggggg ggcgctttaa 900
agggatccaa ggtttaaggc ccgcgggagg gggacagcct aaatcttttt ttataagggc 960
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tctccccct cctccc 1156

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<212> DNA
<213> Diabrotica virgifera

<400> 64
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<210> 65
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<212> DNA
<213> Diabrotica virgifera

<400> 65
gctcttgaaa cagtaatttc gcagcat 27

<210> 66
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<212> DNA
<213> Diabrotica virgifera

<400> 66
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gacgattggt cacttgatcg agtgcatcca aggtaaggta tcatccaata aaggagaaat 180
cggtgatgct acacctttca acgatgccgt caacgtacag aaaatctcca ctttgttaca 240
agaatatggt tatcaactca gaggcaacga agtaatgtac aacggccaca ctggacgtaa 300
gataaatgct cagattttct taggacctac ttactatcaa agattgaagc acatggtgga 360
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gggccgtgca agagacggtg gtctacgttt cggtgagatg gaacgagatt gtcaaatttc 480
acacggtgct gcacaattct taagagagag gctgtttgaa gtttccgatc cttatagaat 540
ccatatttgc aacttctgtg gtttgatagc tatcgccaat ttgcgtaaca acacctttga 600
atgtaagggt tgcaaaaata agacacagat atcgcaagtt agactgcctt atgctgcgaa 660
attactgttt caagagc 677

<210> 67
<211> 919
<212> DNA
<213> Diabrotica virgifera

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tacgtattca ccataataat ataaacgtag aaaatgaatc ccgagtatga ttatttattc 180
aaacttctgc tgattggaga ttcaggagta ggaaaatctt gtcttctact gagatttgca 240
gatgatacct acacagaaag ctatattagt accattggcg tagattttaa aatcaggaca 300
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tgcacagacc aagattcatt caataacgtt aaacaatggc tcgaagaaat cgaccgttat 480
gcgtgtgaca atgtaaacaa attactggta gggaataaaa gcgatttgac aactaagaaa 540
gttgtcgact tcactacagc caaggagtat gccgaccaat tgggtatacc atttttggaa 600
acctcagcta agaatgcaac caatgtagaa caggccttta tgactatggc cgctgaaata 660
aaaaatagag taggacctcc atcttctgcg gtagaccaag gaaataaggt taggttcgat 720
caaagtcgcc cagtcgaaac aaccaaatcc ggttgctgct gaaaatattt agtttctttt 780
ggttgaaggt ggtcactcat gtcatctctt ttgtacggta gcagcgctac agttactctt 840
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ttaaattttt tttttcaaa 919

<210> 68
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 68
caaacttctg ctgattggag attcagg 27

<210> 69
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 69
cttggtctac cgcagaagat ggagg 25

<210> 70
<211> 521
<212> DNA
<213> Diabrotica virgifera

<400> 70
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agatgatacc tacacagaaa gctatattag taccattggc gtagatttta aaatcaggac 120
aatcgattta gatggaaaga caattaaatt gcaaatttgg gatacagcag gtcaggaaag 180
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ttgcacagac caagattcat tcaataacgt taaacagtgg ctcgaagaaa tcgaccgtta 300
tgcgtgtgac aatgtaaaca aattactggt agggaataaa agcgatttga caactaagaa 360
agttgtcgac ttcactacag ccaaggagta tgccgaccaa ttgggtatac cattttgga 420
aacctcagct aagaatgcaa ccaatgtaga acaggccttt atgactatgg ccgctgaaat 480
aaaaaataga gtaggacctc catcttctgc ggtagaccaa g 521

<210> 71
<211> 755
<212> DNA
<213> Diabrotica virgifera

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gaaggcccgt ttagatcaag aattgaaaat catcggagcc tttggtctcc gaaacaaacg 180
tgaagtatgg agagtaaaat acactctagc caaaatccgt aaggccgcca gagaactgct 240
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ggttcgtatt ggagtactag acgagaacag aatgaagctc gattacgtat tgggtctcaa 360
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tgtgaacatt ccctccttca tcgtccgttt ggattcacaa aaacacatcg acttctctct 540
gaaatcacct ttgggaggcg gtcgtccagg acgtgttaag aggaagaacc tcaccaagaa 600
gagcggtggt ggaggtgcag ctgaagaaga ggaagactaa gctgtatgtc gtgctagttg 660
tactagtact tacatattaa tatacttatg tattaaaaaa aaaaaaaaaa aaaaaaaaaa 720
aaaaaagaaa aaagaaaaaa aaaaaaaaaa aaaaa 755

<210> 72
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 72
gtttagatca agaattgaaa atcatcggag c 31

<210> 73
<211> 21
<212> DNA
<213> Diabrotica virgifera

<400> 73
gcacctccac caccgctctt c 21

<210> 74
<211> 490
<212> DNA
<213> Diabrotica virgifera

<400> 74
gtttagatca agaattgaaa atcatcggag cctttggtct ccgaaacaaa cgtgaagtat 60
ggagagtaaa atacactcta gccaaaatcc gtaaggccgc cagagaactg cttactctag 120

aagagaaaga acccaaaagg ttgtttgaag gtaatgcact cctacgtcgt ttggttcgta 180
ttggagtact agacgagaac agaatgaagc tcgattacgt attgggtctc aagattgaag 240
atttcttgga aagacgtctg caaacacaag tcttcaaatc tggtctagct aagtcaatcc 300
atcatgctag ggtattgatc agacaacgac acattcgggt ccgcaaacaa gttgtgaaca 360
ttcccctcctt catcgtccgt ttggattcac aaaaacacat cgacttctct ctgaaatcac 420
ctttgggagg cggtcgtcca ggacgtgtta agaggaagaa cctcaccaag aagagcggtg 480
gtggaggtgc 490

<210> 75
<211> 857
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (818)
<223> n = a, c, g or t/u

<400> 75
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gcagacgctg atgatctatt agattatgaa gatgaggaac agacagaaca aaccgcaact 120
gaaacggcaa ctacagaggt acagaaaaag ggtgtcaagg gcacatatgt atcaatacac 180
agttctgggt ttagagattt tctgttaaaa ccagcaattc tcagagctat agtggactgc 240
gggttcgaac atccttcaga agttcaacat gaatgtattc ctcaagctgt cattggcatg 300
gatattctgt gccaagctaa atccggtatg ggaaaaacgg ctgtttttgt attagctaca 360
ctccaagtaa tagatcctac agaaaatgtt gtatatgttc tcgtcatgtg ccataccaga 420
gagttagcct tccagataag caaagagtac gaacgtttca gtaaatatat gcccaatatt 480
aaagtagggg tcttctttgg tggcttgcct atccagaaag atgaggaaac gttaaaaaat 540
aattgcccgc atatcgttgt gggtactcca ggaagaattt tagcattggt cagatcgaaa 600
aaacttaatc tcaaacatct aaagcatttt attttggatg aatgtgataa aatgttggag 660
ttattagaca tgagacgtga tgttcaagaa atatatcgta acactcccca cgaaaaacaa 720
gtcatgatgt tcagtgccac cttaagtaaa gaaattagac cagtttgcaa gaaatttatg 780
caagatccca tggaagtata tgttgacgac gaagctanat taacattgca tggtctacag 840
caacattatg taaaact 857

<210> 76
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 76
gcagacgctg atgatctatt agattatgaa gatg 34

<210> 77
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 77
cttgaacatc acgtctcatg tctaataact cc 32

<210> 78
<211> 627
<212> DNA
<213> Diabrotica virgifera

<400> 78
gcagacgctg atgatctatt agattatgaa gatgaggaac agacagaaca aaccgcaact 60
gaaacggcaa ctacagaggt acagaaaaag ggtgtcaagg gcacatatgt atcaatacac 120
agttctgggt ttagagattt tctgttaaaa ccagcaattc tcagagctat agtggactgc 180
gggttcgaac atccttcaga agttcaacat gaatgtattc ctcaagctgt cattggcatg 240
gatattctgt gccaagctaa atccggtatg ggaaaaacgg ctgtttttgt attagctaca 300
ctccaagtaa tagatcctac agaaaatgtt gtatatgttc tcgtcatgtg ccataccaga 360

gagttagcct tccagataag caaagagtac gaacgtttca gtaaatatat gcccaatatt 420
aaagtagggg tcttctttgg tggcttgcct atccagaaag atgaggaaac gttaaaaaat 480
aattgcccgc atatcgttgt gggtactcca ggaagaattt tagcattggt cagatcgaaa 540
aaacttaatc tcaaacatct aaagcatttt attttggatg aatgtgataa aatgttggag 600
ttattagaca tgagagtgat gttcaag 627

<210> 79
<211> 847
<212> DNA
<213> Diabrotica virgifera

<400> 79
cccacgcgtc cgtatctaac caggcagcta aattaaacaa ctttactgat aatgcagaac 60
tgtggctctt aaactacgaa gacgatactt tcaaagacca agtacaagct ttatgggagc 120
aagtgaagcc tttataccta gaacttcacg cctatgtgag gttcaagcta agacaaaaat 180
acggagatgt tgtcccggag aaaggaccta ttcctgctca tttgttagga aatatgtggg 240
cacaaacatg gaacaatatt gcaagcttca cattaccata tccagatgtt gttgattatg 300
atataactgc agaaatgttg aaacagaact tcacagcgaa gaagatattt gaaacggccg 360
aaagtttttt caagtccatc aatttaacag ctatgcccga tctgttctgg cagagatcaa 420
tcatagagaa gccgaaggat agggaaatcg tttgtcatgc ctcagcctgg gacttctacg 480
atggaaagga cttcaggatc aaaatgtgta ctgacgttaa ttatgaggat atgaacacag 540
ctcaccacga aatgggacac atagagtact ttttacagta ccgcaatcag cctactccat 600
accggactgg agctaatgat ggattccacg aagctgttgg agacctgatt tctttatcat 660
tcagttccac caaacatttg cggaaaattg gactaataac atccaaagct gataacaatg 720
aacagcttct caacaactta tacaagattg gtttagaaaa aatcgcattc ttgccatttc 780
gatacttgat cgacttgtgc cgatgggata tctttgcacg aaaaactact cctgaaaact 840
accaact 847

<210> 80
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 80
gcgtccgtat ctaaccaggc agc 23

<210> 81
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 81
ggtggaactg aatgataaag aaatcaggtc 30

<210> 82
<211> 666
<212> DNA
<213> Diabrotica virgifera

<400> 82
gcgtccgtat ctaaccaggc agctaaatta aacaacttta ctgataatgc agaactgtgg 60
ctcttaaact acgaagacga tactttcaaa gaccaagtac aagctttatg ggagcaagtg 120
aagcctttat acctagaact tcacgcctat gtgaggttca agctaagaca aaaatacgga 180
gatgttgtcc cggagaaagg acctattcct gctcatttgt taggaaatat gtgggcacaa 240
acatggaaca atattgcaag cttcacatta ccatatccag atgttgttga ttatgatata 300
actgcagaaa tgttgaaaca gaacttcaca gcgaagaaga tatttgaaac ggccgaaagt 360
tttttcaagt ccatcaattt aacagctatg cccgatctgt tctggcagag atcaatcata 420
gagaagccga aggataggga aatcgtttgt catgcctcag cctgggactt ctacgatgga 480
aaggacttca ggatcaaaat gtgtactgac gttaattatg aggatatgaa cacagctcac 540
cacgaaatgg gacacataga gtacttttta cagtaccgca atcagcctac tccataccgg 600
actggagcta atgatggatt ccacgaagct gttggagacc tgatttcttt atcattcagt 660
tccacc 666

<210> 83
<211> 928
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (750)..(835)
<223> n = a, c, g or t/u

<400> 83
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tatcaagata gaggatactt tgaagaatta atcggcctat tggaagcagc attgggcttg 120
gaaagggcac acatgggtat gttcaccgaa ttagcaattt tgtattccaa atacaagccc 180
gccaaaatgc gcgaacatct ggaactcttc tggtctcgag tgaatatccc caaagttctt 240
agggcagctg aacaagcaca tttgtgggca gagttagtgt ttttgtatga caaatatgaa 300
gaatatgata acgctgtgtt agccatgatg gctcatccca ccgaagcttg gcgcgaaggt 360
catttcaagg atattattac aaaagttgcc aatatcgaac tttattatag agctattcaa 420
ttttacttgg attacaaacc gctgttgtta aatgaccttt tgttggtgtt ggcacccagg 480
atggatcata ctagggctgt ttctttcttt acaaaaacag gacacttaca gttggttaaa 540
tcctatctcc ggtctgtgca aaatttgaac aacaaagcta tcaacgaggc cctcaactct 600
ctacttatcg aagaagaaga cttccagggt ctgagaacgt ccatcgacgc cttcgataac 660
ttcgacaaca tcggcttggc tcagaaattg gagaagcacg aactgacgga gttcagacgc 720
atcgccgcct acttgtacaa aggcaacaan ccggtggaag cagagcgtag aactgtgcaa 780
aaaggataga ctatttagag acgctatgga gtacacttct gaatctagaa atcangaaat 840
tgccgaaaga gtgctggcat gggtcttgga taggaaggcc tatgattgtt tttcggcatg 900
tttgtatccc tgctacgact tgttacgg 928

<210> 84
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 84
gcacatcgtc gtacacgctg atgag 25

<210> 85
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 85
cgtgcttctc caatttctga gccaag 26

<210> 86
<211> 686
<212> DNA
<213> Diabrotica virgifera

<400> 86
gcacatcgtc gtacacgctg atgagttgca agatttgatt aattattatc aagatagagg 60
atactttgaa gaattaatcg gcctattgga agcagcattg ggcttggaaa gggcacacat 120
gggtatgttc accgaattag caattttgta ttccaaatac aagcccgcca aaatgcgcga 180
acatctggaa ctcttctggt ctcgagtgaa tatccccaaa gttcttaggg cagctgaaca 240
agcacatttg tgggcagagt tagtgttttt gtatgacaaa tatgaagaat atgataacgc 300
tgtgttagcc atgatggctc atcccaccga agcttggcgc gaaggtcatt tcaaggatat 360
tattacaaaa gttgccaata tcgaacttta ttatagagct attcaatttt acttggatta 420
caaaccgctg ttgttaaatg acctttttgtt ggtgttggca cccaggatgg atcatactag 480
ggctgtttct ttctttacaa aaacaggaca cttacagttg gttaaatcct atctccggtc 540
tgtgcaaaat ttgaacaaca aagctatcaa cgaggccctc aactctctac ttatcgaaga 600
agaagacttc cagggtctga gaacgtccat cgacgccttc gataacttcg acaacatcgg 660
cttgtctcag aaattggaga agcacg 686

<210> 87
<211> 999
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (743)..(827)
<223> n = a, c, g or t/u

<400> 87
aaaaacgaag aaagtacgtt aatatggttc cagggctcca acaagacgag ctattcttac 60
tgggtcgaga acattttaaa atttttggat aagtactacg ttcccagcaa aatagctaaa 120
ggaaatggcc aaattaaaac atgctctcat cacgactatc ctactagtgg agaagtatgc 180
gaagtcgatg tcagagattg ggaagaatgc aacagggatc aattctttaa ttatcacaag 240
aattctccat gtatttttat taaattgaac aaaatatata actgggagcc aatgtattac 300
gatgatccat acgatttacc tgaggaaatg ccggataatc tgaagcaaca tataaggggt 360
atcaacaata ctagagagtt gagaaacgtt tgggtctcat gtcaaggaga aaatcctgct 420
gatgtagaat acttgggccc cattacatac tatccccgaa gcgtacaggg cttccctggt 480
tactatttte cgtacttgaa ctctgaaggt tacctaagtc ctttagtagc agttaaattt 540
gaaagaccag tggctggtat cgttattaac gtagagtgca gagcctgggc aaggaacata 600
ctttacaaca gagccgatag aacgggctct gtgcatttcg agctgctaat tgattaaata 660
ttattttacc caattggaca atagaagaat ccttcaggac tttttaattc aaatattata 720
tagtaataga aatgttgcct tanaatangg ggcttttata aaatagccga tcgatcacat 780
anagtaagct ataagaagta cattccaata tgaaccaccc ataccanata tttttataca 840
ttttataaat ttatataact tttttaatct tactgaaata tccttttggc atccattgtt 900
gcaatttttg tttctagatt aaaatatatt gggttccata ttatttttaa agggatgaat 960
aatttttgga aaagaaaaaa atttttgttt tggtggggg 999

<210> 88
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 88
gaagaaagta cgttaatatg gttccagggc tc 32

<210> 89
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 89
gtatgttcct tgcccaggct ctgc 24

<210> 90
<211> 595
<212> DNA
<213> Diabrotica virgifera

<400> 90
gaagaaagta cgttaatatg gttccagggc tccaacaaga cgagctattc ttactgggtc 60
gagaacattt taaaattttt ggataagtac tacgttccca gcaaaatagc taaaggaaat 120
ggccaaatta aaacatgctc tcatcacgac tatcctacta gtggagaagt atgcgaagtc 180
gatgtcagag attgggaaga atgcaacagg gatcaattct ttaattatca caagaattct 240
ccatgtattt ttattaaatt gaacaaaata tataactggg agccaatgta ttacgatgat 300
ccatacgatt tacctgagga aatgccggat aatctgaagc aacatataag gggtatcaac 360
aatactagag agttgagaaa cgtttgggtc tcatgtcaag gagaaaatcc tgctgatgta 420
gaatacttgg gccccattac atactatccc cgaagcgtac agggcttccc tggttactat 480
tttccgtact tgaactctga aggttaccta agtcctttag tagcagttaa atttgaaaga 540
ccagtggctg gtatcgttat taacgtagag tgcagagcct gggcaaggaa catac 595

<210> 91
<211> 1560

<212> DNA
<213> Diabrotica virgifera

<400> 91
cggacgcgtg ggaaacacat ggatttcgtc gtctcgtcat aagttgaaat acaagtgaaa 60
atatttgtga tatttagttt tagtgtgcca aaataaaaat ggatgacgac caacaatttt 120
gtttacggtg gaacaaccat caatcgacat tggtagccgt ttttgacacg ttattggaga 180
acggcacatt agtagactgt actttggcag cagaaggaaa atgcctaaac gcacacaaag 240
tagttttgtc tgcatgtagt ccatacttcg aggcgctgct gtcaaagcac tttgacaagc 300
atcccattct tattcttaag gacgttaagt tccaagaact aaaagccatg atggactata 360
tgtacagggg ggaagtgaac atatctcaag atcaattagg cgcgctttta aaagccgctg 420
aatctttgca aattaagggt ttatcagaca ataggaaagg ggaaactgaa cgaaaaccca 480
ctcctgctcc tccaccaaag agcccacagc caacgaccct gccgaaggtc cagggtttga 540
caattgagca aagagctcgg gaggattcca gggagggaag catgtcacca gggcctcgaa 600
aaaagaaaag gttaaggcgg aaaagtgagg aattagacaa ccacgatgcc tctaattctt 660
cagaatctca cagtctaccc gcccaaagca ttcctacgtt acctgctatt tcaaaaatga 720
acatgaacgc cgatgtgcct gaacaaatag aaactaaatc agagatactc acaaggcata 780
aacagacaga tgacatgccc caagttccta ttataaaaga aaagattgaa acccacacag 840
aactgatgtt ggaaccaaag tctgaatatg tagaagaaat gaatgaagat agtattgagg 900
atttgacact ggatgatgac gatttaagta atatggaaca ggtagatgat caagcaggac 960
ctagtcatgg agcaggagaa ggatcaagtc aaggttttgg aggttggcat atgggtaacc 1020
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caatggtagt tgttgaagtt ctttacagta gacaagtttc attcacttgc aagtggtatg 1260
gcaaaattta acaccctgac ttccagtctc tggtttaaca ttttatttta ttttacctaa 1320
cgggtagtcc ttggtttctc ctgttgctta acacttagct ttttatttta ctagatgtag 1380
tagtagttat ttttggtttt acccatcacc tttctccctc cctcaagatt gacagcactc 1440
cttcatcaat ttttcatttg gaggtaccag ccagccctac aggtcaaccc aaaaccacta 1500
gtattttaaa tctaaattgt tttgagagaa gtttcataga tgatacctta ctattaataa 1560

<210> 92
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 92
cgtgggaaac acatggattt cgtc 24

<210> 93
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 93
ggaacttggg gcatgtcatc tgtc 24

<210> 94
<211> 802
<212> DNA
<213> Diabrotica virgifera

<400> 94
cgtgggaaac acatggattt cgtcgtctcg tcataagttg aaatacaagt gaaaatattt 60
gtgatattta gttttagtgt gccaaaataa aaatggatga cgaccaacaa ttttgtttac 120
ggtggaacaa ccatcaatcg acattggtag ccgtttttga cacgttattg gagaacggca 180
cattagtaga ctgtactttg gcagcagaag gaaaatgcct aaacgcacac aaagtagttt 240
tgtctgcatg tagtccatac ttcgaggcgc tgctgtcaaa gcactttgac aagcatccca 300
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gggggaagt gaacatatct caagatcaat taggcgcgct tttaaaagcc gctgaatctt 420
tgcaaattaa gggtttatca gacaatagga aaggggaaac tgaacgaaaa cccactcctg 480
ctcctccacc aaagagccca cagccaacga ccctgccgaa ggtccagggt ttgacaattg 540
agcaaagagc tcgggaggat tccagggagg gaagcatgtc accagggcct cgaaaaaaga 600
aaaggttaag gcggaaaagt gaggaattag acaaccacga tgcctctaat tcttcagaat 660
ctcacagtct acccgcccaa agcattccta cgttacctgc tatttcaaaa atgaacatga 720

acgccgatgt gcctgaacaa atagaaacta aatcagagat actcacaagg cataaacaga 780
cagatgacat gccccaagtt ca 802

<210> 95
<211> 1412
<212> DNA
<213> Diabrotica virgifera

<400> 95
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tcgctggcgg ttggattgtc gtttgcagtc gagtttgttt ttgggttctt gctctgtgaa 120
ttgtttttgt tcctcacgaa ttttggcctc cgaccatacg gataacgttg ggggctaggt 180
ttaggttttg gctgaattgc tttcttttca ggatcaaaga aatgatctaa gatatccaac 240
agctcttcca gatctttatc ctttgcattt gctacctcac tcttaataac tttttccaaa 300
ccatccttgg cgtcagaatc ataagcgatt ttaagtttgt cataattaat gttgttctct 360
gccaaaagtc tccttaaatg gctcgcgtgc tgcctctcag ttcgactggc ccgtaacagt 420
gctccaaaca ctggccggaa tgtattttgt ctttctaata ataccttaaa aagagctatt 480
tcctcttcct cagcatctat aggattgaca tatggacata ccacttccat gagatgactt 540
tctgttccag tacaatcttt actggctgcc tctcccttta attcctctct ttccccttga 600
gctaaatgag cagcaatatc aaatgaagcc cttgctctat ctactgcact gttgaagtgc 660
tctgcacccc tgtttaacaa taccttagac attatatgga gattgaaaga tttcgtggtg 720
ttgccacatt ttgcttgggc tatattgaag ccattagcaa agccttttac caccttttgg 780
aacctttcaa tcatattatg tcttcttaat gattctaaca gcatccccgg tgaggctttg 840
cgaagttcat aataaatcaa tataattcca tcaacgtcat ttcctttaac agtctccaac 900
catttcaaga agtcttggag agcagaaatt tcactcttgg tcttcaagaa ttcctgggtg 960
ttgacatctt tcaaccttct gtagcggatt gtgtttacta ctctgatacc atgtcttctg 1020
ctgtaggtag gattcaaatc tccaaatggc atgacatact gtgaaaactg tgattcaggt 1080
gtaaacgcag ctatttgaat gatttcatca attagtctgc ggccagtagt atctataccc 1140
catcctacaa gcttgtattt tccagtagga ataccctttg ctggattttc aggaacaact 1200
ggcactgaac tctccctctc atcaccagag tttgcactct ccttctgcac catcataaat 1260
tatttattat cacaaaaggc tggccaaaat aaattttata ccatcacttt tccaaaactt 1320
ataatgacaa tacaaaatta attattcata aaaaataaca attgcaatcg gaatttataa 1380
ataaaaattc aaagaaaatt ccgaaacaca cg 1412

<210> 96
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 96
gcaggttgtt cagattcgct tcg 23

<210> 97
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 97
ggtggtaaaa ggctttgcta atggc 25

<210> 98
<211> 750
<212> DNA
<213> Diabrotica virgifera

<400> 98
gcaggttgtt cagattcgct tcgaggagaa gaatcgtcgc tggcggttgg attgtcgttt 60
gcagtcgagt ttgtttttgg gttcttgctc tgtgaattgt ttttgttcct cacgaatttt 120
ggcctccgac catacggata acgttggggg ctaggtttag gttttggctg aattgctttc 180
ttttcaggat caaagaaatg atctaagata tccaacagct cttccagatc tttatccttc 240
gcatttgcta cctcactctt aataactttt tccaaaccat ccttggcgtc agaatcataa 300
gcgattttaa gtttgtcata attaatgttg ttctctgcca aaagtctcct taaatggctc 360
gcgtgctgcc tctcagttcg actggcccgt aacagtgctc caaacactgg ccggaatgta 420
ttttgtcttt ctaataatac cttaaaaaga gctatttcct cttcctcagc atctatagga 480

ttgacatatg gacataccac ttccatgaga tgactttctg ttccagtaca atctttactg 540
gctgcctctc cctttaattc ctctctttcc ccttgagcta aatgagcagc aatatcaaat 600
gaagcccttg ctctatctac tgcactgttg aagtgctctg cacccctgtt taacaatacc 660
ttagacatta tatggagatt gaaagattta gtggtgttgc cacattttgc ttgggctata 720
ttgaagccat tagcaaagcc ttttaccacc 750

<210> 99
<211> 441
<212> DNA
<213> Diabrotica virgifera

<400> 99
ggaaaagaag atcaaagtat atttaaaata gctaaaaggg attcgccgac gaagacaata 60
gtctcggatt tgaagcctgg tacaaggtat agattgtggt tggaggttta cttgactaat 120
ggaaaaatta agactagtaa cgtacaagat tttatcacca agcccagaac tgcaccgtcg 180
ttgggcgcat caacacaaca agataaactc tccagagcgg agcatcttga acccaaagga 240
gactactatg gtcctctagt cattgtagca atattagcag cgattgccat attgagtact 300
ttggtactat tactgatttt gattcgacga cataatcaaa acaaggctgc catcacacca 360
ccatctcgaa tcaatcagtc tgcttatgat aatccttcat ataaggttga aatacaacag 420
gaaacaatgg gtaaaggttt t 441

<210> 100
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 100
gattcgccga cgaagacaat agtctc 26

<210> 101
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 101
ctttacccat tgtttcctgt tgtatttcaa cc 32

<210> 102
<211> 396
<212> DNA
<213> Diabrotica virgifera

<400> 102
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tggaggttta cttgactaat ggaaaaatta agactagtaa cgtacaagat tttatcacca 120
agcccagaac tgcaccgtcg ttgggcgcat caacacaaca agataaactc tccagagcgg 180
agcatcttga acccaaagga gactactatg gtcctctagt cattgtagca atattagcag 240
cgattgccat attgagtact ttggtactat tactgatttt gattcgacga cataatcaaa 300
acaaggctgc catcacacca ccatctcgaa tcaatcagtc tgcttatgat aatccttcat 360
ataaggttga aatacaacag gaaacaatgg gtaaag 396

<210> 103
<211> 2859
<212> DNA
<213> Diabrotica virgifera

<400> 103
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gtcaccgccg tcgacaccat ccacaccgtc ggcgccaccg tcgcttccaa ccaattcgaa 180
gacttgcatt gaccactgca cgtgcagctt tggaatgctg accaataggc tgcaggtaac 240
caaatgcgat aggcctctag tacttaacga cgccactttt aagtacatta gcaagacctc 300
aacgaacgtc atcacccttg acaatttgat catcaaccag atccaagtta gtgcattcgc 360

cgggttcaag aatcttgacg atgtcatcat taccaacacg agaattgcga ctatagatgt 420
gaaagccttc gagaatgtga cgcgcctaaa gttctccaaa tgtgcctttg aagacagtcc 480
tgacctcttc tctacaaagt tggaggaggt gcattttggt gaatgcaaat tagaagaaat 540
tcccaatcta aatggactga tcaatctaac gttttaaaat ttatcgggaa attacattaa 600
aaacattgaa gttgaagctt tcgctgaact gtttgatcta ggagagcttc atctttccga 660
caataacatc tacaaactcc cacctactgc gtttattaat aaccaagaat taatcaccct 720
taacctcgac aacaaccccc ttaaacattt taacattaat acatccgaca gtttagagat 780
attgtcactt aagaattgcc aattagagac atttgacgaa gaatcaacaa aaaaattaac 840
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gtcccacatg caggatcttt cagtaattga cctttcttac aataagttga ctaaacttca 960
agataatatt ttctctggaa acggtaaact catcaaagtt atcttagatg gaaacaattt 1020
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gcttatagta tagaaaaata ttgttaagcc acagattaag caggtattgt ttgccatatg 2760
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gtaatcaaaa tgttttcaat aaatttttta tcggaaaaa 2859

<210> 104
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 104
catcttctta gagatattga cgccagaaat gc 32

<210> 105
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 105
cagacccact gtgtttcttt tgacctg 27

<210> 106
<211> 736
<212> DNA
<213> Diabrotica virgifera

<400> 106

catcttctta gagatattga cgccagaaat gctactctaa caaaattgtg gtccaactac 60
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accaacgatg atttcaacat catgcccaaa ttagaggcaa tagaattgga agacaatcct 180
ttagtgtttg atgagaagtt atgtatgtta ttatactttt tagatcttca aggcattact 240
cctatcgatt atagcaagaa tatatatacc ggagctgata aggcttttag ggaagacatt 300
gatgattttg taaccattga atggaaagat gttcataaag gtaaatgtcc tgaacatatt 360
actgagtctg ctttacctga actaactcgc atagataaca aaactacgta taaaactatt 420
gacaaaattg agaaagaaga ttatgaggaa gacgatgacg acgacgatag cgattctgat 480
gaatacgacg atgaatacta cgacgaagaa acgactacta agttccaaga cacatctctt 540
gctagagcca cttacatctt gccagtaact tcagtatttg tattaagtgc tttagtagta 600
ctgaccatag ctgttacctt aactctatgc attctgcgca gaaacaaccg ctttgacatg 660
caacgagcta acttaccaag gctgaaaatt cctctttgga atacaactcc aggtcaaaag 720
aaacacagtg ggtctg 736

<210> 107
<211> 2859
<212> DNA
<213> Diabrotica virgifera

<400> 107
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gtcaccgccg tcgacaccat ccacaccgtc ggcgccaccg tcgcttccaa ccaattcgaa 180
gacttgcatt gaccactgca cgtgcagctt tggaatgctg accaataggc tgcaggtaac 240
caaatgcgat aggcctctag tacttaacga cgccactttt aagtacatta gcaagacctc 300
aacgaacgtc atcacccttg acaatttgat catcaaccag atccaagtta gtgcattcgc 360
cgggttcaag aatcttgacg atgtcatcat taccaacacg agaattgcga ctatagatgt 420
gaaagccttc gagaatgtga cgcgcctaaa gttctccaaa tgtgcctttg aagacagtcc 480
tgacctcttc tctacaaagt tggaggaggt gcattttggt gaatgcaaat tagaagaaat 540
tcccaatcta aatggactga tcaatctaac gtttttaaat ttatcgggaa attacattaa 600
aaacattgaa gttgaagctt tcgctgaact gtttgatcta ggagagcttc atctttccga 660
caataacatc cacaaactcc cacctactgc gtttattaat aaccaagaat taatcaccct 720
taacctcgac aacaaccccc ttaaacattt taacattaat acatccgaca gtttagagat 780
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gcttatagta tagaaaaata ttgttaagcc acagattaag caggtattgt ttgccatatg 2760
tacctaatat cagcagcatt cagctcttct taatatctgt aaactatcta atttctagtt 2820

gtaatcaaaa tgttttcaat aaatttttta tcggaaaaa 2859

<210> 108
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 108
cgacgccact tttaagtaca ttagcaagac 30

<210> 109
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 109
ctaagataac tttgatgagt ttaccgtttc cag 33

<210> 110
<211> 740
<212> DNA
<213> Diabrotica virgifera

<400> 110
cgacgccact tttaagtaca ttagcaagac ctcaacgaac gtcatcaccc ttgacaattt 60
gatcatcaac cagatccaag ttagtgcatt cgccgggttc aagaatcttg acgatgtcat 120
cattaccaac acgagaattg cgactataga tgtgaaagcc ttcgagaatg tgacgcgcct 180
aaagttctcc aaaagtgcct ttgaagacag tcctgacctc ttctctacaa agttggagga 240
ggtgcatttt ggtgaatgca aattagaaga aattcccaat ctaaatggac tgatcaatct 300
aacgttttta aatttatcgg gaaattacat taaaaacatt gaagttgaag ctttcgctga 360
actgtttgat ctaggagagc ttcatctttc cgacaataac atccacaaac tcccacctac 420
tgcgtttatt aataaccaag aattaatcac ccttaacctc gacaacaacc cccttaaaca 480
ttttaacatt aatacatccg acagtttaga gatattgtca cttaagaatt gccaattaga 540
gacatttgac gaagaatcaa caaaaaaatt aacttctctt aatgaattaa acctaagtca 600
caacaatctt acagacatat tcagtaaagc attgtcccac atgcaggatc tttcagtaat 660
tgacctttct tacaataagt tgactaaact tcaagataat attttctctg gaaacggtaa 720
actcatcaaa gttatcttag 740

<210> 111
<211> 464
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (313)..(407)
<223> n = a, c, g or t/u

<400> 111
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atatttttga aattcaataa aattagaaaa ttaaactgta ctctggatga tttacgaaaa 120
gcaattagca agtcggatat gatagaacta tcagaatgca aagaaagaat aaagagaaag 180
atgcctataa aaattaatga aaatgtagac aattgtacaa tatatgttga aaatattaaa 240
gccgatgcta accatgagtg ggtttcacag atattttcag aatttggaaa tgtggtttat 300
gtttccatac canaatacag acataatana acaaacaaag gttttgcttt tgttgagttc 360
gaagatgaag ctggtgctaa aaatgctctt acatactttg agagtantgg gtgtaaaatg 420
ccatcagaaa caaacccgga gaaattaaag agtatcagac attc 464

<210> 112
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 112
ctctggatga tttacgaaaa gcaattagca 30

<210> 113
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 113
ggtttgtttc tgatggcatt ttacacc 27

<210> 114
<211> 336
<212> DNA
<213> Diabrotica virgifera

<400> 114
ctctggatga tttacgaaaa gcaattagca agtcggatat gatagaacta tcagaatgca 60
aagaaagaat aaagagaaag atgcctataa aaattaatga aaatgtagac aattgtacaa 120
tatatgttga aaatattaaa gccgatgcta accatgagtg ggtttcacag atattttcag 180
aatttggaaa tgtggtttat gtttccatac caaaatacag acataataaa acaaacaaag 240
gttttgcttt tgttgagttc gaagatgaag ctggtgctaa aaatgctctt acatactttg 300
agagtattgg gtgtaaaatg ccatcagaaa caaacc 336

<210> 115
<211> 968
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (922)
<223> n = a, c, g or t/u

<400> 115
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tttttgtagt tgttgtgata tcaaaatgag gcgtactttt ggattactgc tagtttttct 120
aggattgtgg acattgtgta tagcacaaac ggaatattgt atgaccccaa ggcaggaagg 180
aggagattgc aaaataatta cacaatgtcc aagtttattt aaaatttaa aaaatcgtcc 240
tattagatct gaggacgcgg attatttaag aaaatcacaa tgtggtttcg aggggacgtt 300
accaaaagtg tgctgtgctc tgcaagaaac tgttcaaact accacgcagc gtcaagtaga 360
atatgacacc cctaaacctg cagatagtcc cctgttacca tcaaaagaag actgcggtat 420
tggaagtata ccagacaaaa tttatggagg taatacaacg gatctcgatg aatttccatg 480
gatggccctc cttgattacg aaaaagataa tggtaatcac ggattttatt gtggaggagt 540
actaattaac tcacggtata tacttacagc agctcattgt gtcaaaggaa aagatttacc 600
aagaaattgg aaactagttg gcgttaggct tggagaatat aatttagaaa cagacacaga 660
ctgtgtacaa acagtaagtg gtcaaaaatg tgcacctcct ccagttaatg ttgctgtaga 720
agaacaaatt gcccatgagc agtacaagcc ctacgatcaa aaccaatacc atgacattgc 780
cttacttaga cttgcaagaa atgtaaaaat taccggattt gttagaccca tctgtcttcc 840
aaaaactgct gatgatcaat ctagaaacta cacagggcaa aaactaacag ttgctggatg 900
gggtaaaacg gaacacgatc gnaaagtaac ataaaactca aactagatgt accaagtaaa 960
gctaatac 968

<210> 116
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 116
caaggcagga aggaggagat tgc 23

<210> 117
<211> 29

<212> DNA
<213> Diabrotica virgifera

<400> 117
gatcatcagc agtttttgga agacagatg 29

<210> 118
<211> 690
<212> DNA
<213> Diabrotica virgifera

<400> 118
caaggcagga aggaggagat tgcaaaataa ttacacaatg tccaagttta tttaaaattt 60
taaaaaatcg tcctattaga tctgaggacg cggattattt aagaaaatca caatgtggtt 120
tcgaggggac gttaccaaaa gtgtgctgtg ctctgcaaga aactgttcaa actaccacgc 180
agcgtcaagt agaatatgac acccctaaac ctgcagatag tcccctgtta ccatcaaaag 240
aagactgcgg tattggaagt ataccagaca aaatttatgg aggtaataca acggatctcg 300
atgaatttcc atggatggcc ctccttgatt acgaaaaaga taatggtaat cacggatttt 360
attgtggagg agtactaatt aactcacggt atatacttac agcagctcat tgtgtcaaag 420
gaaaagattt accaagaaat tggaaactag ttggcgttag gcttggagaa tataatttag 480
aaacagacac agactgtgta caaacagtaa gtggtcaaaa atgtgcacct cctccagtta 540
atgttgctgt agaagaacaa attgcccatg agcagtacaa gccctacgat caaaaccaat 600
accatgacat tgccttactt agacttgcaa gaaatgtaaa aattaccgga tttgttagac 660
ccatctgtct tccaaaaact gctgatgatc 690

<210> 119
<211> 542
<212> DNA
<213> Diabrotica virgifera

<400> 119
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cccgaaaatg gaggtatata cagatgcttg gccgacaatg gcttaaagga acccagtcac 120
aaacacatcg ccataaacat tgaacatgca ccaaagatct caatttccaa gtacctagta 180
acatctaaca aagaaagaga tgccgaatta gtgtgtactg tagatgccta cccagatgca 240
atggtttttt ggaaaaaagg tgaccaaatc atgaaaaacg acgagaccag gaaagttatg 300
actaagagaa gacagcacac cattgaaagc atttttgtca tcaccaatct gactgacgat 360
gacttcggta cctatacttg tgtgggcaag aatagaaatg gtaagaaaga agagaaagtg 420
agcttagtga aaactcctgc agttagggat ttcatcaaac ctgtaaatgt cagcaaagac 480
gtacttttgt cgtggaaagt tgaatcgaaa tcgcccatat cagcacatga aattcagtac 540
ag 542

<210> 120
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 120
cacaaaggaa acgaaagact ggaacttc 28

<210> 121
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 121
cacaaaggaa acgaaagact ggaacttc 28

<210> 122
<211> 542
<212> DNA
<213> Diabrotica virgifera

<400> 122
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cccgaaaatg gaggtatata cagatgcttg gccgacaatg gcttaaagga acccagtcac 120
aaacacatcg ccataaacat tgaacatgca ccaaagatct caatttccaa gtacctagta 180
acatctaaca aagaaagaga tgccgaatta gtgtgtactg tagatgccta cccagatgca 240
atggtttttt ggaaaaaagg tgaccaaatc atgaaaaacg acgagaccag gaaagttatg 300
actaagagaa gacagcacac cattgaaagc atttttgtca tcaccaatct gactgacgat 360
gacttcggta cctatacttg tgtgggcaag aatagaaatg gtaaggaaga agagaaagtg 420
agcttagtga aaactcctgc agttagggat ttcatcaaac ctgtaaatgt cagcaaagac 480
gtacttttgt cgtggaaagt tgaatcgaaa tcgcccatat cagcacatga aattcagtac 540
ag 542

<210> 123
<211> 2449
<212> DNA
<213> Diabrotica virgifera

<400> 123
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tccacaaata tgtcgaaagt aaggatcgga gatgaagaga aggaagggca gtatggttat 120
gtccatgctg tctcaggtcc agtcgttact gctgagaaaa tgtctggttc tgctatgtac 180
gaactggtac gtgtcggata ctatgagctg gtaggagaaa tcattagatt ggaaggtgac 240
atggctacta ttcaggtata cgaagaaaca tcaggtgtaa ctgttggtga tccagtatta 300
agaactggta aaccactttc agtagaactt ggacctggta ttatgggttc catttttgat 360
ggtatccaac gtccattgaa agacatttgt gacgctactg atagtattta catccccaag 420
ggtattaacg taccttcttt atcgagaaca gcaaaatggg acttcaaccc aatcaacatc 480
aagttgggat ctcacttaac tggaggtgat atatatggtc tagttcatga aaacaccctt 540
gtcaaacaca aaatgattct gcctcctaga gctaagggta ctgtaaccta cattgcagaa 600
ccaggaaact acactgttga tgaagtagta ttggaaactg aatttgatgg tgatcgtacc 660
aaatatacta tgttgcaagt atggcctgta cgtcaagcaa ggccagtcag tgaaaaatta 720
cctgccaacc atcctctgct tacaggacag cgtgtacttg atgctctttt cccatgtgta 780
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aacgaaatgt ctgaagtatt gagagatttc cctgaattga ctgttgaaat tgacgggcac 960
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<210> 124
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 124

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<210> 125
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 125
caagtacacg ctgtcctgta agcagagg 28

<210> 126
<211> 742
<212> DNA
<213> Diabrotica virgifera

<400> 126
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ccagtcgtta ctgctgagaa aatgtctggt tctgctatgt acgaactggt acgtgtcgga 180
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tacgaagaaa catcaggtgt aactgttggt gatccagtat taagaactgg taaaccactt 300
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actggaggtg atatatatgg tctagttcat gaaaacaccc ttgtcaaaca caaaatgatt 540
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gatgaagtag tattggaaac tgaatttgat ggtgatcgta ccaaatatac tatgttgcaa 660
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<210> 127
<211> 2014
<212> DNA
<213> Diabrotica virgifera

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cccaggtttc cctggagtga aaggagatag gggttaccca ggtgaacaag gagcaccagg 180
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cggttttaca ggagagaaag gagaccgagg tttgtcaggt cttgatggat atgaaggaca 300
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<212> DNA
<213> Diabrotica virgifera

<400> 128
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<210> 129
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 129
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<210> 130
<211> 838
<212> DNA
<213> Diabrotica virgifera

<400> 130
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ccggttggcc cttgtggtcc tggagctcca tcaaaacctc gatctccctt ctgcccttga 240
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<210> 131
<211> 771
<212> DNA
<213> Diabrotica virgifera

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ccttttataa actgtgattt aatggatggt cgagatgcat tcctaacact cgcccgtgaa 180
aaacattatg aattctcttc tttaagaagg gccaaatata gtactttgtc tatgttatat 240
gaattgcata atcaaggtca agataaattt gtatatactt gtaatagttg taaagcccat 300
gtggaaacaa ggtatcattg tactgtgtgt gaagactttg acttgtgcat ccaatgttat 360
gagaaagaag gtcatcctca caaaatggag aaacttggat tggatattga tgatggaagt 420
tcacctagtg atagcaaagc caatccagga gaagctagaa aattatctat acagcgttgt 480
atccattctt tggtacatgc ttgtcaatgc agagatgcca attgtcggtt accaagctgt 540
cagaagatga aacgagtcac aaatcacacc aaattgtgca agaggaaaac aaatggtggt 600

tgccctattt gcaaacaact catcgctcta tgttgctatc atgccaaaca ctgcccagaa 660
aacaagtgtc ctgtaccatt ctgttcatgc ataaagcaca aactaaaaca acaacaattg 720
caacaaaggt tgcaacaggt gcaactactt agtataagaa tggtagttat g 771

<210> 132
<211> 22
<212> DNA
<213> Diabrotica virgifera

<400> 132
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<210> 133
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 133
ggacacttgt tttctgggca gtgtttg 27

<210> 134
<211> 515
<212> DNA
<213> Diabrotica virgifera

<400> 134
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acttgtaata gttgtaaagc ccatgtggaa acaaggtatc attgtactgt gtgtgaagac 180
tttgacttgt gcatccaatg ttatgagaaa gaaggtcatc ctcacaaaat ggagaaactt 240
ggattggata ttgatgatgg aagttcacct agtgatagca aagccaatcc aggagaagct 300
agaaaattat ctatacagcg ttgtatccat tctttggtac atgcttgtca atgcagagat 360
gccaattgtc ggttaccaag ctgtcagaag atgaaacgag tcacaaatca caccaaattg 420
tgcaagagga aaacaaatgg tggttgccct atttgcaaac aactcatcgc tctatgttgc 480
tatcatgcca aacactgccc agaaaacaag tgtcc 515

<210> 135
<211> 1120
<212> DNA
<213> Diabrotica virgifera

<400> 135
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aagaaaaaga atgaaaacca agaagaaaac agtgaccaaa gcaacgaggt tgtccaagcc 180
gaaaacaact tattatctaa cttatcgaac cctattaata caatatcaat taaggagcta 240
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ctaaagaaga cattccagtt ttggaatacc cagcctgttc ccaaaatgga cgaaaaaata 360
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agtttgcctg atggttttat gtgggacact cttaatctag atgaaccgtt ggtgctcaaa 480
gagttatata cgttactcaa tgaaaactat gttgaagatg acgattgtat gtttagattt 540
gattatcaac ctgaattttt gaaatgggct ttgcaacccc cagggtggaa gcgagaatgg 600
cattgtggag tcagagttgt aaaaagtggt agattagtgg gatttatctc tgcaattcca 660
gcaactctaa acatttataa aaagacacaa agaatggtgg agataaattt tctatgtgta 720
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ttcacacatt ggttcctacc tagaacgaac ataatcgaca 1120

<210> 136

<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 136
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<210> 137
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 137
gtaggtacaa gtactcactg gtttcggtag g 31

<210> 138
<211> 707
<212> DNA
<213> Diabrotica virgifera

<400> 138
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tgcaacccCC agggtggaag cgagaatggc attgtggagt ccgagttgta aaaagtggta 480
gattagtggg atttatctct gcaattccag caactctaaa catttataaa aagacacaaa 540
gaatggtgga gataaatttt ctatgtgtac ataaaaagct acgttccaaa cgagtcgcac 600
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<212> DNA
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tgtgtcaaac agggaagttt ttaaattgtt aatttagaag ttaatttttt gattaagtta 180
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cacaatttgg cgtttggaca cgcacggccg ttgcacaata aattatttgg atttttgcc 540
aatttgccaa taggattacc gattactata agctttaaaa aataccactt ggaacaccac 600
agatatcaag gtgacgaaca gaaagatacg gacatcccaa cgtacataga ggccaaacta 660
ttttgcacga cctttggaaa attcatttgg gtgatactgc aaccgttttt ctactctttc 720
cgcccactcg tagtttatcc gaagccgcct acgcttttgg aattcgtaaa cctggtaatt 780
caactcgcct tcgatgctct cgttgtttat tttttcggag gaagaatgtt gggatatctc 840
cttattggat ctgtcatggc tatgggtctt catccggtag cgggacactt catcagtgaa 900
cattacatgt tcaaaaaggg ctacgaaacg tacagctact 940

<210> 140
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 140
gtcaggttgg tcaattcagt attcagaata gtag 34

<210> 141
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 141
ggataaacta cgagtgggcg gaaagag 27

<210> 142
<211> 746
<212> DNA
<213> Diabrotica virgifera

<400> 142
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taagaatgtg tcaaacaggg aagtttttaa attgttaatt tagaagttaa ttttttgatt 180
aagttatacc taagtgcgaa attttcaaaa atgggccaac acgtatctag aacagatttc 240
gaatgggtat ataccgagga acctcacgct agccgcagga agcaaatctt agaaaaatat 300
ccccaaatca agaaactctt tggatacgat ccgaacttca aatgggtcgt aacgagcatg 360
gtacttacac aattcgtact tctgtactta ctcaaagata ggtcatggcc agtgctaatt 420
ttagtagcgt attgcttagg aggtgtcatc aatcactcgt taatgttggc tatacatgaa 480
atttcccaca atttggcgtt tggacacgca cggccgttgc acaataaatt atttggattt 540
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caccacagat atcaaggtga cgaacagaaa gatacggaca tcccaacgta catagaggcc 660
aaactatttt gcacgacctt tggaaaattc atttgggtga tactgcaacc gtttttctac 720
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<211> 1049
<212> DNA
<213> Diabrotica virgifera

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gttagataca aaaggtaata aaagactagt cttagtatta aacaaggcag acttagttcc 600
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agttcgaatt tctgccttga gtgatcctg 1049

<210> 144
<211> 35
<212> DNA
<213> Diabrotica virgifera

<400> 144
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<210> 145

<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 145
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<210> 146
<211> 598
<212> DNA
<213> Diabrotica virgifera

<400> 146
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aagaggacat tcttaaagaa gtagaagcac taaagaaaca aaaggaagaa gaaaaactta 180
agctaagaga agctgcaaaa ttggaaaggc aaaaggagaa agaggaaagt aaaaaagaga 240
aacttactgc agaacttcag ggattagtgc aaaatgctga actaaggagt aaacttcatg 300
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<210> 147
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<212> DNA
<213> Diabrotica virgifera

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<210> 148
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 148
gccatacaac tcatccaggt gctaga 26

<210> 149
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 149
gtgataggga atagagcagg agccatataa g 31

<210> 150

<211> 792
<212> DNA
<213> Diabrotica virgifera

<400> 150
gccatacaat tcatccagtg ctagaaaaaa cagtttcacc ggataaaaat gaatggaaca 60
agcgtcatcg tttctcgaac aagctgcagt gactaaccta ctagaattca tcaaaactct 120
atcagatata ttaagacatg gcggaaatag ccctgtggcc cgaatggccg caggtttgca 180
gttaaaaaat caactcacct ctaaagactc caacataaag accacctacc aacaacggtg 240
gttggctttc ccagaggacg ttcgggggta tattaaaaat aacgttgtgt gcgcacttgg 300
aaccgaaaca agcagaccat catccgcagc tcagtgcgta gcatacgtcg cagtaacaga 360
actaccacaa gggtaatggc cagatctcat agcaacgttg gtcaacaatg tttgccatgc 420
aaattccaca gaaatgcaaa aggaagccac attagaagct atcggttata tatgccaaga 480
aatcgactcg gacgtattag tatctcaatc aaacgacatc ttaacagcta tagttcatgg 540
aatgcgagcc tcggaaccga gcaaccacgt tcgtttagca gctacacagg ccctattaaa 600
ctctctagaa ttcacaaagg ccaactttga ccaaccgacg gaacggaact atatcatgga 660
agtcgtctgt gaagccacgc agtctccaga ttcacagatc agagtggccg ctttgcagtg 720
tctagttaag attatgtctt tgtattatca acacatggaa ccttatatgg ctcctgctct 780
attccctatc ac 792

<210> 151
<211> 685
<212> DNA
<213> Diabrotica virgifera

<400> 151
tcccttccc cgcgttccgca gcatatgcta tacggatcat gccgaagcga ttcaaccagg 60
ctgatagagc tataaatatg gcctgcaaga ctggaagatg ggtcatgctg aagaacgtac 120
acttggctcc tcaatggtta gtccagctgg agaagaagct tcattcactt caacctcacg 180
ccaactttag actattcctc accatggaaa ttaatccgaa actaccagtt aatcttctta 240
gagcaggaag aatatttgta ttcgaacctc caccgggtat tagagctaac ctcttgagaa 300
cattcaacac agttccagtc agtaggatga tgaaagcacc aaacgaaaca gcaagacttt 360
acttcttatt ggcgtggttc cacgcgattg tccaggagag gttgatatat tgccctctag 420
gttgagcaaa acattatgaa tttagtgaat catatttaag agtcgcctgc gatactttgg 480
atacttggat tgataccacg gctatgggaa tgactaactt gccggcagag aaactctcat 540
gtgacaccct agccactctg ctctcgcaat ccatctatgg tggtaaaatc gataacgatt 600
ccgatcaacg actgttacat tccttcctga atctgctttt tactcccata agctttgaaa 660
gcgactttcg cttcaagtcc aacat 685

<210> 152
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 152
ggatcatgcc gaagcgattc aac 23

<210> 153
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 153
gaatgtaaca gtcgttgatc ggaatcg 27

<210> 154
<211> 588
<212> DNA
<213> Diabrotica virgifera

<400> 154
gatcatgccg aagcgattca accaggctga tagagctata aatatggcct gcaagactgg 60
aagatgggtc atgctgaaga acgtacactt ggctcctcaa tggttagtcc agctggagaa 120
gaagcttcat tcacttcaac ctcacgccaa ctttagacta ttcctcacca tggaaattaa 180

tccgaaacta ccagttaatc ttcttagagc aggaagaata tttgtattcg aacctccacc 240
gggtattaga gctaacctct tgagaacatt cagcacagtt ccagccagta ggatgatgaa 300
agcaccaaac gaaagagcaa gactttactt cttattggcg tggttccacg cgattgtcca 360
ggagaggttg agatattgcc ctctaggttg ggcaaaacat tatgaattta gtgaatcaga 420
tttaagagtt gcctgtgata ctttggatac ttggattgat acaacggcta tgggaaggac 480
gaacttgccg ccagagaaag tcccatggga cgccctagtc actctgctct cgcaatccat 540
ctatggtggt aaaatcgata acgattccga tcaacgactg ttacattc 588

<210> 155
<211> 946
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (802)..(849)
<223> n = a, c, g or t/u

<400> 155
atccgaacat cctgacttgg taaaattaag atctgtggga aaatctgtaa gaaataggga 60
tttgtgggct ttagaaataa attctaatgt ccaaaacagg acattgttaa caccaatgtt 120
taaatatgtt gctaatatgc atggggatga agccatagga agacagttga tgatttacct 180
ggctctctat ttaattcaca attatggcac taatgatagg gtgaccagat tggttaattc 240
aactgatatt tatttaatgc cttcaatgaa ccctgatggt tatgaaaatt cagaagaggg 300
cagatgtgaa tctaaaaaac aatatgttgg aagagaaaat gaaaatagtg ttgatttaaa 360
tagagatttt ccagatcagt ttgatgctac aaaagcagga acaattctgt ctggtaggca 420
gcctgaaacg atagctatga tgacttggat tatttccaga ccatttgttt tatctggaaa 480
tttgcacgga ggtgcagtag tagctagcta tccgtatgat gattctaact ctggtcgaag 540
atgctgtgta gagagtagat caccagataa taatattttc aaaacgttag cattaaacta 600
cgctcaatcg aatcctgtga tgaaaaaggg taatgcttgt aaagacgata catttgatca 660
gggcatcaca aatggtgctt tttggtatga agtgagaggt ggcatgcaag acttcaacta 720
cgttcactcc aactgtttcg aagtaacttt tgaactgagt tgctgtaaat ttccgttagc 780
caaaactcta cctcaggaat gngcaacaac aaggaagccc tactaacttt catggagtca 840
acacattgng gcgctaaggg attggttaga aacgaaaacg gtgacgccgt tttggacgcc 900
gacgtagtgg ttgtgggtat tacacataac gtcactacat ccaacc 946

<210> 156
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 156
ctgtaagaaa tagggatttg tgggctttag 30

<210> 157
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 157
gttggagtga acgtagttga agtcttgc 28

<210> 158
<211> 689
<212> DNA
<213> Diabrotica virgifera

<400> 158
ctgtaagaaa tagggatttg tgggctttag aaataaattc taatgtccaa aacaggacat 60
tgttaacacc aatgtttaaa tatgttgcta atatgcatgg ggatgaagcc ataggaagac 120
agttgatgat ttacctggct ctctatttaa ttcacaatta tggcactaat gatagggtga 180
ccagattggt taattcaact gatatttatt taatgccttc aatgaaccct gatggttatg 240
aaaattcaga agagggcaga tgtgaatcta aaaaacaata tgttggaaga gaaaatgaaa 300
atagtgttga tttaaataga gattttccag atcagtttga tgctacaaaa gcaggaacaa 360

ttctgtctgg taggcagcct gaaacgatag ctatgatgac ttggattatt tccagaccat 420
ttgttttatc tggaaatttg cacggaggtg cagtagtagc tagctatccg tatgatgatt 480
ctaactctgg tcgaagatgc tgtgtagaga gtagatcacc agataataat attttcaaaa 540
cgttagcatt aaactacgct caatcgaatc ctgtgatgaa aaagggtaat gcttgtaaag 600
acgatacatt tgatcagggc atcacaaatg gtgctttttg gtatgaagtg agaggtggca 660
tgcaagactt caactacgtt cactccaac 689

<210> 159
<211> 658
<212> DNA
<213> Diabrotica virgifera

<400> 159
gccgtggact tagcgggctg cgggatgatc gtgatctcgt cattgatctt cagaggtttc 60
aactgatctg cagccgacgg cttgggagag ctgttggaag ttgtcgaaga ggtcgtggag 120
ccgcccttct tgtccatgac tcgcttggcg acgacgctgt gggcggaata gacgtggttc 180
tcgaattgtt tgtacattcc gaaggtggcc gtgcacactg tgcatttgta ggacaggtgc 240
gcgggtttca acgtcatgtt atgatcccgg gccacgtggt ttagtaattt ccattggtag 300
actcttccac aaacaggaca ccttcctgaa tctttgctct tgttggcagc atcctgcatg 360
ctggaggtga ctaatccatg agagcctaat aaatgccttt ccaacccttg atctgtgaag 420
aacctaaatt gacacttttg acaatttaat ggcggcctgt tatatatcat cttgggatga 480
atcttaatct tgtgtatcca ttgcatgtga tttctaagct gttcaaggtc cttgatgtac 540
ccatcgcaga tctcgcagat gacgaacgag ttcttggagg atgtatcccc tggtttggcg 600
ccgcccgaag atccaggtgc ggctgcggca gcagatgggg actagttcta gatcgcga 658

<210> 160
<211> 21
<212> DNA
<213> Diabrotica virgifera

<400> 160
gacttagcgg gctgcgggat g 21

<210> 161
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 161
gatacatcct ccaagaactc gttcgtca 28

<210> 162
<211> 580
<212> DNA
<213> Diabrotica virgifera

<400> 162
gacttagcgg gctgcgggat gatcgtgatc tcgtcattga tcttcagagg tttcaactga 60
tctgcagccg acggcttggg agagctgttg gaagttgtcg aagaggtcgt ggagccgcct 120
ttcttgccat gactcgcttg gcgacgacgc tgtgggcgga atagacgtgg ttctcgaatt 180
gtttgtacat gccgaatgtg gccgtgcaca ctgtgcattt gtaggacagg tgtgcgggtt 240
tcaacgtcat gttatgatcc cgggccacgt ggtttagtaa tttccattgg tagactcttc 300
cacaaacagg acaccttcct gaatctttgc tcttgttggc agcatcctgc atgctggagg 360
tgactaatcc atgagagcct aataaatgcc tttccaaccc ttgatctgtg aagaacctaa 420
attgacactt ttgacaattt aatggcggcc tgttatatat catcttggga tgaatcttaa 480
tcttgtgtat ccattgcatg tgatttctaa gctgttcgag gtccttgatg tacccatcgc 540
agatctcgca gatgacgaac gagttcttgg aggatgtatc 580

<210> 163
<211> 888
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (771)
<223> n = a, c, g or t/u

<400> 163
cttattttat ggtgtcgtgc cagcagaaaa ttttaaaaat tcttgtaatt gtttagacat 60
ttcgcaacaa ttgtgaacaa ttttggaaaa tattgcttga aagctataat tctagatgta 120
agagcaaagt tttgtagtca aaatggctgg agtattcgat ttagaactgc atgatgttga 180
aactgtagaa gtagatgatt cagacgatgc aatcgaaatt gaagaggatg aatatgatca 240
aaatcctaat attaatgcaa ttgtagaatc cgatgataca gaaacggttc atctgactga 300
acaaattgtg aatccgggcc aggaaaaaac cggaccccat gactttgaat tacgcaaagt 360
cctgggcaaa ggaggttatg gcaaagtatt tcaagttaga aaaattacgg ggaaagatgc 420
caatactgtc tttgccatga aggttctccg caaggcttcc atagttagaa atcaaaaaga 480
tactgcccat acgaaagcag aacgaaatat tttagaagaa gttaagcatc cttttatagt 540
ggatttgata tatgccttcc aaacgggtgg aaaattgtac ttaattttag aatacctcag 600
cgggggcgaa ctttttatgc atttagaaag agaaggaata tttttagagg ataccgcttg 660
cttttattta tccgaaatca ttctcgccct agaacattta catggacaag gaattattta 720
tagagatcta aagcctgaaa atattttact tgacgcccac ggtcacgtta nattgacaga 780
tttcggtctg tgtaaaaaca cattaacgaa ggcatattga cccacaccgt tttgtggaac 840
tattgaatat atggcacctg aaatttaact agacatggcc atggaaaa 888

<210> 164
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 164
gcatgatgtt gaaactgtag aagtagatga ttc 33

<210> 165
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 165
gtgtgggtca atatgccttc gttaatg 27

<210> 166
<211> 658
<212> DNA
<213> Diabrotica virgifera

<400> 166
cttatgttga aactgtagaa gtagatgatt cagacgatgc aatcgaaatt gaagaggatg 60
aatatgatca aaatcctaat attaatgcaa ttgtagaatc cgatgataca gaaacggttc 120
atctgactga acaaattgtg aacccgggcc aggaaaaaac cggaccccat gactttgaat 180
tacgcaaagt cctgggcaaa ggaggttatg gcaaagtatt tcaagttaga aaaattacgg 240
ggaaagatgc caatactgtc tttgccatga aggttctccg caaggcttcc atagttagaa 300
atcaaaaaga tactgcccat acgaaagcag aacgaaatat tttagaagaa gttaagcatc 360
cttttatagt ggatttgata tatgccttcc aaacgggtgg aaaattgtac ttaattttag 420
aatacctcag cgggggcgaa ctttttatgc atttagaaag agaaggaata tttttagagg 480
ataccgcttg ctttttattta tccgaaatca ttctcgccct agaacattta catggacaag 540
gaattattta tagagatcta aagcctgaaa atattttact tgacgcccac ggtcacgtta 600
aattgacaga tttcggtctg tgtaaagaac acattaacga aggcatattg acccacac 658

<210> 167
<211> 886
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (805)

<223> n = a, c, g or t/u

<400> 167
cgtttactaa acgtaaacga ataaaacaat aaaagtacaa tgaaaattat ttaaataaga 60
acataagtat ttcagtatgg atcgaccaag tacaagtaag cgaaatgtct ttgactccga 120
ttcagatagt gtcgacagca ctgaagaagc tcgccgaaga gatctgaagg aaagagatga 180
attcgcaaat aggctcaaaa aacgcgatga agaacgtact agaaacgttg ccagtacttc 240
tgataagcgc gcttatgaag aggctgctaa aagacttaaa ttggacaatg cagaaaaaga 300
gaaacttatt cctgcactca gagttgcttc caggaggaag tatttggaga agagaaagga 360
ggacaaacta caagaattgg aagctgatat tgccgatgat gagtaccttt ttgaggaaga 420
tgttttgact gaaagagaga aaaaagatcg tgtacacaag aaagagctgt taaaattggc 480
gcaggaacat gaaaaggcca gggaacttga gcgggttcaa aggtatcaca tgcccagaga 540
tttgggcaag gactccactg ctgattacat tgaagttgat gacttggaga aggtaccaca 600
atctgaacag aagaaatggg aaaaagatca gatggcctcg gcagtgttta agtttggagc 660
aaaagatggg attaaaaaag aagagtatga gttagtgtta gaagatcaaa ttcagtttat 720
acaagcacta caaatgccag gagtgtctga taagaaagaa cccgaactaa cggaaacaga 780
aaagaaaaaa cttactatag aaganacaaa gaaaagcctt ccgatatacc cttttaaaga 840
cgacttaata caggccatta gggaacacca agttttgatt atcgaa 886

<210> 168
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 168
cgaccaagta caagtaagcg aaatgtcttt g 31

<210> 169
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 169
gttctttctt atcagacact cctggcattt g 31

<210> 170
<211> 679
<212> DNA
<213> Diabrotica virgifera

<400> 170
cgaccaagta caagtaagcg aaatgtcttt gactccgatt cagatagtgt cgacagcact 60
gaagaagctc gccgaagaga tctgaaggaa agagatgaat tcgcaaatag gctcaaaaaa 120
cgcgatgaag aacgtactag aaacgttgcc agtacttctg ataagcgcgc ttatgaagag 180
gctgctaaaa gacttaaatt ggacaatgca gaaaaagaga aacttattcc tgcactcaga 240
gttgcttcca ggaggaagta tttggagaag agaaaggagg acaaactaca agaattggaa 300
gctgatattg ccgatgatga gtacctttt gaggaagatg ttttgactga aagagagaaa 360
aaagatcgtg tacacaagaa agagctgtta aaattggcgc aggaacatga aaaggccagg 420
gaacttgagc gggttcaaag gtatcacatg cccagagatt tgggcaagga ctccactgct 480
gattacattg aagttgatga cttggagaag gtaccacaat ctgaacagaa gaaatgggaa 540
aaagatcaga tggcctcggc agtgtttaag tttggagcaa aagatgggat taaaaaagaa 600
gagtatgagt tagtgttaga agatcaaatt cagtttatac aagcactaca aatgccagga 660
gtgtctgata agaaagaac 679

<210> 171
<211> 910
<212> DNA
<213> Diabrotica virgifera

<400> 171
accaaaatta taacccagga aggatattga aaatattcag aacttttagg aacccagaag 60
gacgcgaatt cacccgcgta gaatacgtcc ggaagcaagt cgtgatagac gcctacgtca 120
aaattcgtat gaccaaagac gaagaattca taagacagtt cgctacgtta gacgaagcgc 180
agaaggaaga gatgaagaga gagaagcgac ggatacagga gcaactgagg cggatcaaga 240

gaaaccaaga gaaggaaaag atgggaggtg ggcatacgca tatgcattcg acgcctatcg 300
taccgcctgc agggactgcg attgaaaagt tgccaaatcc aagtgactct ctttcgacac 360
ctgttacacc aacttctagt aagagtatgt cctcgtctcc tcctaaatca aggaggaaaa 420
ccaaactcaa gccagatctc aaactcaagt gtggagcctg tggaaatgtc ggccatatga 480
gaacaaacaa agcctgccct ctttatcaag ccacaactgg tcagaacccg cctattaacg 540
ttgccatgac tgaagaacaa gaagaagata tcgagaagca aattaataca gacgatgaag 600
atctcgtaaa cgtagatgga accaaagtta aattgtctgg aaagttgttg aagaattact 660
ttcagcatgc cgaggagatt aagcgtagga gcttaatgtt aaaagtccct aaggacgctt 720
taggtaaccg aaaaagaaga agaggggtgc aagatttaca ttgtgattat ttgaagaaac 780
acaacaggcc agcgaataga agacgaacgg atccggttgt cgttttgtct actattttag 840
agaatatact caatgaaatg cgagatatgc cagacgtcca gccttttctt attccctgtc 900
aatcaaaaac 910

<210> 172
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 172
cagaactttt aggaacccag aaggacg 27

<210> 173
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 173
gatccgttcg tcttctattc gctgg 25

<210> 174
<211> 776
<212> DNA
<213> Diabrotica virgifera

<400> 174
cagaactttt aggaacccag aaggacgcga attcacccgc gtagaatacg tccggaagca 60
agtcgtggta gacgcctacg tcaaaattcg tatgaccaaa gacgaagaat tcataagaca 120
gttcgctacg ttagacgaag cgcagaagga agagatgaag agagagaagc gacggataca 180
ggagcaactg aggcggatca agagaaacca agagaaggaa aagatgggag gtgggcatac 240
gcatatgcat tcgacgccta tcgtaccgcc tgcagggact gcgattgaaa agttgccaaa 300
tccaagtgac tctctttcga cacctgttac accaacttct agtaagagta tgtcctcgtc 360
tcctcctaaa tcaaggagga aaaccaaact caagccagac ctcaaactca agtgtggagc 420
ctgtggaaat gtcggccata tgagaacaaa caaagcctgc cctctttatc aagccacaac 480
tggtcagaac ccgcctatta acgttgccat gactgaagaa caagaagaag atatcgagaa 540
gcaaattaat acagacgatg aagatctcgt aaacgtagat ggaaccaaag ttaaattgtc 600
tggaaagttg ttgaagaatt actttcagca tgccgaggag attaagcgca ggagtttaat 660
gttaaaagtc cctaaggacg ctttaggtaa ccgaaaaaga agaagagggg tgcaagattt 720
acattgtgat tatttgaaga agcacaatag gccagcgaat agaagacgaa cggatc 776

<210> 175
<211> 365
<212> DNA
<213> Diabrotica virgifera

<400> 175
ggacgcgtgg ggtcaagtga agttatatta aatatattta taataattta tcctatcgtc 60
atcatgagaa gtttaatagt tgccacgatt gtacttttcg ccgtttatca ggcagtagat 120
ggtctcattg cctgtcacga aacctttgc gacaatcaaa aatgtacaga aaacctcgtt 180
tgcaaagatt ctgaagttct ggttcccaag ggaaccattt gcggatgttg cgacgactgc 240
tacagaaaac taaatgaagg cgatgcttgc aggtcacgtt ttattggagg aggtccattc 300
agaggaaaat gtgtagatgg attagtatgt aacgctgaag gaaaatgcgc caaagcctaa 360
attat 365

<210> 176
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 176
cgtttatcag gcagtagatg gtctcattg 29

<210> 177
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 177
gcattttcct tcagcgttac atactaatcc 30

<210> 178
<211> 247
<212> DNA
<213> Diabrotica virgifera

<400> 178
cgtttatcag gcagtagatg gtctcattgc ctgtcacgaa acctttgcg acaatcaaaa 60
atgtacagaa aacctcgttt gcaaagattc tgaagttctg gttcccaagg gaaccatttg 120
cggatgttgc gacgactgct acagaaaact aaatgaaggc gatgcttgca ggtcacgttt 180
tattggagga ggtccattca gaggaaaatg tgtagatgga ttagtatgta acgctgaagg 240
aaaatgc 247

<210> 179
<211> 870
<212> DNA
<213> Diabrotica virgifera

<400> 179
acgcgtgggt tcgtattttt ttcttaacaa aagggcaaaa tgagcttttt tggaaaattg 60
ttcgggggga aaaaggaaga gatagcccct agtcctgggg aggctattca aaaactcaga 120
gagactgaag aaatgttaat aaaaaaacag gatttttag aaaagaagat agaagaattt 180
accatggtag caaagaaaaa tgcgtcgaaa aataaaagag ttgcactcca agccctcaaa 240
aagaagaaac gattggaaaa gacccaacta caaatagatg gaacccttac aactattgaa 300
atgcagaggg aagccctcga aggagctagc acaaatactg ctgtattaga ttctatgaaa 360
aatgctgcag atgcccttaa gaaagctcat aagaatttga atgtagatga tgttcacgat 420
atcatggatg acatagccga acaacacgac atagccaacg aaatcacaaa cgctattagc 480
aatcctgtcg gattcaccga cgatctggat gacgatgaat tagaaaaaga attagaagag 540
ctcgaacaag aaggattgga agaagacctg ctccaagtgc caggtccaac tcaactgccg 600
gctgtgcctg ctgatgcagt tgctactaaa ccaatcaaac cagcagctaa aaaagttgaa 660
gatgatgacg atatgaaaga attggaagcc tgggcctcgt aaaattcctg aaatctggat 720
atttgtaaac gaaatcaccc atctaagatg aaaacattat aaatatatag gtaataacag 780
ctaaaaacgt ttcaatgtag aacaagcttt tgctgaaaag gcgtcttgca aaaaatgttg 840
ataatttaga attctctata tattatatat 870

<210> 180
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 180
gtcctgggga ggctattcaa aaactc 26

<210> 181
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 181
caggcttcca attctttcat atcgtcatc 29

<210> 182
<211> 601
<212> DNA
<213> Diabrotica virgifera

<400> 182
gtcctgggga ggctattcaa aaactcagag agactgaaga aatgttaata aaaaaacagg 60
atttttaga aaagaagata gaagaattta ccatggtagc aaagaaaaat gcgtcgaaaa 120
ataaaagagt tgcactccaa gccctcaaaa agaagaaacg attggaaaag acccaactac 180
aaatagatgg aacccttaca actattgaaa tgcagaggga agccctcgaa ggagctagca 240
caaatactgc tgtattagat tctatgaaaa atgctgcaga tgcccttaag aaagctcata 300
agaatttgaa tgtagatgat gttcacgata tcatggatga catagccgaa caacacgaca 360
tagccaacga aatcacaaac gctattagca atcctgtcgg attcaccgac gatctggatg 420
acgatgaatt agaaaaagaa ttagaagagc tcgaacaaga aggattggaa gaagacctgc 480
tccaagtgcc aggtccaact caactgccgg ctgtgtctgc tgatgcagtt gctactaaac 540
caatcaaacc agcagctaaa aaagttgaag atgatgacga tatgaaagaa ttggaagcct 600
g 601

<210> 183
<211> 860
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (804)
<223> n = a, c, g or t/u

<400> 183
acgacaaagt aacatataat taattataaa cactgtttta ttgaaattac aaaactaaac 60
ttatcctaaa aatgatttgt aagcttatgt atatccgtaa ggtcttcaat aagttcttcc 120
attttagtac caatttttg aaacctctga cttttctgtt agcgaaaggt ttaggaaatt 180
ccacactaac tccccatcga ttatagatct agcagggttg ttttgtagtt ttctccaact 240
tttaaatgtc ctgaaagcct tgggatttag gccggcaata tgagctcctt gggaaactaa 300
tacattttgc aacataagta aacggcgata tgttttctct ggaactggca taatgtatcc 360
tatacctcca tccaaagtag caaacattgt aataaacctt ctatctgctc cagaaaaatg 420
cttttatca tcgcctagtt cacctagttt acatttaatt ttaaagaatg tgttgacagt 480
ttggcctaaa tggaaatccg ctttccttaa tagtctttga cctcctaaag attctcttga 540
ttctggttga tacatataca tggctagatt ttgttctcca tctgatacta aaaatcctag 600
tgatgaatta tctatcatgt attctattga atatacttcg tttggtttga aatccctaga 660
taccattgac agtgttcggt actcttcttg aaaccttaac aacgcgatag atttgtagac 720
atcaccaacc aacagcaaac ttttgatagt aagtatttga tgagtataga cttgtgtatc 780
tataaatgct actccaataa atcngtatct ttgagttgcc aaatatatat cttttgtccc 840
actgctgaca caggaaacct 860

<210> 184
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 184
ctctggaact ggcataatgt atcctatacc tc 32

<210> 185
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 185
ctgttggttg gtgatgtcta caaatctatc g 31

<210> 186
<211> 399
<212> DNA
<213> Diabrotica virgifera

<400> 186
ctctggaact ggcataatgt atcctatacc tccatccaaa gtagcaaaca ttgtaataaa 60
ccttctatct gctccagaaa aatgcttttt atcatcgcct agttcaccta gtttacattt 120
aattttaaag aatgtgttga cagtttggcc taaatggaaa tccgctttcc ttaatagtct 180
ttgacctcct aaagattctc ttgattctgg ttgatacata tacatggcta gattttgttc 240
tccatctgat actaaaaatc ctagtgatga attatctatc atgtattcta ttgaatatac 300
ttcgtttggt ttgaaatccc tagataccat tgacagtgtt cggtactctt cttgaaacct 360
taacaacgcg atagatttgt agacatcacc aaccaacag 399

<210> 187
<211> 816
<212> DNA
<213> Diabrotica virgifera

<400> 187
ggtcagctgt gtacgggagt tgaagtcgag aaatgcgcct taggcatgta agtgtggctg 60
tcggagacac tcaaagacag caacatgtac gtatacggtt tcgacattac atagacgtgt 120
aatatgcgtg cgagtgcttg atcacggtga agttctggcg tgaacggtgg ctcggaggaa 180
tcatggcgtc ggtggcgggc tcgcaagaac agccgcccgc cgcgcacggc catagcttct 240
gcaagaagac cttccacaag cccacctact gccaccactg cagcgacatg ttatggggcc 300
tcatccagca gggcttcatc tgcgaagttt gcaacttcgt agtgcatgat cgctgcttaa 360
ggactgtggt atccccgtgt tccagcgtct ccgccagtca aataagaaat ccggttgcac 420
actgttggtc ggagtcgttt caccataaaa gaaaattttg caacgtatgt agaaaacggt 480
tagatgacag cgaatccatt cattgcgaaa tttgtgagta tttcgtacat gtggagtgcc 540
aggattttgc agtagctgac tgtaaagaaa atgcaacttа tcttccggga aaacaactta 600
ccttcgtgcg tcatcaacat cactggcgcg aaggaaatct tccaagcaat tcccaagtgt 660
gctctctgta aaaagacgtg ctggactact gaatgtttat cccggataca gatgcgaatg 720
gtggtgaatg acgagccatg cctcctgtcc tacgagtatt aatagtgaat ggacttttg 780
gaattctgga acccattcat ctaccccgc aggctg 816

<210> 188
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 188
ccttaggcat gtaagtgtgg ctgtcg 26

<210> 189
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 189
ctcgtaggac aggaggcatg gct 23

<210> 190
<211> 717
<212> DNA
<213> Diabrotica virgifera

<400> 190
ccttaggcat gtaagtgtgg ctgtcggaga tactcaaaga cagcaacatg tacgtatacg 60
gtttcgacat tacatagacg tgtaatatgc gtgcgagtgc ttgatcacgg tgaagttctg 120
gcgtgaacgg tggctcggag gaatcatggc gtcggtggcg ggctcgcaag aacagccgcc 180
cgccgcgcac ggccatagct tctgcaagaa gaccttccac aagcccacct actgccacca 240
ctgcagcgac atgttatggg gcctcatcca gcagggcttc atctgcgaag tttgcaactt 300
cgtagtgcat gatcgctgct taaggactgt ggtatccccg tgttccagcg tctccgccag 360

tcaaataaga aatccggttg cacactgttg gtcggagtcg tttcaccata aaagaaaatt 420
ttgcaacgta tgtagaaaac ggttagatga cagcgaatcc attcattgcg aaatttgtga 480
gtatttcgta catgtggagt gccaggattt tgcagtagct gactgtaaag aaaatgcaac 540
ttatcttccg ggaaaacaac ttaccttcgt gcgtcatcaa catcactggc gcgaaggaaa 600
tcttccaagc aattccaagt gtgctctctg taaaaagacg tgctggacta ctgaatgttt 660
atccggatac agatgcgaat ggtgtggaat gacgagccat gcctcctgtc ctacgag 717

<210> 191
<211> 826
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (752)
<223> n = a, c, g or t/u

<400> 191
gcagtggtta gtgcagtttt gtgatttaag aagattacga tggttactac cacgaatgcg 60
gtcactagta ctagcatgat tcaaggaaat agtacgacgc ctacatctaa caccctggc 120
acaggcgaga ataataatgg tgttaagaga attagtgata atagaaggag taacaagcct 180
attatggaga aaaggcggag ggcgaggata aataactgtc tcaatgagtt gaaaacgctc 240
atattggacg ccatgaaaaa agatcctgcc agacattcaa agctggaaaa agctgacatc 300
ctggagatga cagtcaagca tttacagaac cttcaaagac agcaagtcgc tatgtcagcg 360
gcagcagatc ccttagtagt taataaattc agagcagggt ttagcgagtg cgcttcagaa 420
gtcggcagat ttccaggtct agatccaatc gtccgacgaa ggttactcca gcatctagcc 480
aactgtctca gccaaggttc caaaccacaa gaagttcctc aagtacaagt tcacatactt 540
ccaaacactc aaaaaccttt agaacagcaa gtaccccaaa gcagtggcat tattcttagt 600
aacggtaacg gtactggagt tcaactagta ccaacaagac taccgaatgg agatttagct 660
ctggtacttc ctacgacctt acaaacacag ccccagtatt caccggcggc agtaccatta 720
ttagtgccga tagtaccgga aagaaccgct tncaccacat cagcgaccag cagttactcg 780
aattatttct ccagtcatag tccagagcct atggagtcta tgtaca 826

<210> 192
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 192
gcagttttgt gatttaagaa gattacgatg g 31

<210> 193
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 193
gctgtgtttg taaggtcgta ggaagtacca 30

<210> 194
<211> 679
<212> DNA
<213> Diabrotica virgifera

<400> 194
gcagttttgt gatttaagaa gattacgatg gttactacca cgaatgcggt cactagtact 60
agcatgattc aaggaaatag tacgacgcct acatctaaca cccctggcac aggcgagaat 120
aataatggtg ttaagagaat tagtgataat agaaggagta acaagcctat tatggagaaa 180
aggcggaggg cgaggataaa taactgtctc aatgagttga aaacgctcat atcggacgcc 240
atgaaaaaag atcctgccag acattcaaag ctggaaaaag ctgacatcct ggagatgaca 300
gtcaagcatt tacagaacct tcaaagacag caagtcgcta tgtcagcggc agcagatccc 360
ttagtagtta ataacttcag agcagggttt agcgagtgcg cttcagaagt cggcagattt 420
ccaggtctag atccaatcgt ccgacgaagg ttactccagc atctagccaa ctgtctcagc 480
caaggttcca aaccacaaga agttcctcaa gtacaagttc acatacttcc aaacactcaa 540

aaacctttag aacagcaagt accccaaagc agtggcatta ttcttagtaa cggtaacggt 600
actggagttc aactagtacc gacaagacta ccgaatggag atttagctct ggtacttcct 660
acgaccttac aaacacagc 679

<210> 195
<211> 873
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (709)..(772)
<223> n = a, c, g or t/u

<400> 195
cgacgaagtc accgtgggta aattctacgc gactttcctc attcaggatt acttcaggcg 60
gttcaagaag agaaaagagc aggagatgag ggacggagat aaagatattc agaataccgt 120
tacacttcaa gctgggttgc gtacgttaca tgaggctggt ccagaactga aacgcgccat 180
ctcaggcaat ctagatgaat taattgatga caatcccgaa ccaatgcatc gtagaaatca 240
ttcactcttc ggaagtgtat ggtcttcaat gagacgaggt catactttca atagagcgaa 300
atctctgaag ttaaattcaa cccaaatcaa aattacaccg gcttccagcg tcgactatct 360
tccatacaat tctattaaga atgccgtcac agaagggatg aatcacatta cttccatgac 420
gaaaaacgtt caaaaccgtg ttagcgctag ttccttgaac aatcaggata actataagga 480
tgaagaaatt cctctgaggt ctcttagtaa tctgcataat ggagatgaga agaataacta 540
cacggtcatc gataaatctg gcttcctgca ccctaactac aaggttggag caggtgaggc 600
gaatggtcac gtgggaccag agcgtcttag ccattcactg cctggcagtc cggccgaccg 660
tagacttgct tccttcgaag tcgtaggctc tgcggaaagc ctggtaggnc gaatcctagc 720
cgagcaaggc ttaggtaagt actgtgatca ggatttcgtg cgctacacct nncgaagaga 780
tgcagaggca ttggatatga ctcaggagga aatggatcgc gcagcccacc agattctttt 840
cacagagaaa cttatacatc atcctctgca gca 873

<210> 196
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 196
cgacgaagtc accgtgggta aattc 25

<210> 197
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 197
cgaaggaagc aagtctacgg tcgg 24

<210> 198
<211> 677
<212> DNA
<213> Diabrotica virgifera

<400> 198
cgacgaagtc accgtgggta aattctacgc gactttcctc attcaggatt acttcaggcg 60
gttcaagaag agaaaagagc aggagatgag ggacggagat aaagatattc agaataccgt 120
tacacttcaa gctgggttgc gtacgttaca tgatgctggt ccagaactga aacgcgccat 180
ctcaggcaat ctagatgaat taattgatga caatcccgaa ccaatgcatc gtagaaatca 240
ttcactcttc ggaagtgtat ggtcttcaat gagacgaggt catactttca atagagcgaa 300
atctctgaag ttaaattcaa cccaaatcaa aattacaccg gcttccagcg tcgactatct 360
tccatacaat tctattaaga atgccgtcac agaagggatg aatcacatta cttccatgac 420
gaaaaacgtt caaaaccgtg ttagcgctag ttccttgaac aatcaggata actataagga 480
tgaagaaatt cctctgaggt ctcttagtaa tctgcataat ggagatgaga agaataacta 540
cacggtcatc gataaatctg gcttcctgca ccctaactac aaggttggag caggtgaggc 600
gaatggtcac gtgggaccag agcgtcttag ccattcactg cctggcagtc cggccgaccg 660

tagacttgct tccttcg 677

<210> 199
<211> 418
<212> DNA
<213> Diabrotica virgifera

<400> 199
acggaaacac agttacctgt atcgttccga catttgattt tgcccgagaa aaacttccct 60
cctactgaat tgctggactt gcaaccgctg cctattactg ctttgagaaa cgaacaattt 120
gagtctttat acgccgataa gtttccacag tttaatccta tacaaacaca ggttttcaac 180
tcagtataca atggagacga caacatattc ataggcgctc ccacgggatc aggaaagacc 240
acaatagcaa aatttgccat cctcagactc ttcgattgaa atcctgaagg tcgatgtgtt 300
tatctagttc ctaaggacgc cctcgctgaa ctgattttcg ccgattggca taataagttt 360
ggacaggcct tggcaaagaa agtggtattg ctgactggag aaactggtac tgatctaa 418

<210> 200
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 200
cacagttacc tgtatcgttc cgacatttg 29

<210> 201
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 201
gatcagtacc agtttctcca gtcagcaata c 31

<210> 202
<211> 408
<212> DNA
<213> Diabrotica virgifera

<400> 202
cacagttacc tgtatcgttc cgacatttga ttttgcccga gaaaaacttc cctccgactg 60
aattgctgga cttgcaaccg ctgcctatta ctgctttgag aaacgaacaa tttgagtctt 120
tatacgccga taagtttcca cagtttaatc ctatacaaac acaggttttc aactcagtat 180
acaatggaga cgacaacata ttcataggcg ctcccacggg atcaggaaag accacaatag 240
cagaatttgc catcctcaga ctcttcgatc gaaatcctga aggtcgatgt gtttatctag 300
ttcctaagga cgccctcgct gaactgattt tcgccgattg gcataataag tttggacagg 360
ccttggcaaa gaaagtggta ttgctgactg gagaaactgg tactgatc 408

<210> 203
<211> 735
<212> DNA
<213> Diabrotica virgifera

<400> 203
cactgtcatt cgtcattctc atacattttt tttgggtact ttgggttgta cttgggataa 60
aagacctttt tgtatttcca aatacattgt catataaatt aaaaaagaaa tggctgccat 120
cagatctatg tctcgccttc ttattaatag atcacttcaa accactgcaa agaggaccta 180
tgccgaccaa atgaacttca catttgcagc tggaaatcag gtttactata ctgcaacttc 240
agttaaacaa gtagatgtac catcttttct tggtagcttt ggtatccttc ccgcccatgt 300
acccacactg gctgtgctaa aacctggagt agtcactgtt tacgaagatg gtggtaatgt 360
taagaaaatc tttgtttcca gtggtactgt caccatcaat gatgattcat cagttcagat 420
tcttgctgaa gaagcccacc cagtagaaaa cattgatgtc aatgcagcaa gagacatcct 480
taccaaagcc cagagccagt tatcatctgc aagtacagat gaggcgaaag ctgaagcctc 540
cattgctgtt gaagtgggag aagcgttagt caaagcggct gaataataat ttaatttttg 600
taattttatg taaatttaat aaattagtgt ctcaatggta ctgttcattt taaaacaaca 660

acatattaga tctatacctc tatgagttga caatttttac aaaaacgaga atcaatccaa 720
atacataatt tttgt 735

<210> 204
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 204
ggtactttgg gttgtacttg ggataaaaga c 31

<210> 205
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 205
gctttgacta acgcttctcc cacttca 27

<210> 206
<211> 542
<212> DNA
<213> Diabrotica virgifera

<400> 206
ggtactttgg gttgtacttg ggataaaaga ccttttgta tttccaaata cattgtcata 60
taaattaaaa aagaaatggc tgccatcaga tctatgtctc gccttcttat taatagatca 120
cttcaaacca ctgcaaagag gacctatgcc gaccaaatga acttcacatt tgcagctgga 180
aatcaggttt actatactgc aacttcagtt aaacaagtag atgtgccatc tttctctggt 240
agctttggta tcctcccccgc ccatgtaccc acactggctg tgctaaaacc tggagtagtc 300
actgtttacg aagatggtgg taatgttaag aaaatctttg tttccagtgg tactgtcacc 360
atcaatgatg attcatcagt tcagattctt gctgaagaag cccacccagt agaaaacatt 420
gatgtcaatg cagcaagaga catccttacc aaagcccaga gccagttatc atctgcaagt 480
acagatgagg cgaaagctga agcctccatt gccgttgaag tgggagaagc gttagtcaaa 540
gc 542

<210> 207
<211> 686
<212> DNA
<213> Diabrotica virgifera

<400> 207
tatatttaat aattaataca gatttttaag tatggcacca aaggaaaaag atgatgaaat 60
cgtatcaata aataaatggg atggagtagc cgtcaaaaat gcattagatg atgcagttaa 120
agaggtactt acaaagaaat acaattatgc tgaaaatttt gctctcatgg atggtaggtt 180
agttatatgt ggcatagctg taggtgttgc aatgtttgcc ttgatttggg attatttgta 240
cccattccca caatctaagc ctattttaat attttctgtt actacatatt tttttatgat 300
gggaatttta actttatata ctacatacaa agagaaagga atctttgctg tttgtattca 360
gaaagatagt tctaagaagg aaaatacttg ggaagctagc tcttatattc aaaagtatga 420
tgataagtat actttgaatc ttgcatatat tgatggaaaa acacgccaaa gaagagagca 480
gagtattaaa aggagtattg ccaggtacat agaccagcaa ggaactgtag ttaaagaaaa 540
tgttgaagat gaaatcacca aaatgcacaa ttctctacta agtgagagga aagaaaaatg 600
atgtacacag agactaccta ctaaaagaag ttgacgtgta aattatttca ttttttatat 660
ttttcaataa gttttttgg tttgag 686

<210> 208
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 208
gtatggcacc aaaggaaaaa gatgatga 28

<210> 209
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 209
cattttggtg atttcatctt caacattttc 30

<210> 210
<211> 536
<212> DNA
<213> Diabrotica virgifera

<400> 210
gtatggcacc aaaggaaaaa gatgatgaaa tcgtatcaat aaataaatgg gatggagtgg 60
ccgtcaaaaa tgcattagat gatgcagtta aagaggtact tacaaagaaa tacaattatg 120
ctgaaaattt tgctctcatg gatggtaggt tagttatatg tggcatagct gtaggtgttg 180
caatgtttgc cttgatttgg gattatttgt acccattccc acaatctaag cctattttaa 240
tattttctgt tactacatat ttttttatga tgggaatttt aactttatat actacataca 300
aagagaaagg aatctttgct gtttgtattc agaaagatag ttctaagaag gaaaatactt 360
gggaagctag ctcttatatt caaaagtatg atgataagta tactttgaat cttgcatata 420
ttgatggaaa aacacgccaa agaagagagc agagtattaa aaggagtatt gccaggtaca 480
tagaccagca aggaactgta gttaaagaaa atgttgaaga tgaaatcacc aaaatg 536

<210> 211
<211> 901
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (707)
<223> n = a, c, g or t/u

<400> 211
cggacgcgtg ggctaatagc attgtgttat ccatttttag cttctagtgt caatgagtac 60
attccattga ttattaaaaa tctagatgaa catactgatg gggtctgtaa taatgctgct 120
tgggtgattg gaaagttgtg tgctgtgatg ggcaatgcaa tccaaccttt ccttccagaa 180
atccttaatg cctttgttca tatattaaga acaccagctg tagctcgtac catgcacaaa 240
actgtagcta tttccttatg catcgtattc tatgtgtgcc ccgatgtgac tattccagaa 300
atggatgtga ttgttaagaa ttgctgtatg ttagtgagaa atgttaggga ttcagatgag 360
aaggatcttg cttttcgagg cttgtgtgag gtgattataa ggcatccaga attcaacaag 420
aactacttca tcttcttttg tgatgctgca gcttcctgga tcaatatccg tgtagatttg 480
aagcagacaa ttcgcaatgt tctattggca tttaaacaac aatgtggtga ggataactgg 540
cgccaatttt attgtcagtt tcctgaagct cttaaactta aacttcaaga gttatatggg 600
gtatgaaata aacaatctac aaaaaacggg gaattcgaca tatgggtggg aaagcttgag 660
tgcacctgcc ttgagtttat cgcgtaatag tatttaaata tcgtccngtg agggaggggc 720
gtcttgccgg tatcttagag tcacgcgtta ataaaaaaat cgagaaggat ttttttagac 780
agattaattt ttttgttttt tgggtagttt cttagtaaat caactaaata atgtttattt 840
aattattttt taaggaattt tataacaaat atggtaattt atattgtgga agtgtttttt 900
t 901

<210> 212
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 212
cgtgggctaa tagcattgtg ttatcca 27

<210> 213
<211> 28
<212> DNA

<213> Diabrotica virgifera

<400> 213
gaacattgcg aattgtctgc ttcaaatc 28

<210> 214
<211> 496
<212> DNA
<213> Diabrotica virgifera

<400> 214
cgtgggctaa tagcattgtg ttatccattt ttagcttcta gtgtcaatga gtacattcca 60
ttgattatta aaaatctaga tgaacatact gatggggtct gtaataatgc tgcttgggtg 120
attggaaagt tgtgtgctgt gatgggcaat gcaatccaac ctttccttcc agaaatcctt 180
aatgcctttg ttcatatatt aagaacacca gctgtagctc gtaccatgca caaaactgta 240
gctatttcct tatgcatcgt attctatgtg tgccccgatg tgactattcc agaaatggat 300
gtgattgtta agaattgctg tatgttagtg agaaatgtta gggattcaga tgagaaggat 360
cttgcttttc gaggcttgtg tgaggtgatt ataaggcatc cagaattcaa caagaactac 420
ttcatcttct tttgtgatgc tgcagcttcc tggatcaata tccgtgtaga tttgaagcag 480
acaattcgca atgttc 496

<210> 215
<211> 916
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (870)
<223> n = a, c, g or t/u

<400> 215
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agaatagcag gaaagcaaga caaatcctaa agatcaagcg tcatcgggtt tagaccggca 120
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<400> 217
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<210> 218
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cacagaagtt tagagc 2176

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<210> 221
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<212> DNA
<213> Diabrotica virgifera

<400> 221
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<210> 222
<211> 992
<212> DNA
<213> Diabrotica virgifera

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<212> DNA
<213> Diabrotica virgifera

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<212> DNA
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<210> 225
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 225
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<210> 226
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<213> Diabrotica virgifera

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<210> 229
<211> 26
<212> DNA
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<400> 229
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<210> 230
<211> 799
<212> DNA
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<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 232
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<210> 233
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<212> DNA
<213> Diabrotica virgifera

<400> 233
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<210> 234
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atcatgctag ggtattgatc agacaacgac acattcgggt ccgcaaacaa gttgtgaaca 360
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<210> 235
<211> 1850
<212> DNA
<213> Diabrotica virgifera

<400> 235
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aggtatcgat ttgggaaatg aatcctgtta tgtagctgtc gcaaaggctg gtggaatcga 180
aaccattgca aatgactaca gtttaagggc tactccatca tgcgttgctt tttctggaaa 240
gaaccgcata ttgggagttg cggcgaaaaa tcagcaagtc accaatatga agaacactgt 300
atatgggcta aaaaggctgt taggtagaaa gtttagggat cctcatgtca aaaaagaaat 360
tcagttttta ccatatacag ttgtagaaga aaaaaacggg ggtattggaa ttagggtaaa 420
ttatttaaat gaagaacata aattttcacc agaacaatgt ttggccatgt tgttaacaaa 480
attaaaagat agtgctatga cagctctaca aactcccata aatgattgtg ttatatcagt 540
tccttcttac tttacaaaca atgagaggaa ggcactatta gattctgcag ccatagcagg 600
tcttaatact ctaaggttat ttaatgaaac aacagctacg gccttgtcat atggcattta 660
caagcaggat ttaccagctg tcgaagaaaa gcctcgtaat attatttttg tcgattgtgg 720
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<210> 236
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 236
ctgtcgcaaa ggctggtgga atc 23

<210> 237
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 237
ctcttcatgt cactggacac atctttatcg t 31

<210> 238
<211> 862
<212> DNA
<213> Diabrotica virgifera

<400> 238
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catcatgcgt tgctttttct ggaaagaacc gcatattggg agttgcggcg aaaaatcagc 120
aagtcaccaa tatgaagaac actgtatatg ggctaaaaag gctgttaggt agaaagttta 180
gggatcctca tgtcaaaaaa gaaattcagt ttttaccata tacagttgta gaagaaaaaa 240
acgggggtat tggaattagg gtaaattatt taaatgaaga acataaattt tcaccagaac 300
aatgtttggc catgttgtta acaaaattaa aagatagtgc tatgacagct ctacaaactc 360
ccataaatga ttgtgttata tcagttcctt cttactttac aaacaatgag aggaaggcac 420
tattagattc tgcagccata gcaggtctta atactctaag gttatttaat gaaacaacag 480
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gtaatattat ttttgtcgat tgtggccatt catccttaca agtatttgca gttgcattta 600
ataagggcaa attgaagatg cttaccactg ctgcagatcc caatttaggt ggtagggact 660
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caaaatctaa tccaagagct tttctaagat tgctaacgga ggtagaaaag ttgaagaagc 780
agatgtctgc aaattctaca accttaccac tcaacataga atgtttcatg aacgataaag 840
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<210> 239
<211> 1188
<212> DNA
<213> Diabrotica virgifera

<400> 239
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acattgcagt tttaaaaaga attaaaaatg gtatccctaa atcccgtaag aattctcaag 120
caagaagccg aggaagaaag ggcagagatt gcccgactca gtagttttgt aggtgctata 180
gctataggag atttggttag aagcaccttg ggaccaaaag gaatggataa aattttagta 240
tccagtggta gatctgcagg atcagttgaa gttactaacg acggagcaac tatcctaaaa 300
tcggtgggtg ttgataatcc tgctgctaaa atttggtgg atatgtcaaa agtccaggat 360
gatgaagtag gagatggcac cacatcagtg acagtattag catctgaact acttaaagaa 420
gcagaaaaac ttgtagaaca gaaaattcac ccacaaacaa tcattgccgg ttggaggaaa 480
gcagtagata ttgccagaaa agctcttcta gaaactgcca aagacaacag ctctgattca 540
gaaaagttca gagaagatct gatgaacatt gccagaacta cactcagctc aaagattctt 600
tcacaacata aagaatattt tgccaaactg gcagtagatg ctgtgctgag attgaaaggt 660
acaggtgatt tacaatccat ccagctgatt aagaaaactg gtggtacttt ggaagattcc 720
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gaaaaaatga aagataaagt gaacaaaatt cttaaacata atgctaatgt atttattaat 960
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tcaacatttg accatccaga attggtaaaa cttggaactt gtaagcttat tgaacaaatc 1140
atgattggag aagatatcct gctccgtttc agtggtgttg ctcttggg 1188

<210> 240
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 240
ggtgggtgtt gataatcctg ctgct 25

<210> 241
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 241
caagagcaac accactgaaa cggag 25

<210> 242
<211> 884
<212> DNA
<213> Diabrotica virgifera

<400> 242
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tgaagtagga gatggcacca catcagtgac agtattagca tctgaactac ttaaagaagc 120
agaaaaacct gtagaacaga aaattcaccc acaaacaatc attgccggtt ggaggaaagc 180
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aaagttcaga gaagatctga tgaacattgc cagaactaca ctcagctcaa agattctttc 300
acaacataaa gaatatttg ccaaactggc agtagatgct gtgctgagat tgaaaggtac 360
aggtgattta caatccatcc agctgattaa gaaaactggt ggtactttgg aagattcctt 420
tttggatgaa ggtttttat tggacaaaaa acctggtgta catcaaccaa agagagtaga 480
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aaaaatgaaa gataaagtga acaaaattct taaacataat gctaatgtat ttattaatag 660
acagttgatt tacaattatc ctgaacaatt gtttgctgat gcaggagtta tggctattga 720
acatgcagat tttgatggaa ttgaaaggct agcacttgtc acaggaggag agattgtctc 780
aacatttgac catccagaat tggtaaaact tggaacttgt aagcttattg aacaaatcat 840
gattggagaa gatatcctgc tccgtttcag tggtgttgct cttg 884

<210> 243
<211> 1188
<212> DNA
<213> Diabrotica virgifera

<400> 243
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caagaagccg aggaagaaag ggcagagatt gcccgactca gtagttttgt aggtgctata 180
gctataggag atttggttag aagcaccttg ggaccaaaag gaatggataa aattttagta 240
tccagtggta gatctgcagg atcagttgaa gttactaacg acggagcaac tatcctaaaa 300
tcggtgggtg ttgataatcc tgctgctaaa attttggtgg atatgtcaaa agtccaggat 360
gatgaagtag gagatggcac cacatcagtg acagtattag catctgaact acttaaagaa 420
gcagaaaaac ttgtagaaca gaaaattcac ccacaaacaa tcattgccgg ttggaggaaa 480
gcagtagata ttgccagaaa agctcttcta gaaactgcca aagacaacag ctctgattca 540
gaaaagttca gagaagatct gatgaacatt gccagaacta cactcagctc aaagattctt 600
tcacaacata aagaatattt tgccaaactg gcagtagatg ctgtgctgag attgaaaggt 660
acaggtgatt tacaatccat ccagctgatt aagaaaactg gtggtacttt ggaagattcc 720
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gaacatgcag attttgatgg aattgaaagg ctagcacttg tcacaggagg agagattgtc 1080
tcaacatttg accatccaga attggtaaaa cttggaactt gtaagcttat tgaacaaatc 1140
atgattggag aagatatcct gctccgtttc agtggtgttg ctcttggg 1188

<210> 244
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 244
ctcactctga tggtgtaatc actatggaaa tc 32

<210> 245
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 245
gtcttctaca aatgctgatt tcaaatggtc t 31

<210> 246
<211> 820
<212> DNA
<213> Diabrotica virgifera

<400> 246
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aatactcctg cgttgctaca aacgaacacg gcgtagacga aacatcttgt gtagttattg 120
tagaaggaca aaccagcaca ccagaacaac aagaactagc caacaaatta ctctattcag 180
gagacaggaa gtacattgaa catcctataa agccagctcc aattcctgta actgtgcgaa 240
aaccaatacc ctcatcaaat cctcaccctc tacaaccgaa atctaacaat cctagcacaa 300
atagtttagc gcattcttca tccacactca gtgttggaga tggagacaag aggacgccta 360
ggaaatatgg tagattagat tctactggaa gtccaaatag atcaagaagc gcaactaaag 420
aattagcact gcctgatgac tcaacaatgt acgccccaca atttaccaaa aatctcacag 480
acttaaccat caatgatggt gaaagtctaa ccttgactgc acacgtaaag ggagatccag 540
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tcaaatacaa gaacggaata gcgaaattac acataaatga agtataccct gaagatgaag 660
gagaatatgt gtgcagagca accaactctg taggaacctc tgagaccaaa tgcaaactaa 720
ccattaaacc aatggccaat gccaccaacg gcaagaaaaa atcctcagaa gacaaacccc 780
caagaatagt agaccattga aatcagcatt tgtagaagac 820

<210> 247
<211> 815
<212> DNA
<213> Diabrotica virgifera

<400> 247
gttataccag aaaaagaaga aggtagtcct tcggaagtaa aacaagtgct gcaggatgtg 60
gatactgaag atttgtacac taaatataaa aaacttcaac aacagttgga gttcttggag 120
gttcaagaag agtacattaa agatgagcaa aggaatctca aaaaggagta tttacatgct 180
caggaagaag tgaagcgtat ccagtctgtc ccgcttgtta ttggacagtt tttagaagct 240
gtagatcaaa acactggcat tgttggctca actacaggtt caaattatta tgttagaatc 300
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agcaatgcct tagtagatgt cctaccacca gaggcagatt cttcaataag catgctccag 420
gctgatgaaa aaccagatgt tcaatacagt gacattggag gtatggatat gcagaaacaa 480
gaaattaggg aagctgtaga gttacctttg actcacttcg aattgtataa acagattggt 540
attgatcccc ccagaggtgt gttgatgtat ggacctcctg gatgcgggaa gactatgttg 600
gccaaagctg ttgctcatca tactacagct gcctttattc gtgtagtcgg atcagaattc 660
gtacagaaat atcttggtga aggtcctcga atggtgagag acgtgttccg tctagcaaaa 720
gaaaattctc cagcaatcat ctttattgat gaaattgatg caatcgctac caaacgtttt 780
gatgcccaga caggtgctga tcgtgaagtc cagag 815

<210> 248
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 248
cttcaacaac agttggagtt cttggagg 28

<210> 249
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 249
ctctggactt cacgatcagc acctg 25

<210> 250
<211> 722
<212> DNA
<213> Diabrotica virgifera

<400> 250
cttcaacaac agttggagtt cttggaggtt caagaagagt acattaaaga tgagcaaagg 60
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cttgttattg gacagttttt agaagctgta gatcaaaaca ctggcattgt tggctcaact 180
acaggttcaa attattatgt tagaatctta tcaacaattg atagagaact cttaaaacct 240
tctgctagtg ttgctcttca taaacacagc aatgccttag tagatgtcct accaccagag 300
gcagattctt caataagcat gctccaggct gatgaaaaac cagatgttca atacagtgac 360
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cacttcgaat tgtataaaca gattggtatt gatccccccа gaggtgtgtt gatgtatgga 480
cctcctggat gcgggaagac tatgttggcc aaagctgttg ctcatcatac tacagctgcc 540
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gttagagacg tgttccgtct agcaaaagaa aattctccag caatcatctt tattgatgaa 660
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ag 722

<210> 251
<211> 1324
<212> DNA
<213> Diabrotica virgifera

<400> 251
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tttaaatcgg aaaatggaga agtcgccggt gatatgatgg atctccccat agactgttcc 180
ttacagcagc tcacgttaat ttgtaatgct ttgttaaaac aggaagaacc agtaccatac 240
ttattttacg ttaacgaaaa cgaaataacc catactttgg aaaaagcact aaatataagg 300
gaattaaata cagaaggtgt tgtagatatc atttatcaac aacaagcagt gtttagggta 360
cgccctgtaa caaggtgtac cagctcaata ccaggtcatg cagaagcagt tatttcagtt 420
agttttagtc cagacggtaa acatttagca agtggatctg gtgatacaac agtcaggttt 480
tgggatgttg atacgcaatc tccgttatat acttgtgaag gtcataaaaa ttgggtgttg 540
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atcatatggg atcctttтac aggaaagcaa ataggtaaaa cgttaacggg acataaacag 660
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aagttcttca aaagatggag atgtaaggat atgggatact gtactcagca atacattttt 780
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caagaaaaaa tctcaggact ttgccctcaa acgatactat gaagttacag aatctattgg 1080
agaaagatta gtatcgggtt ctgatgattt cacattattt ctttggaatc ctgataaaga 1140
caagaagcct ttagctaggc taacaggtca ccaacaatta gtcaatgacg tgaaatttтc 1200
acctgatggt agaatattag cttcagcatc tttcgataaa tcaatcaaat tgtgggaggc 1260
aaaacaggaa agtttatttg taccctacgt ggacatgttc aggctgtgta catggtatca 1320
tttt 1324

<210> 252
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 252
gaaaacgaag gcgaagctgt aacagaac 28

<210> 253
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 253
gctccacccc atttcaccat tgttacac 28

<210> 254
<211> 757

<212> DNA
<213> Diabrotica virgifera

<400> 254
gaaaacgaag gcgaagctga acagaacaga agcgtctgtt gtgttgtttt aaatcggaaa 60
atggagaagt cgccggtgat atgatggatc tccccataga ctgttcctta cagcagctca 120
cgttaatttg taatgctttg ttaaaacagg aagaaccagt accatactta ttttacgtta 180
acgaaaacga aataacccat actttggaaa aagcactaaa tataagggaa ttaaatacag 240
aaggtgttgt agatatcatt tatcaacaac aagcagtgtt tagggtacgc cctgtaacaa 300
ggtgtaccag ctcaatacca ggtcatgcag aagcagttat ttcagttagt tttagtccag 360
acggtaaaca tttagcaagt ggatctggtg atacaacagt caggttttgg gatgttgata 420
cgcaatctcc gttatatact tgtgaaggtc ataaaaattg ggtgttgtgt atagcttggt 480
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taagctggga gccttatcat aaaaaccctg aatgtagata tttggcaagt tcttcaaagg 660
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<210> 255
<211> 794
<212> DNA
<213> Diabrotica virgifera

<400> 255
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tgtctgtgat aaatagtaaa aaatattaaa gcgatatttt cgtcgaaact gatatgtatt 180
aaatttatct tttgtgttat taaagagagt taaacgtagc taaagaagaa aaactattag 240
tgatttaaac atgagtacga aagatgatga atacgattat ttatttaaag ttgtccttat 300
tggtgattct ggtgtaggaa aaagtaactt attgtcaaga tttactagaa atgaattcaa 360
tttggagtct aaatctacta taggtgtcga attcgctacc agaagtatac aggtggatgg 420
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gacatacgaa aacgttgaac gttggttgcg cgaattgcgc gaccacgcag atcagaacat 600
tgtgatcatg ttggtcggaa acaaatccga tctgaggcat ttgcgcgccg tgctgacaga 660
agaagctaag gctttcgccg aaagaaacgg cctcagcttc atcgagactt cagccctaga 720
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ccaaaaacag atca 794

<210> 256
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 256
ggaacgtatc ggaagtaatg tgtctgtg 28

<210> 257
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 257
cacaatgttc tgatctgcgt ggtcg 25

<210> 258
<211> 504
<212> DNA
<213> Diabrotica virgifera

<400> 258
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cgtcgaaact gatatgtatt aaatttatct tttgtgttat taaagagagt taaacgtagc 120
taaagaagaa aaactattag tgatttaaac atgagtacga aagatgatga atacgattat 180

ttatttaaag ttgtccttat tggtgattct ggtgtaggaa aaagtaactt attgtcaaga 240
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agaagtatac aggtggatgg taaaactatt aaagcacaaa tatgggacac ggcaggtcaa 360
gagagatacc gagcaatcac ggcggcctat tatcgtggtg cagtcggtgc tctactcgtc 420
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gaccacgcag atcagaacat tgtg 504

<210> 259
<211> 1180
<212> DNA
<213> Diabrotica virgifera

<400> 259
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cttcccgcaa aaccgtaagc cgccgtggta ccacaaagaa acgtgcccaa agagccacat 180
ccaatgtatt cgcaatgttt gatcaggctc agattgctga gttcaaagaa gccttcaata 240
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<212> DNA
<213> Diabrotica virgifera

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<210> 261
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<212> DNA
<213> Diabrotica virgifera

<400> 261
caacggacaa gacttgatgg tctagtatga 30

<210> 262
<211> 607
<212> DNA
<213> Diabrotica virgifera

<400> 262
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tgcttgcttc cttaggtaaa aacccaactg atgactatct agatggcatg atgaatgaag 180
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aattcacccg catttaaag cacggggcta aggacaagga tgagcaataa gagacgagtt 480

gatgatgaaa ggatttgtaa ttaatatgga acgatgtctt agtttgaatg atttggattt 540
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tccgttg 607

<210> 263
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<212> DNA
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gatggtgata ttggattcgt tgattaccaa acacgaatgg tggactgtgc gaagagtata 180
gctaaaatcg ccggagaaat tgctagcaaa gctgccactg accctcagaa ggtggctcaa 240
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<210> 264
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 264
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<210> 265
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<212> DNA
<213> Diabrotica virgifera

<400> 265
cagtttcaga atccgtcacc tttgcg 26

<210> 266
<211> 913
<212> DNA
<213> Diabrotica virgifera

<400> 266
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aagagtatag ctaaaatcgc cggagaaatt gctagcaaag ctgccactga ccctcagaag 180
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aacgcagtac gtgacgttgc cagtgctctt ggtgacttga ttcaagctac taaggctgct 840

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gattctgaaa ctg 913

<210> 267
<211> 846
<212> DNA
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gttagcttca cagcggccgg cgagcccctt aagtcctacc agacattcta gattacagga 180
gaagcatgaa cttcagaatc ttaacgaccg tttggcggga tatatagatc gagtaaggta 240
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aagggaagtt tcaaacatta aatctatgta tgaccatgaa ttatcagatg ctagaaaact 360
attagacgag acccaccgtg aaaaagcacg tttagagata gatgttaaac gtcttttaga 420
agagaatgac gaactcaagt ctgagttagc aaagaagaac aaggatttgg ctctagctga 480
gaattctgcc aggatatacg agaccagatg taacgagtta cagctcaaag caaatcaagc 540
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ggaagtcgaa aatgccaacc aaagtcttcg agaagagctg tcctttaagg atcagatcca 720
tcaacaacag ttgacagaaa ctcgtactcg tcgtcaagta gaaatcagcg aaatcgacgg 780
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<210> 268
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 268
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<210> 269
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 269
gatttcgctg atttctactt gacgacgag 29

<210> 270
<211> 595
<212> DNA
<213> Diabrotica virgifera

<400> 270
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caagggaagt ttcaaacatt aaatctatgt atgaccatga attatcagat gctagaaaac 180
tattagacga gacccaccgt gaaaaagcac gtttagagat agatgttaaa cgtcttttag 240
aagagaatga cgaactcaag tctgagttag caaagaagaa caaggatttg gctctagctg 300
agaattctgc caggatatac gagaccagat gtaacgagtt acagctcaaa gcaaatcaag 360
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tggaagtcga aaatgccaac caaagtcttc gagaagagct gtcctttaag gatcagatcc 540
atcaacaaca gttgacagaa actcgtactc gtcgtcaagt agaaatcagc gaatc 595

<210> 271
<211> 901
<212> DNA
<213> Diabrotica virgifera

<400> 271
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tgaaaagagc aaagaagttt tagaaacaga tctaccagag aaggcaaaag tgggaaatgg 180
cttgaaacgc ttgcagagca acgatgaagg accttctaaa aaaaaaaaga agaaaaataa 240
aaagaagaaa gagaaaatag tcgaagagga agatacagac gaagaacaac cagaggaaga 300
tgaaattgag tctgacattg aagatcaaga gattgacaat ggtgaagaag atacagatga 360
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tatgggtttt actactatga ctgaaattca agcaaaatct atacctccac ttctggaagg 540
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cgctgttgaa cttatttata agttaaagtt tatgccaaga aatggtactg gtatcattat 660
catttccccc acacgagaat tatcaatgca gacttttgga gtattaaaag aactaatgaa 720
atatcatcac catacatacg gtttggttat gggtggaact gcaagacaaa cagaagcaca 780
aaagctttcc aaaggtatta atatcttagt agcaacgcct ggtaggcttc tggatcatct 840
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c 901

<210> 272
<211> 22
<212> DNA
<213> Diabrotica virgifera

<400> 272
ggaaatggct tgaaacgctt gc 22

<210> 273
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 273
ctgaagatga tccagaagcc taccagg 27

<210> 274
<211> 672
<212> DNA
<213> Diabrotica virgifera

<400> 274
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gaggaagatg aaattgagtc tgacattgaa gatcaagaga ttgacaatgg tgaagaagat 180
acagatgaaa aatctgattt aggaaacaaa ttaccaggat ccagtgctac attagaaatt 240
ctcagtaaaa gtacatttga ctcattgacg gataaagtat gtgaaaatac tttgaaagcc 300
attgcagata tgggttttac tactatgact gaaattcaag caaaatctat acctccactt 360
ctggaaggta gagatttggt tggggctgca aaaacaggat ctggaaaaac tcttgctttt 420
ctcattcccg ctgttgaact tatttataag ttaaagttta tgccaagaaa tggtactggt 480
atcattatca tttccccccac acgagaatta tcaatgcaga cttttggagt attaaaagaa 540
ctaatgaaat atcatcacca tacatacggt ttggttatgg gtggaactgc aagacaaaca 600
gaagcacaaa agctttccaa aggtattaat atcttagtag caacgcctgg taggcttctg 660
gatcatcttc ag 672

<210> 275
<211> 512
<212> DNA
<213> Diabrotica virgifera

<220>
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<222> (370)..(452)
<223> n = a, c, g or t/u

<400> 275

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acatgatgtg ttatggaaat gagagattta ctcagtacct agcatccagt aacagtacat 180
ttcaacttag caacttctta gataaagggg gacttcaagg atatgacatg tctccattta 240
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acttttgcaa agttaaaaga gggaaggatt gatggcatgt taaggacaat gaacgcagat 360
aaattattan aaactcttcc cactttacaa natcaactgg atatcctatt ggaantttga 420
tgttccgcan atgatttnna caacggagtg antaatatgt gtttcatgtt gcttttagg 480
gatttatacg cttatttttg ctgtataatg at 512

<210> 276
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 276
caaatgaacc aaatgtttca attccaca 28

<210> 277
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 277
cgtataaatc cctaaaaagc aacatgaaac ac 32

<210> 278
<211> 470
<212> DNA
<213> Diabrotica virgifera

<400> 278
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aaactgggta gtagtttaca aggcattagt tacagttcac cacatgatgt gttatggaaa 120
tgagagattt actcagtacc tagcatccag taacagtaca tttcaactta gcaacttctt 180
agataaaggg ggacttcaag gatatgacat gtctccattt attagaaaat attcacgata 240
tctcaatgag aaggccttat catacagaac tacagccttc gacttttgca aagttaaaag 300
agggaaggat gatggcatgt taaggacaat gaacgcagat aaattattaa aaactcttcc 360
cactttacaa aatcaactgg atatcctatt ggaatttgat tgttccgcaa atgatttaac 420
aaacggagtg ataaatatgt gtttcatgtt gcttttagg gatttatacg 470

<210> 279
<211> 978
<212> DNA
<213> Diabrotica virgifera

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<222> (918)
<223> n = a, c, g or t/u

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tcgcaagaag aggcccagca gccacaatcg ctaaaccaat cagggcaggg caacacaaca 480
cggttaacgt agctggtaac cccgtcatta gaactggagg catcaacatg gccaacagat 540
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aatattgccg atacttcgcg cgagtctgtc gccagcagtt tttggaacag acaagaaaaa 720

aaattgctcc tccagactcg ctcttcaatg tgcttacagc ttagatattt ctgtagtata 780
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gcaaattgtt ttaataaatc gttcattttt tgttttcgat cacttctagc ttcctgtcga 900
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<210> 280
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 280
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<210> 281
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<212> DNA
<213> Diabrotica virgifera

<400> 281
cacattgaag agcgagtctg gaggag 26

<210> 282
<211> 741
<212> DNA
<213> Diabrotica virgifera

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ctcgaaaaca atctcgatca attgacaaaa gtccacaagc agttggtacg agacaacgcg 240
gatctgcgct gtgaacttcc caaactcgaa aagagactac gagctacgat ggaaagagtc 300
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cagaaacgta ggtctgttat tggtggagat aaagattgag tcgccagcca tcttgtcagg 600
tgcttgagac gtttttagta agcaaaatcc ataaaactgt aataccaaaa atattgccga 660
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ccagactcgc tcttcaatgt g 741

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<212> DNA
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aattgggcta tttgttgatt caagttgcta agatcacctt ttatgatata tgtgagttct 240
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caataattat cgttacctac tataacttgg ggctcagttt cagagccagc tcgacgacgt 660
ctaggaagca ttgcattctt aagaggctac aaagttaatt ttgaaagtag cacaaccata 720
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<210> 284
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 284
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<210> 285
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 285
cgttgacata cttgctaatt tggatggag 29

<210> 286
<211> 645
<212> DNA
<213> Diabrotica virgifera

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taaccctcag cctaaaacga atcagtcaca cacggtgtat ccaaacaatg ttacatctga 180
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gttgacattg ttggcaaaac gaaaatcttt atttgacgac aaaacatcag aaatccaaga 480
actcacatat atcataaaag gtgatcttag caacttgaat caacaaatag cccaattaca 540
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tagcattgtc ttagcactcc atccaaatta gcaagtatgt caacg 645

<210> 287
<211> 883
<212> DNA
<213> Diabrotica virgifera

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ccactcaccc atgggaagtt atttttactg tcatcacctt cactgtatgt tttttgactt 180
tggataaacc gcaagggaca aaggcctttc cacggactac ctcaacatgt agcacctgca 240
ccgaagacca ttttatagcc gccgatgtaa tagtgatgac aataatcaga tgtcttgcca 300
tactgtacag ttatcatcaa ttcagaaatc tcagaaaact aggatccaaa tatatattag 360
gttttgcagg actatttgta gtctgctcca gtttcgtgtt tatatctgca gtattaaaca 420
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tcgtagaaac cttagtaata ggagtgggaa ctttgtcagg agttcagcgt ctagaaatgc 660
tatcgtattt tgcgtgtctg tcagtcattg tgaattatat aattttgtta acttttacc 720
cagcttgttt agctttaatg ttagatttaa gcaaagtaag tgattattac aaacaagaac 780
aagttaccag aatactagtg gacgaaaaag ataagtccaa tccagctgca caacgtgtta 840
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<210> 288
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 288
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<210> 289
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 289
gactgacaga cacgcaaaat acgatagc 28

<210> 290
<211> 586
<212> DNA
<213> Diabrotica virgifera

<400> 290
gttatacggg gaactatgtg ccactcaccc atgggaagtt atttttactg tcatcacctt 60
cactgtatgt tttttgactt tggataaacc gcaagggaca aaggcctttc cacggactac 120
ctcaacatgt agcacctgca ccgaagacca ttttatagcc gccgatgtaa tagtgatgac 180
aataatcaga tgtcttgcca tactgtacag ttatcatcaa ttcagaaatc tcagaaaact 240
aggatccaaa tatatattag gttttgcagg actatttgta gtctgctcca gtttcgtgtt 300
tatatctgca gtattaaaca tcctccaaat cgaagtagcg gacctaaaag atgctctgtt 360
ctttttcttg ttgctaatag atctctcaaa agctgttaaa ttggctcaat acgctctaac 420
tgcctcaaac caagaagaaa taagtaaaaa catagcaatg ggagttgctg ttttagggcc 480
taccataacg ctagatacta tcgtagaaac cttagtaata ggagtgggaa ctttgtcagg 540
agttcagcgt ctagaaatgc tatcgtattt tgcgtgtctg tcagtc 586

<210> 291
<211> 816
<212> DNA
<213> Diabrotica virgifera

<400> 291
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cacctccgcg ttttcttcca aaaacaccgg atgctgataa ggaccagtat tgtttcatta 120
atttaaaaca gatggatggg tgcactgtca agttcagaga attcaattcg attatggttt 180
agcgatacgg tgacaataaa tttgaattat tgtcacattt atcaagaaag tgtacttaat 240
ttataaacag tctgtgataa tatagagctg aatatctaga ccagttatta acatgacgat 300
taagaatatt tgttgccttg gcgctggtta cgtaggtggg ccaacctgca gtgtgatagc 360
tttaaaatgt aaagatatta aagtaacagt tgctgatctt agcgaagaac gaatagctca 420
atggaactcc gacagactcc caatttatga gcctggatta gacaaagtag tacaagagtg 480
cagaggtagg aatttattct tcaccactaa ccttacttcaa gcaatattag atgctgactt 540
gatatttata tcagtgaata caccaacaaa actgaacgga aatggcaagg gaagggcacc 600
tgatctaaaa tacatagagg gagcagcaag aatcatagct gatactgctc aaactaacaa 660
aatcgttgta gaaaaaagta ctgttccagt acgagcagct gaaagtattt cagatatctt 720
aacagctaat aaaaagccaa aagtgacaca tcagattttg tctaatccag aatttctagc 780
ggaaggtact gcaatcaatg atctgctcat cctgat 816

<210> 292
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 292
gatagtagtc aatcagccag ccatgtgg 28

<210> 293
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 293
gcagtaccct ccgctagaaa ttctgga 27

<210> 294
<211> 792
<212> DNA
<213> Diabrotica virgifera

<400> 294
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cacctccgcg ttttcttcca aaaacaccgg atgctgataa ggaccagtat tgtttcatta 120
atttaaaaca gatggatggg tgcactgtca agttcagaga attcaattcg attatggttt 180
agcgatacgg tgacaataaa tttgaattat tgtcacattt atcaagaaag tgtacttaat 240
ttataaacag tctgtgataa tatagagctg aatatctaga ccagttatta acatgacgat 300
taagaatatt tgttgccttg gcgctggtta cgtaggtggg ccaacctgca gtgtgatagc 360
tttaaaatgt aaagatatta aagtaacagt tgctgatctt agcgaagaac gaatagctca 420
atggaactcc gacagactcc caatttatga gcctggatta gacaaagtag tacaagagtg 480
cagaggtagg aatttattct tcaccactaa ccttactcaa gcaatattag atgctgactt 540
gatatttata tcagtgaata caccaacaaa actgaacgga aatggcaagg gaagggcacc 600
tgatctaaaa tacatagagg gagcagcaag aatcatagct gatactgctc aaactaacaa 660
aatcgttgta gaaaaaagta ctgttccagt acgagcagct gaaagtattt cagatatctt 720
aacagctaat aaaaagccaa aagtgacaca tcagattttg tctaatccag aatttctagc 780
ggaaggtact gc 792

<210> 295
<211> 1215
<212> DNA
<213> Diabrotica virgifera

<400> 295
cggacgcgtg gggttgaaag ttaggttaac tccttcacta aacttgctct tgttgtagat 60
acacgtgttt acagcaaata agttattttt taagtatatt gactgcaaat tttcacaatg 120
gctaacgatt tagaacaaaa gatcatcaaa caaatcgaat attacttcgg agacatcaat 180
ctgccgcgtg ataaattctt acaagagaaa atcaaagaag atgaagggtg gatcactctg 240
gatgtcttat taacgttcaa acgtctttcg tcgttatcta ctgaccaaga attaatcgca 300
aaagcagttg aaaagtctga aaatggccta gtgatggtaa gcgaagaccg taagaaactt 360
agacgcaatc cagagaaacc gagtccagaa ttgaatgagg aaagacgcaa agagatcatg 420
gggaggacag cctacgcaaa aggatttcca ttggatgaag aatttaacaa cattatcact 480
ttcctagatg catatggacc agtcgaatca tgcagtcgta gatccaccaa agaccataaa 540
tttaagggtt cctgttttat tattttcaaa gatgtcgaaa cctgcaagaa attcgtagaa 600
gcggaaagta tcaaatatgg agaaacagaa ctaatcagga aattccaaca agtatatttt 660
gacgacaaaa aaaaagagat acaggacaga aaaaacgaga aagctgctag caaggtagct 720
gcaaaatcgg gcacaccgct tcagtttccc aaaggagcca ttattcattt ctctggaatc 780
gaggaaggtg taaaattatt gagggaagat cttaaagaaa aggtcaagga agtcggcaaa 840
attgaagtaa aattcgttga ttttaatcaa ggtgatttgg agggatacct acgtttcgca 900
gaagaaaacg aagctgtcga gttctttaag acagttgata atgacacact tgaaattaaa 960
gatcaaaaag tcaaattgag agtgttagaa ggagacgaag aggaggaata tctgaagaaa 1020
acttcagatt ctattctaaa catgagaaaa cataagaaac aaaattctaa taacagaaaa 1080
cgaaagggca actttggtgg cggaagaaga gatgctaaag ttagtaaaag ggactaataa 1140
acaaaatatg ttatcatctt tatctaattg tttagatatt gtaaaaatta ggttaaaaat 1200
aaaggttttt tttac 1215

<210> 296
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 296
caagagaaaa tcaaagaaga tgaagggtgg 30

<210> 297
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 297
ccaaagttgc cctttcgttt tctgttatta gaat 34

<210> 298
<211> 895
<212> DNA
<213> Diabrotica virgifera

<400> 298
caagagaaaa tcaaagaaga tgaagggtgg atcactctgg atgtcttatt aacgttcaaa 60
cgtctttcgt cgttatctac tgaccaagaa ttaatcgcaa aagcagttga aaagtctgaa 120
aatggcctag tgatggtaag cgaagaccgt aagaaacttа gacgcaatcc agagaaaccg 180
agtccagaat tgaatgagga aagacgcaaa gagatcatgg ggaggacagc ctacgcaaaa 240
ggatttccat tggatgaaga atttaacaac attatcactt tcctagatgc atatggacca 300
gtcgaatcat gcagtcgtag atccaccaaa gaccataaat ttaagggttc ctgttttatt 360
attttcaaag atgtcgaaac ctgcaagaaa ttcgtagaag cggaaagtat caaatatgga 420
gaaacagaac taatcaggaa attccaacaa gtatatttтg acgacaaaaa aaaagagata 480
caggacagaa aaaacgagaa agctgctagc aaggtagctg caaaatcggg cacaccgctt 540
cagtttccca aaggagccat tattcatttc tctggaatcg aggaaggtgt aaaattattg 600
agggaagatc ttaaagaaaa ggtcaaggaa gtcggcaaaa ttgaagtaaa attcgttgat 660
tttaatcaag gtgatttgga gggataccta cgtttcgcag aagaaaacga agctgtcgag 720
ttctttaaga cagttgataa tgacacactt gaaattaaag atcaaaaagt caaattgaga 780
gtgttagaag gagacgaaga ggaggaatat ctgaaaaaaa cttcagattc tattctaaac 840
atgagaaaac ataagaaaca aaattctaat aacagaaaac gaaagggcaa cttgg 895

<210> 299
<211> 822
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (807)
<223> n = a, c, g or t/u

<400> 299
caattagctc aaagagccag agacgagaga gctgggatta aggcagctcc tagtcattcc 60
aagggaggcg tggacgagga agaacacgaa agagacttgc ttcgtcaaga tcgtcataaa 120
gagcgagctc gagatcgtaa tttagcgcgt gcagctcccg ataagcgcag taaacttcag 180
cgagagcgcg aaagagacat ctcagaacaa attgctctcg gtatgccagc gaaaggtgca 240
ccatccaacg acactcagtt tgatcaaaga ttatttggtc aggctcaagg tcttggtcac 300
ggctatgggg atgatgaagc ttataatgtc tatgataaac cttggagaga tggaggatcc 360
atggcaaatc acatttatcg accaagtaaa aatattgata aagatatgta tggtggagaa 420
gacattgaaa aagctattag aactaatagg tttgtaccag ataaagaatt tgggggtact 480
gatcgttctg gagcaggccg atcaggtcct gtgcaattcg aaaaagaaga agatccgttc 540
ggattggatc agttcttgtc gcaagctaag agagccagta aaagaaaaga acctgaaaag 600
agagacgaca gggataagag gaaaagaaga gagtaaaagt attttacagt ttctttttga 660
gacctttata aaataaatat aggtatactg gtatacataa ttctgatgta tttttaaaaa 720
agttatattt gatattatgt aactaattgt aataggtaaa ctcaacaata catttttcag 780
ataatttttg tgaattattg taattanata tctataacac ac 822

<210> 300
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 300
caagggaggc gtggacgagg aag 23

<210> 301
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 301
ctctcttctt ttcctcttat ccctgtcgtc tc 32

<210> 302
<211> 573
<212> DNA
<213> Diabrotica virgifera

<400> 302
cagggaggcg tggacgagga agaacacgaa agagacttgc ttcgtcaaga tcgtcataaa 60
gagcgagctc gagatcgtaa tttagcgcgt gcagctcccg ataagcgcag taaacttcag 120
cgagagcgcg aaagagacat ctcagaacaa attgctctcg gtatgccagc gaaaggtgca 180
ccatccaacg acactcagtt tgatcaaaga ttatttggtc aggctcaggg tcttggtcac 240
ggctatgggg atgatgaagc ttataatgtc tatgataaac cttggagaga tggagggtcc 300
atggcaaatc acatttatcg accaagtaaa aatattgata aagatatgta tggtggagaa 360
aacattgaaa aagctattag aactaatagg tttgtaccag ataaagaatt tgggggtact 420
gatcgttctg gagcaggccg atcaggtcct gtgcaattcg aaaaagaaga agatccgttc 480
ggattggatc agttcttgtc gcaagctaag agagccagta aaagaaaaga acctgaaaag 540
agagacgaca gggataagag gaaaagaaga gag 573

<210> 303
<211> 755
<212> DNA
<213> Diabrotica virgifera

<400> 303
aatgataact ttgggtgggg atgctgattt tgaaatggtt gatacgtatg atccattttc 60
agagggaatt cagtttaatg tgaggcctcc gaaaaaatct tggaagaaaa tttctaactt 120
atctggagga gaaaaaacgt tatcatcttt ggcccttgtc tttgctctgc attattacaa 180
accttcgcca ctttatgtaa tggacgaaat tgacgcagcc ttagatttca aaaatgtgtc 240
aattgttgga aattatatta agcaacgtac caaaaacgct caattcatta taatctccct 300
tcgatccaac atgttcgaac tgtgcgataa tctcatagga atttacaaaa cgtacgattg 360
cacgaagtct ataacgatag atccaagagt atatgacgag caaacaaaac ataacgaaaa 420
gcgagtgtcg cttggatcga ccaacgaaga gagtagacga acgtctgtgc ccgcttctgg 480
tactggagat tctggagata aaaatccaga aagaaatgtt agcaatgaag ttgtagacga 540
acaacgttcg aacttgatgg aggttgataa tgtcatccag agtacaaata atgccaggga 600
ttcatctggt ctgtctagta gcatgagtga aaatgaaaat agtttacaag aatcccaagt 660
gcctgaaata tgaaggggtc agtttcgtga tttagttact acttcttgat ataaatgtag 720
catttttagt tactttaata catttacata tttgt 755

<210> 304
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 304
ggatgctgat tttgaaatgg ttgatacg 28

<210> 305
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 305
cttcatattt caggcacttg ggattcttg 29

<210> 306
<211> 656
<212> DNA
<213> Diabrotica virgifera

<400> 306
ggatgctgat tttgaaatgg ttgatacgta tgatccattt tcagagggaa ttcagtttaa 60
tgtgaggcct ccgaaaaaat cttggaagaa aatttctaac ttatctggag gagaaaaaac 120
gttatcatct ttggcccttg tctttgctct gcattattac aaaccttcgc cactttatgt 180

aatggacgaa attgacgcag ccttagattt caaaaatgtg tcaattgttg gaaattatat 240
taagcaacgt accaaaaacg ctcaattcat tataatctcc cttcgatcca acatgttcga 300
actgtgcgat aatctcatag gaatttacaa aacgtacgat tgcacgaagt ctataacgat 360
agatccaaga gtatatgacg agcaaacaaa acataacgaa aagcgagtgt cgcttggatc 420
gaccaacgaa gagagtagac gaacgtctgt gcccgcttct ggtactggag attctggaga 480
taaaaatcca gaaagaaatg ttagcaatga agttgtagac gaacaacgtt cgaacttgat 540
ggaggttgat aatgtcatcc agagtacaaa taatgccagg gattcatctg gtctgtctag 600
tagcatgagt gaaaatgaaa atagtttaca agaatcccaa gtgcctgaaa tagaag 656

<210> 307
<211> 428
<212> DNA
<213> Diabrotica virgifera

<400> 307
cggacgcgtg ggctgaaatc caaatttttt ataaatataa ccttaaagaa gtctgtaaag 60
atttaagcat gatttaacga aatattaaat ttttaacttt aaaatgccga actcagatat 120
tgatgataac gaaaaagtaa ctgggcccgt cgacaatgca tgggaactga aaattccaga 180
attcaaacca gaagataatc cacatggatt attagaggaa agtagtttcg ccacattatt 240
tccacaatac agagaacaat atttaagaca agtatggcct ttagttaaga aaactctggg 300
tgaatataat ataaaagcag aactagatgt tgtagaaggt agtatgactg ttaaaaccac 360
aaggcaaaca tgggatcctt acattattat taaagcaaga gatgtgataa agttaatgtc 420
tagaagtg 428

<210> 308
<211> 36
<212> DNA
<213> Diabrotica virgifera

<400> 308
cgaactcaga tattgatgat aacgaaaaag taactg 36

<210> 309
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 309
catgtttgcc ttgtggtttt aacagtcata ctac 34

<210> 310
<211> 265
<212> DNA
<213> Diabrotica virgifera

<400> 310
cgaactcaga tattgatgat aacgaaaaag taactgggcc cgtcgacaat gcatgggaac 60
tgaaaattcc agaattcaaa ccagaagata atccacatgg attattagag gaaagtagtt 120
tcgccacatt atttccacaa tacagagaac aatatttaag acaagtatgg cctttagtta 180
agaaaactct gggtgaatat aatataaaag cagaactaga tgttgtagaa ggtagtatga 240
ctgttaaaac cacaaggcaa acatg 265

<210> 311
<211> 657
<212> DNA
<213> Diabrotica virgifera

<400> 311
acgcgtccgc ccacgcgtcc gcgactgccg gccattattt gtaagcggcg aaagattcgg 60
cgttgctttg taaaattgtt gtgaatctac cggcatcaaa agcctaaaaa gcgtgtagct 120
tttacgtagt tatttaactg tagctacttt acaaatttca tcaaaatggg cgatgaaaag 180
aaggccagcg atagcgaaca cattaatctc aaagtacttg gtcaggataa tgcagtggta 240
caattcaaaa tcaaaaaaca cacccccatta aaaaaattga tgaccgccta ttgtgaacgt 300

gctggtataa gcacacaagt agtcagattt agatttgatg gcaaccccat aaacgacaca 360
gatactccta attctttaga gatggatgaa ggagacacaa ttgaagtata tcaacaacag 420
acaggtggtt tcttctatcg gtttctattc atttaaataa tcacactgta ttgttcttgt 480
attttcttat ttgctaaatt aaactagttt taaataagta agttaatttt aatataattt 540
ttaattcatg tcaactgaag ttacaatagt tctgtaagaa ttcgactatt tgtgtttttg 600
gactcttatt ttgtaattaa aacacttaga atacaaacat ttttcttata aaaaaaa 657

<210> 312
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 312
gaaagattcg gcgttgcttt gtaaaattg 29

<210> 313
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 313
gaatagaaac cgatagaaga aaccacctgt c 31

<210> 314
<211> 401
<212> DNA
<213> Diabrotica virgifera

<400> 314
gaaagattcg gcgttgcttt gtaaaattgt tgtgaatcta ccggcatcaa aagcctaaaa 60
agcgtgtagc ttttacgtag ttatttaact gtagctactt tacaaatttc atcaaaatgg 120
gcgatgaaaa gaaggccagc gatagcgaac acattaatct caaagtactt ggtcaggata 180
atgcagtggt acaatttaaa atcaaaaaac acaccccatt aaaaaaattg atgaccgcct 240
attgtgaacg tgctggtata agcacacaag tagtcagatt tagatttgat ggcaacccca 300
taaacgacac agatactcct aattctttag agatggatga aggagacaca attgaagtat 360
atcaacaaca gacaggtggt ttcttctatc ggtttctatt c 401

<210> 315
<211> 822
<212> DNA
<213> Diabrotica virgifera

<400> 315
aaacgacgat tcagtgcacc gacgcaacgt acgccagcca attgtcccta gagaatccca 60
aaggattttc tagagatgct tttggaaggc agagtatgtc agagaagagg catgcgacgt 120
tggatgccaa gaataccgac acatatcaga aatcgaagaa gattagggag gagaggaaga 180
tgaaagaaat aaatgctgat aaattaggcc aattaggacc aagtttaggc atgaagaaat 240
cttcaagctt ggaatcgtta cagacaatgg tacaagagat tcaaatgcaa gaagaaggcg 300
acccagctta tagttataga ggacccaatg gagctttaaa agtaatcagg gggaaaggct 360
gtgaagaaag ctttagggca gctgtagtgg atccaaatca ccgaagtgag atcggagcca 420
aaaagcattg gttgcttgac ggtccaatgg aaaacgaacg agaagtggat ggcttcagca 480
atgctcgagg aggtcctagg caatcttctc tgaatgcagc tattgatata aagaataaat 540
cagcaaagaa gaaacctggt atatttaaag gcattggttc gatgttcagg tttggcaaac 600
atcgtaaact ggacttccaa acagcagagg ctgcccaaca ctatcatcat acaaacgaat 660
tcgattcaaa tgccaacgta cctcaacaac acaccgcaga taccgaaaac cgaacgcaaa 720
gtagtcaaac agaacggacg caagagcatt cacaaaaagt acctctaaat agcaaccccc 780
agaaccaaaa cacttcccaa ggatctcacc accagacgca ag 822

<210> 316
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 316
gatgccaaga ataccgacac atatcagaaa tc 32

<210> 317
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 317
cttgcgtctg gtggtgagat ccttg 25

<210> 318
<211> 700
<212> DNA
<213> Diabrotica virgifera

<400> 318
gatgccaaga ataccgacac atatcagaaa tcgaagaaga ttagggagga gaggaagatg 60
aaagaaataa atgctgataa attaggccaa ttaggaccaa gtttaggcat gaagaaatct 120
tcaagcttgg aatcgttaca gacaatggta caagagattc aaatgcaaga agaaggcgac 180
ccagcttata gttatagagg acccaatgga gctttaaaag taatcagggg gaaaggctgt 240
gaagaaagct ttagggcagc tgtagtggat ccaaatcacc gaagtgagat cggagccaaa 300
aagcattggt tgcttgacgg tccaatggaa aacgaacgag aagtggatgg cttcagcaat 360
gctcgaggag gtcctaggca atcttctctg aatgcagcta ttgatataaa gaataaatca 420
gcaaagaaga aacctggtat atttaaaggc attggttcga tgttcaggtt tggcaaacat 480
cgtaaactgg acttccaaac agcagaggct gcccaacact atcatcatac aaacgaattc 540
gattcaaatg ccaacgtacc tcaacaacac accgcagata ccgaaaaccg aacgcaaagt 600
agtcaaccag aacggacgca agagcattca caaaaagtac ctcaaaatag caacccccag 660
aaccaaaaca cttcccaagg atctcaccac cagacgcaag 700

<210> 319
<211> 1321
<212> DNA
<213> Diabrotica virgifera

<400> 319
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cgaaattata atttaagaag ttataaaatt gatctccagt aagaatgttg gaacatgagt 120
caaccatggc acaacctggt aaatactcat cattttcagg atcttctctt ctatctagtt 180
cgttaagtac catttcccat actgcatgtg atcttgttgg gcaattttgg aggtttccgt 240
gacatctgtg tggcattcta aaatacatag tatagggcca tagtggtggg ttatttaagg 300
gtgcggtgat agtggagtcg tataagaagg cttcttcttc catcatagta aattggttgt 360
tacctcctac tcttagataa ggggctctta ctcctactac gctgttatcg gtaatattgg 420
cgaatttctc agtgatgact cgcatacctc ccatttcttt aacccagtca tttacactgg 480
cgttggacca gaagttttcg tcatcattgt gcgatattga atgtactgcg atttcgtgac 540
cttttctatg catttcttgg actgccgagt agttggtgta cttgtgagac acgaagaatg 600
tagccttgat atgacaaccg ttggggtttt tccgttcacc gttgaaaatg ttcttgtata 660
gaccgatgtt gttattattt atggcgtcgt caaatgtgac agttatcatt tgaggtacat 720
ctttggctgg taaatcattg ggaatgcctg taccgtcctc tgagcagaaa caatcaggga 780
gaacgcatac tgcggggtcg cagggtgggg cactattggg gtcactatcg atatcgcagg 840
tagtttcatc agacccatcc tggcaatcct tttccccgtt acaaaagagc cctctttcta 900
tacactgacc atctccgcag gccaattcac cttcgttaca tacgggtttg tccgtaaaca 960
acatgggttt tacccgccgc tctttgtttt tcaatttgca gtttttaact gagtccttcc 1020
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ggcccgaaga tgtacattga atgacgtctc gacaggtgtc cccctcccct cccactaaac 1140
gaaaccactc gcccgcgtct ttgtctttgc atatttcggc ctcgaaactc tcctctttct 1200
tcggttcatc gtctttggcc tgctgttgtg ccaaaccgct tgaggctacc aacgcaacca 1260
agaaaatcgt cgttgcgaag tacgccatga cacttaaaca actgaaagta ccggacgcac 1320
a 1321

<210> 320
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 320
cagttgttta agtgtcatgg cgtacttcg 29

<210> 321
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 321
ggaggtttcc gtgacatctg tgtgg 25

<210> 322
<211> 1075
<212> DNA
<213> Diabrotica virgifera

<400> 322
cagttgttta agtgtcatgg cgtacttcgc aacgacgatt ttcttggttg cgttggtagc 60
ctcaagcggt ttggcacaac agcaggccaa agacgatgaa ccgaagaaag aggagagttt 120
cgaggccgaa atatgcaaag acaaagacgc gggcgagtgg tttcgtttag tgggagggga 180
gggggacacc tgtcgagacg tcattcaatg tacatcttcg ggcctgcaag ccattcgttg 240
tccagccggt ctatatttcg acatcgaaaa gcaaacatgc gactggaagg actcagttaa 300
aaactgcaaa ttgaaaaaca aagagcggcg ggtaaaaccc atgttgttta cggacaaacc 360
cgtatgtaac gaaggtgaat tggcctgcgg agatggtcag tgtatagaaa gagggctctt 420
ttgtaacggg gaaaaggatt gccaggatgg gtctgatgaa actacctgcg atatcgatag 480
tgaccccaat agtgccccac cctgcgaccc cgcagtatgc gttctccctg attgtttctg 540
ctcagaggac ggtacaggca ttcccaatga tttaccagcc aaagatgtac ctcaaatgat 600
aactgtcaca tttgacgacg ccataaataa taacaacatc ggtctataca agaacatttt 660
caacggtgaa cggaaaaacc ccaacggttg tcatatcaag gctacattct tcgtgtctca 720
caagtacacc aactactctg cagtccaaga aatgcataga aaaggtcacg aaatcgcagt 780
acattcaata tcgcacaatg atgacgaaaa cttctggtcc aacgccagtg taaatgactg 840
ggttaaagaa atgggaggta tgcgagtcat cactgagaaa ttcgcaaata ttaccgataa 900
cagcgtagta ggagtaagag ccccttatct aagagtagga ggtaacaacc aatttactat 960
gatggaagaa gaagccttct tatacgactc cactatcacc gcaccattaa ataacccacc 1020
actatggccc tatactatgt atttcagaat gccacacaga tgtcaggaaa cctcc 1075

<210> 323
<211> 1703
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (1641)
<223> n = a, c, g or t/u

<400> 323
tgaaagtcaa cattggtgaa gagtagtact gtccaacgga gcatgcgcag tgcgaaaaaa 60
gcacttgtat aaataaaacg aaagtctgcg atcacttctt ggctagtgct tgaaatttca 120
gcatggctga caaaagacta tggctgtgtt gtttttttatt attgacaatt gcttacgctc 180
aagatgaaga tgatgacgat tcaggggaac cacagatcga ccagctgtgt gaaaacaggc 240
ctgctgatga atattttagg ttaagcactg atggagactg cagagaagtt gtaaggtgtg 300
atctcaattc agatcttaag ggcggtactc gattggcagc ggtaaaatgt ccgacaggac 360
ttgcttttga tcttttccga caaacttgcg attggaaagt caatgtcaaa aattgtgata 420
tcgtagaaaa accaagaaaa gtccttccaa ttttgaaaac cgacgaacca agatgtccag 480
aaggaaagct gatgtgtggt aatgaagaat gtatcgacaa agatcttttc tgtaatggaa 540
agccagactg taaagatgaa tcagacgaga atgcatgcga tgttgatagt gatcccaacc 600
gtgcacctga ctgtgaccca actcaatgtg taattccgga ctgtttctgc tcagcggacg 660
gaactagaat tcctggcgcg ctagaaccag caaatgtacc acaaatgata accatttcgt 720
tcaatggtgc cgttaatgta gataacatcg atctatatga agaaatcttt tcaggcacta 780
gacttaatcc aaatggttgc caaattaaag gaaatttctt cgtttctcac aaatacacaa 840
actactcagc agtacaggac ctacacagac gtggtcatga aatcgcggtg ttttcattga 900
ctcataaaga ggatccaaac tactggtccc agggttctta tgacgactgg ttggctgaaa 960
tggctggagc tagattgatt attgaaagat ttgccaacat taccgatgga tcaataattg 1020

gagtgagagc tccatacctc agagtaggag gaaacagaca atttgaaatg atgacagatc 1080
aattctttat ttatgattca tcaattacag cctctcttgg acgtgtccca atctggcctt 1140
atactttata cttcaggatg ccacataagt gcaacggaaa tgcccacaac tgtcccagca 1200
gaagccatcc cgtttgggaa atagtcatga acgaattgga cagacgtgat gatcctactt 1260
ttgacgaatc actacctggt tgccacatgg tagactcctg ttctaatgtt caaactggag 1320
atcaatttgc aagactactc agacacaatt tcaacagaca tttgaattca aaccgagctc 1380
cgttgggtct taacttccat gcctcatggt taaagagtaa gaaagaattc aaagaagaac 1440
ttattaaatt cattgaagat atgttggccc gaaatgatgt ttatttcgta acaaacagtc 1500
aagtcatcca atgggttcag aatcccacag aactcagtgg attaagagac ttccaagaat 1560
ggaaagaaaa gtgtgacatt aaaggtcaac cttactgttc attgcccaat tcatgtccat 1620
tacataccag agaactgcca nggtgaactc tacgattgtt tacctgtatg gaatgtccca 1680
acaattatcc atggattttg gat 1703

<210> 324
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 324
gacgaaccaa gatgtccaga aggaaagc 28

<210> 325
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 325
gttgggacat tccatacagg taaacaatcg 30

<210> 326
<211> 1221
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (271)..(358)
<223> n = a, c, g or t/u

<400> 326
gacgaaccaa gatgtccaga aggaaagctg atgtgtggta atgaagaatg tatcgacaaa 60
gatcttttct gtaatggaaa gccagactgt aaagatgaat cagacgagaa tgcatgcgat 120
gttgatagtg atcccaaccg tgcacctgac tgtgacccaa ctcaatgtgt aattccggac 180
tgtttctgct cagcggacgg aactagaatt cctggcgcgc tagaaccagc aaatgtacca 240
caaatgataa ccatttcgtt caatggtgcc ngttaatgta gataacatcg atctatatga 300
agaaatcttt tcaggcacta gacttaatcc aaatggttgc caaattaaag gaaatttnct 360
tcgtttctca caaatacaca aactactcag cagtacagga cctacacaga cgtggtcatg 420
aaatcgcggt gttttcattg actcataaag agggtccaaa ctactggtcc cagggttctt 480
atgacgactg gttggctgaa atggctggag ctagattgat tattgaaaga tttgccaaca 540
ttaccgatgg atcaataatt ggagtgagag ctccatacct cagagtagga ggaaacagac 600
aatttgaaat gatgacagat caattcttta tttatgattc atcaattaca gcctctcttg 660
gacgtgtccc aatctggcct tatactttat acttcaggat gccacataag tgcaacggaa 720
atgcccacaa ctgtcccagc agaagccgtc ccgtttggga aatagtcatg aacgaattgg 780
acagacgtga tgatcctact tttgacgaat cactacctgg ttgccacatg gtagactcct 840
gttctaatgt tcaaactgga gatcaatttg caagactact cagacacaat ttcaacagac 900
atttgaattc aaaccgagct ccgttgggtc tcaacttcca tgcctcatgg ttaaagagta 960
agaaagaatt caaagaagaa cttattaaat tcattgaaga tatgttggcc cgaaatgatg 1020
tttatttcgt aacaaacagt caagtcatcc aatgggttca gaatcccaca gaactcagtg 1080
gattaagaga cttccaagaa tggaaagaaa agtgtgacat taaaggtcaa ccttactgtt 1140
cattgcccaa ttcatgtcca ttacatacca gagaactgcc aggtgaaact ctacgattgt 1200
ttacctgtat ggaatgtccc a 1221

<210> 327
<211> 826

<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (658)..(683)
<223> n = a, c, g or t/u

<400> 327
caaattgttt attacaagtt tattaccatg agagtgtata taatattatt tagcgtcttt 60
tgcttgagcc attgcgctcc acaggaaaac aaaaataaat ttccagaaca ataccaaggt 120
caacacatac caattgtaag gcaagaacaa gaagtgaatt atgatggcac ctacgaatac 180
aactttgaaa ctggaaatgg catagtccaa gaagaaaaag gatttttgaa aaacgccggt 240
acaaaggaag aagctcaagt cgctcaaggt ttttcctcat atacttcccc cgaaggagta 300
aaaatagaac tccggtacat cgcagacgaa aacggtttcc agccaatcgg agaccaccta 360
ccgactccgc caccaatccc tgaggctatt ttacgagcgc taagtgtact gaaacagttg 420
ggtaatttga atgaagacca agaagaaaat aacaacatta gatgaagaga gagtgtgatc 480
aaatcgttat tttggataag tcccttcata tttcaaaatg gtaccatact aactatgaaa 540
tacttcaaag aattaagatc tttttaaaat acgtcaacac tttagagtag gaaacagcgg 600
tggaacctcg caaaatgtac acaagttcgg ttttattttt ttgcaggaaa atcaaggngt 660
gcttataatg aaactaacat tttnctaaaa aatttcgccc ctgaaccccc ctttttatcc 720
ctttgaaggg gggtatttgt ggtttttgcg aaacgaagcc cttcctgtat acgttttaca 780
aaagaatgta ctaaatagta aaatgaagag gactataatt tgctac 826

<210> 328
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 328
ccagaacaat accaaggtca acacatacc 29

<210> 329
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 329
gaggttccac cgctgtttcc tactc 25

<210> 330
<211> 505
<212> DNA
<213> Diabrotica virgifera

<400> 330
agaacaatac caaggtcaac acataccaat tgtaaggcaa gaacaagaag tgaattatga 60
tggcacctac gaatacaact ttgaaactgg aaatggcata gtccaagaag aaaaaggatt 120
tttgaaaaac gccggtacaa aggaagaagc tcaagtcgct caaggttttt cctcatatac 180
ttcccccgaa ggagtaaaaa tagaactccg gtacatcgca gacgaaaacg gtttccagcc 240
aatcggagac cacctaccga ctccgccacc aatccctgag gctattttac gagcgctaag 300
tgtactgaaa cagttgggta atttgaatga agaccaagaa gaaaataaca acattagatg 360
aagagagagt gtgatcaaat cgttattttg gataagtccc ttcatatttc aaaatggtac 420
catactaact atgaaatact tcaaagaact aagatctttt taaaatacgt caacacttta 480
gagtaggaaa cagcggtgga acctc 505

<210> 331
<211> 731
<212> DNA
<213> Diabrotica virgifera

<400> 331
ttggtaaagt ttgttgtagt ttcagtgatc ttcattttga actcttttt ttttttcaata 60
tgcgaactac gtactttaca ttagttgtaa tattagctgt agctgtacaa gaacatgcat 120

ctcaacaatt accagtaacg caagcttgct tgggatgtat atgtgaagct atttccaact 180
gtaatgtaac tagcggttgt tctggtgagg tttgtggacc atttcggatc acctgggcat 240
attgggcaga tgctggaaag cccaccgtga aaggagtatc accagaagac aataatgcat 300
atggatcttg tgctactgat acgtattgtt ctgcattagc tgttcaagga tatatgaata 360
aatttcaaca ggattgcaat ggtgatggta aaatagactg tgacgattat gcaagtattc 420
acacgcatgg tggatatggc tgcaaaggaa ctaatctacc acaacctttt ggaaatcgat 480
attatcaatg taaagagata gttggacgta gaccagagta atgttggagt aaccccagga 540
ttgagaacag gaagattgat agaaacgcat ttactactct atgaattttg ttggatgatt 600
attgcaactt aatgtaattc aatatgttta agggctgtaa ttacaattaa ataaaaataa 660
ctgacatcat agaatacact attgtaacaa ctatttttt aggtatagta ttttaagtaa 720
actcttttt t 731

<210> 332
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 332
gcatctcaac aattaccagt aacgcaagc 29

<210> 333
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 333
gtttctatca atcttcctgt tctcaatcct gg 32

<210> 334
<211> 450
<212> DNA
<213> Diabrotica virgifera

<400> 334
gcatctcaac aattaccagt aacgcaagct tgcttgggat gtatatgtga agctatttcc 60
aactgtaatg taactagcgg ttgttctggt gaggtttgtg gaccatttcg gatcacctgg 120
gcatattggg cagatgctgg aaagcccacc gtgaaaggag tatcaccaga agacaataat 180
gcatatggat cttgtgctac tgatacgtat tgttctgcat tagctgttca aggatatatg 240
aataaatttc aacaggattg caatggtgat ggtaaaatag actgtgacga ttatgcaagt 300
attcacacgc atggtggata tggctgcaaa ggaactaatc taccacaacc ttttggaaat 360
cgatattatc aatgtaaaga gatagttgga cgtagaccag agtaatgttg gagtaacccc 420
aggattgaga acaggaagat tgatagaaac 450

<210> 335
<211> 878
<212> DNA
<213> Diabrotica virgifera

<400> 335
gtgattgtgg tgttttatcg gtgttaagac aggatgggtt tcggtcaaaa aattctagtc 60
cctctagtcc ttatagaaat gtccctactg gttacatcca gaataatata tgaccatcag 120
caagaagata atcacgaagg gcaacaagtt caatacacca attactatgg tcacgaagag 180
tctgccacaa cagcacattt ccaacaaccc gtccagtttc ccgaggaaca tagccaaggt 240
ttgcacaaag aggaacacat cgattattac gcaccagcca agtattcctt caaatatgga 300
gtcaacgact accacactgg cgatataaaa agccaacacg aatccagaga cggagatact 360
gtcaaaggcc aatacacact tgtagaaccc gacggatcta tcagaactgt agactacact 420
gctgacaaac acagtggatt taacgcagta gtgcgcaaat caggtcccac aaaacacata 480
gaaggaaggc atctggaaca ccaacccgaa gaagagcaac atatacctca gcatcatttg 540
gcagaagatc atgttttacc gcagtatcaa ctggaacacc aacaggcttt ggaagaagat 600
gttgaagaag gacatctgga agctgaagat gctagtcaat atgaagaaga agagcattag 660
gtgttatatt aagtttaagg acgtaatggt ttgtaaataa gcgaactcaa agattaaagt 720
agtatctttt aaaattattg gagaaaataa gaatttttgt ttgtaagaaa aagtatcatc 780
atcaactata ttttttata acacttttaa catttggga acgtaatatt cgaatttata 840
cactcacaga caaaaatctt gcatattttg aaattatg 878

<210> 336
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 336
ggtgttaaga caggatgggt ttcggtc 27

<210> 337
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 337
ggtgttccag ttgatactgc ggtaaaac 28

<210> 338
<211> 560
<212> DNA
<213> Diabrotica virgifera

<400> 338
ggtgttaaga caggatgggt ttcggtcaaa aaatttctagt ccctctagtc cttatagaaa 60
tgtccctact ggttacatcc agaataatat atgaccatca gcaagaagat aatcacgaag 120
ggcaacaagt tcaatacacc aattactatg gtcacgaaga gtctgccaca acagcacatt 180
tccaacaacc cgtccagttt cccgaggaac atagccaagg tttgcacaaa gaggaacaca 240
tcgattatta cgcaccagcc aagtattcct tcaaatatgg agtcaacgac taccacactg 300
gcgatataaa aagccaacac gaatccagag acggagatac tgtcaaaggc caatacacac 360
ttgtagaacc cgacggatct atcagaactg tagactacac tgctgacaaa cacagtggat 420
ttaacgcagt agtgcgcaaa tcaggtccca caaaacacat agaaggaagg catctggaac 480
accaacccga agaagagcaa catatacctc agcatcattt ggcagaagat catgttttac 540
cgcagtatca actgaacacc 560

<210> 339
<211> 831
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (807)
<223> n = a, c, g or t/u

<400> 339
ctcagttttg tcgacggtgt tgatcgaaga cgagtcatga aatttttgat tgttgccgca 60
ttggtgtttg gagcctgttc ggcagaacca cagaggcggc ctcattccta ctatgacaac 120
caggctgaac aagacacaaa cgtcccacaa aactaccaag ataactcaga tcaataccaa 180
cagaattctg tccaacaaaa cccaccgcaa catcaggaaa aatcgcaata tgaaccacga 240
gtaaaagaaa ctatcaaatt cataccaatt atcagattcg ataaagaaca aggagaagcc 300
ggtaattaca aagctgcata tgaaaccgga aacaacatta tcgctgaaga agaaggttac 360
ttgaaggaac tcggtccaga tccagaccag caaggacaag ttatcaaatc gcaagtacaa 420
cagggtcact tcacatatac atcccctgaa ggagtagtta ttgaaactaa atatactgct 480
gacgaaaacg gtttccatgt tgaaggagat catttgccaa ccccaccacc agttagcgcc 540
gaagtacaaa agggattgga ccttattttt gctggtatca gagctcaaca ggaggcgtta 600
gaacaaagat taaaagatca cccagaagaa agagacagac ctgaaaatta cgacgatggt 660
caataccgac cggcacaaca ggagtaattt tactctttat ttatagttta gcaccatcat 720
tctgtgattt tgtcgtcatt tctatagaat atcttctgta cagactgaat aagattgata 780
atacactgtg gaaaaaaaat tgataanaat caataaaaat ctttttacac a 831

<210> 340
<211> 24
<212> DNA

<213> Diabrotica virgifera

<400> 340
gattgttgcc gcattggtgt ttgg 24

<210> 341
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 341
gacgacaaaa tcacagaatg atggtgc 27

<210> 342
<211> 690
<212> DNA
<213> Diabrotica virgifera

<400> 342
gattgttgcc gcattggtgt ttggagcctg ttcggcagaa ccacagaggc ggcctcattc 60
ctactatgac aaccaggctg aacaagacac aaacgtccca caaaactacc aagacgactc 120
agatcaatac caacagaatt ctgtccaaca aaacccaccg caacatcagg aaaaatcgca 180
atatgaacca cgagtaaaag aaactatcaa attcatacca attatcagat tcgataaaga 240
acaaggagaa gccggtaatt acaaagctgc atatgaaacc ggaaacaaca ttatcgctga 300
agaaggaggt tacttgaagg aactcggtcc agatccagac tagcaaggac aagttatcaa 360
atcgcaagta caacagggtc acttcacata tacatccccc gaaggagtag ttattgaaac 420
taaatatact gctgacgaaa acggtttcca tgttgaagga gatcatttgc caaccccgcc 480
accagttagc gccgaagtac aaaagggatt ggaccttatt tttgctggta tcagagctca 540
acaggaggcg ttagaacaaa gattaaaaga tcacccagaa gaaagagaca gacctgaaaa 600
ttacgacgat ggtcaatacc gaccggcaca acaggagtaa ttttactctt tatttatagt 660
ttagcaccat cattctgtga ttttgtcgtc 690

<210> 343
<211> 633
<212> DNA
<213> Diabrotica virgifera

<400> 343
caacactatg ttctctaaaa ttttgtcagt gttagccttc acagctttag cacaagctgg 60
cgttttagac tacagtcacg gccatgctac ctcatatgct tcctcaaacc taggtggttc 120
agaacatgga catggatatt cagctccagt tttaagtcac gcatatgctg cacctgttgc 180
tcacggatat tctgctcctg ttctcgccca cggacattcc gcacatcacg atgtagatta 240
caacgcttat cccaaatacg aattcaacta cggagttcaa gatggccaca ctggagacca 300
caaaactcaa cacgaagtcc gtgatggtga cgtagtcaaa ggttcctaca cagtagctga 360
acctgacggt actcttcgta ctgtccacta cactgctgat gaccacaacg gtttcaatgc 420
tgttgttgaa aaatctggac acccagttca cccagctcca gctcatggac acggaaaagt 480
actcctagct gctcccgctg tccaccacgc tccattgtac catcattaaa acctgaaaga 540
tgcatgttga ttattgttac tgtatttatt gactttgttg attgaattac tatgtaatta 600
atttttgtac ataaaataaa tttaattgaa tat 633

<210> 344
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 344
ctaggtggtt cagaacatgg acatgga 27

<210> 345
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 345
caggttttaa tgatggtaca atggagcgtg 30

<210> 346
<211> 421
<212> DNA
<213> Diabrotica virgifera

<400> 346
ctaggtggtt cagaacatgg acatggatat tcagctccag ttttaagtca cgcatatgct 60
gcacctgttg ctcacggata ttctgctcct gttctcgccc acggacattc cgcacatcac 120
gatgtagatt acaacgctta tcccaaatac gaattcaact acggagttca agatggccac 180
actggagacc acaaaactca acacgaagtc cgtgatggtg acgtagtcaa aggttcctac 240
acagtagctg aacctgacgg tactcttcgt actgtccact acactgctga tgaccacaac 300
ggtttcaatg ctgttgttga aaaatctgga cacccagttc acccagctcc agctcatgga 360
cacggaaaag tactcctagc tgctcccgct gtccaccacg ctccattgta ccatcaaaac 420
c 421

<210> 347
<211> 698
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (14)
<223> n = a, c, g or t/u

<400> 347
aacatggcat tcanattagt tgctttcgcc gcattggtag cagtagctcg tgctggtgtc 60
atcggagaag cctactctgc accacttgcc tatgcagctc cagcagtagc taaggtagcc 120
tactcagccg ctccagctgt atcatactca agtgtgtcat cacctgtagc ttacgcagca 180
ccagctgttg ctaaattagc tgcacctgta tcttatgctg caccagcttt atcttacgct 240
gcaccagtcg ctaaagttgc ctactcatca gctccagctg tctcttactc cagtgtatcc 300
gcaccagtag cctacgccgc tgccccagcc tacgccaaag tagctgctcc agtatcgtac 360
gcagctccag ctgtttccta cgccgctcca gctctctcct atgccgcccc agcccttaaa 420
gtagctgccc cagtagctta tgccgctcct gttgccaaag cagtttacgc cgaaccatca 480
gcaccagcta actacgattt tggatatgcc gtaaacgacc cccacaccgg agatagcaaa 540
agccaacaag aatctcgcca cggtgatgtt gtacatggaa gctattccct tattgaagcc 600
gatggcagca aacgtaccgt agaatacacc gctgatgaac acaatggttt taatgcagtt 660
gtacacaagg aaccagccac agttgcggtt aaagcagt 698

<210> 348
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 348
gctcgtgctg gtgtcatcgg agaag 25

<210> 349
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 349
gcaactgtgg ctggttcctt gtgtac 26

<210> 350
<211> 641
<212> DNA
<213> Diabrotica virgifera

<400> 350
gctcgtgctg gtgtcatcgg agaagcctac tctgcaccac ttgcctatgc agctccagca 60
gtagctaagg tagcctactc agccgctcca gctgtatcat actcaagtgt gtcatcacct 120
gtagcttacg cagcaccagc tgttgctaaa ttagctgcac ctgtatctta tgctgcacca 180
gctttatctt acgctgcacc agtcgctaaa gttgcctact catcagctcc agctgtctct 240
tactccagtg tatccgcacc agtagcctac gccgctgccc cagcctacgc caaagtagct 300
gctccagtat cgtacgcagc tccagctgtt tcctacgccg ctccagctct ctcctatgcc 360
gcccagccc ttaaagtagc tgcccagta gcttatgccg ctcctgttgc caaagcagtt 420
tacgccgaac catcagcacc agctaactac gattttggat atgccgtaaa cgacccccac 480
accggagata gcaaaagcca acaagaatct cgccacggtg atgttgtaca tggaagctat 540
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<210> 351
<211> 977
<212> DNA
<213> Diabrotica virgifera

<400> 351
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tagccccagc accagttcta gctccagctc cagttttggc caaagtttct gatgccacaa 180
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caggtttgag gagtttagtg acccccttct cagcgggtcc tgctccacta gccgttggat 840
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tcctatattt ttatctt 977

<210> 352
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 352
caagattacc ttcagcatcc ttatagcagt tc 32

<210> 353
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 353
gtcactaaac tcctcaaacc tgaaggcaag 30

<210> 354
<211> 777
<212> DNA
<213> Diabrotica virgifera

<400> 354
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agctccagtt ttggccaaag tttctgatgc cacaattgac cccaatcctg catattcatt 180
tgcgtatgac gtgcaggatg ccctaacagg agattcaaaa ggacaagttg aaagcagagc 240
caacggcgtt gtaagaggac aatatcaagt agcagatcca gacggtacca gaagaattgt 300

agattattac gccgatcctg tgcatggatt caatgctgtg gtcagaagag ttcctctagg 360
tgttgcagtt gctcctgtcg tagccaaagc tgtagctcct gttgctccaa tcgctcccgt 420
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<210> 355
<211> 1176
<212> DNA
<213> Diabrotica virgifera

<400> 355
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ccttttttaa gtctgcaggt gtaaggctca caactggctc catcgggcgc gtcagcagtt 180
ttaaaatcgc taattttaac gggatttttt ataaaatcta ggacctgttt ttgtgagacg 240
aagaaggtat cttttgcttc acgtgcaact gtgttttcca agaattttcg aagcccatcg 300
aagctggtgt cagtttgttc aaaccagtat gagttgatca tcaaatttat gggagttcta 360
gatttacttc taattccttc aatttgatca tccaaatatt tggcgatttc atcaacacta 420
ccttctattc cacaagtagc cagtgaattg cattctgtac catttggtga agttaaatcg 480
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gcaagttgta gttggggagt tctgactcca ataatagctt cagctggtat gttggcataa 720
gtacttataa tttgcttttg gcctttaaat tcttttgtta gtgtgtctag agttgcatat 780
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gaatcagact cacacggttt tgctacatca tttgcaatcg cactatcgaa tgctaaagta 1140
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<210> 356
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 356
gcaaatgatg tagcaaaacc gtgtgag 27

<210> 357
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 357
ggtattcgtc tggacaagga acacacg 27

<210> 358
<211> 1043
<212> DNA
<213> Diabrotica virgifera

<400> 358
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attttaacgg gatttttttat aaaatctagg acctgttttt gtgagacgaa gaaggtatct 180
tttgcttcac gtgcaactgt gttttccaag aattttcgaa gcccatcgaa gctggtgtca 240
gtttgttcaa accagtatga gttgatcatc aaatttatgg gagttctaga tttacttcta 300
attccttcaa tttgatcatc caaatatttg gcgatttcat caacactacc ttctattcca 360

caagtagcca gtgaattgca ttctgtacca tttggtgaag ttaaatcatt tattggcaga 420
atccaataac ctgggaaagc ttcgttagga catttctgcgc ccaaaagaca ttgttctgtt 480
gattgataat ccaatgtata gggaaataat cttcttgatg gcaaagaggg ccatgaacta 540
tcatatgcca attctgatgc tatataggcc tcaatggaag tgtttcctgc aagttgtagt 600
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gtaacagctt catcaaatgt taaactaatc agctgaggat actctgtgag atctccacct 960
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cacggttttg ctacatcatt tgc 1043

<210> 359
<211> 649
<212> DNA
<213> Diabrotica virgifera

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tatgcctatt ttgtgtcatt tatattcttc tgttcgttct tgatgttaaa cttgttcgta 180
gccgtcatta tggacaattt tgattattta acacgtgatc cttccatatt gggtgctcat 240
catttagacg aattcgttag aatttgggca gaatacgatc caaatgccac aggaaaaatc 300
cactacagcg aaatgtacga catgttgaaa aatatggatc cgccactagg ctttggaaac 360
aagtgtccta atcgattagc gtataagaaa ttaattagga tgaacatgcc agtagacgac 420
gatgggaaag ttaattttac tacgacattc tttgctctcg tcagagaaaa tcttagcatt 480
aaaatgcgaa cagctgatga aatggaccag gccgatgacg aactcaaaga gacaatcaaa 540
aacatctggc cgatccaagc caagaacatg gtggagctgt tggttccacc gaccaaccag 600
ctcaccaccg gaaaatgtcc gtcggcaagt tatacgccgg tcttctgat 649

<210> 360
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 360
ctattattca gatgtgccac aggtgaaaat tg 32

<210> 361
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 361
cagatgtttt tgattgtctc tttgagttcg 30

<210> 362
<211> 547
<212> DNA
<213> Diabrotica virgifera

<400> 362
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ggcaagatgt gtgacgaaaa ttcgggaaaa gacggacacc agtgtggtca caatatagct 120
tatgcctatt ttgtgtcatt tatattcttc tgttcgttct tgatgttaaa cttgttcgta 180
gccgtcatta tggacaattt tgattattta acacgtgatc cttccatatt gggtgctcat 240
catttagacg aattcgttag aatttgggca gaatacgatc caaatgccac aggaaaaatc 300
cactacagcg aaatgtacga catgttgaaa atatggatcc gccactaggc tttggaaaca 360
agtgtcctaa tcgattagcg tataagaaat taattaggat gaacatgcca gtagacgacg 420
atgggaaagt taattttact acgacattct ttgctctcgt cagagaaaat cttagcatta 480
aaatgcgaac agctgatgaa atggaccagg ccgatgacga actcaaagag acaatcaaaa 540
acatctg 547

<210> 363
<211> 677
<212> DNA
<213> Diabrotica virgifera

<400> 363
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ccaaaaagcc cgaggaactg attaaattag acaattggta tcagaatgaa ctaccgaaaa 180
ggatcaaaag tcgtggcaaa gatgcccact tagtacacga ggagttggta caatgcatga 240
aatggaaaca gaccaggggg aagttcttcc cccaattatc gtatttggta aaggttaaca 300
ctcctagagc tgttatggca gaaacgaaga gagcctttag aaaattgccc aatcttgagt 360
tggcgatgtc agcgctctca aatttgaaag gagtcggtac cacaatggcc tcagcattac 420
tggcggctgc ttgtccagac agcgcccccc ttatggcaga tgaatgtctg atggccatac 480
cagacatcga aggtattgat tacaccacca aggagtacct gaaattcgcc aaccacatca 540
aatccgtcgt cgagagatta aacaaggccg cagaagaaag gtcagaggct gtacgttggt 600
cgccacacaa ggacgagtta gctctttgga cacctacgtt gtctccgaac acaaaccaga 660
gttgctctct agtattt 677

<210> 364
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 364
gttctttact cacggcacct gtcaaca 27

<210> 365
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 365
ctaactcgtc cttgtgtggc gacc 24

<210> 366
<211> 587
<212> DNA
<213> Diabrotica virgifera

<400> 366
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ccttcgattg aaagctgata gaaaagccaa aaagcccgag gaactgatta aattagacaa 120
ttggtatcag aatgaactac cgaaaaggat caaaagtcgt ggcaaagatg cccacttagt 180
acacgaggag ttggtacaat gcatgaaatg gaaacagacc agggggaagt tcttccccca 240
attatcgtat ttggtaaagg ttaacactcc tagagctgtt atggcagaaa cgaagagagc 300
ctttagaaaa ttgcccaatc ttgagttggc gatgtcagcg ctctcaaatt tgaaaggagt 360
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ggcagatgaa tgtctgatgg ccataccaga catcgaaggt attgattaca ccaccaagga 480
gtacctgaaa ttcgccaacc acatcaaatc cgtcgccgag agattaaaca aggccgcaga 540
agaaaggtca gaggctgtac gttggtcgcc acacaaggac gagttag 587

<210> 367
<211> 882
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (792)..(853)
<223> n = a, c, g or t/u

<400> 367

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aaagagttcc tccaagaaag ccaaaaggtc tggttccaat gtcttctcca tgttttcgca 180
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catctctaag agcgatttga gggccacctt cgatgctgtt ggtaaactcg ccagtgagaa 300
agagctcgac gagatgatca acgaagcacc cggaccaatc aacttcactc aattgttggg 360
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gaaggaagaa ggtgaagaag gcgaagcagc ataaacacca tcataactta taacagaaag 660
tcaatgtaaa tcttcacggc taccgtgtgg ttccactaag acgaaaacat caattcggat 720
acatctaagt gtggtgtgtt tcttatataa ttccaatgaa cacataagaa aaggtgtact 780
tatatgtgta tnttattatg tatttgtttt taagtttatt tttattcagt tgctttacca 840
tcacgcgact canaagaaat aatatattat tttttgtttc at 882

<210> 368
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 368
ggcggataaa gaaaagaagg tcaagaag 28

<210> 369
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 369
cacaccacac ttagatgtat ccgaattgat g 31

<210> 370
<211> 711
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (631)
<223> n = a, c, g or t/u

<400> 370
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gtctggttcc aatgacttct ccatgttttc gcaatctcaa gtagctgaat tcaaagaagc 180
tttccaactt atggaccacg acaaagatgg catcatctct aagagcgatt tgagggccac 240
cttcgatgct gttggtaaac tcgccagtga gaaagagctc gacgagatga tcaacgaagc 300
acccggacca atcaacttca ctcaattgtt gggattgttc ggtacccgta tggctgattc 360
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caccattgac ggagacagat tccgccatgc cctcatgacc tggggagaaa aattcaccgg 480
caaagaatgc gacgacgctt tcgatgccat ggacatcgac gacaacaaca ggatcgacac 540
ccaggcactt atcaccctct taacagcagc cgagaaggaa gaaggtgaag aaggcgaagc 600
agcataaaca ccatcataac ttacaactga nagtcaatgt aaatcttcac ggctaccgtg 660
tggttccact aagacgaaaa catcaattcg gatacatcta agtgtggtgt g 711

<210> 371
<211> 2918
<212> DNA
<213> Diabrotica virgifera

<400> 371
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aactaaacga taacttctgt ttatactgtt gtttttatcg tttaacaatg gctctctttc 180
ttctaggttt gttgttctgc ctatctagtc ggatctctgc cagtggtttc tacgaaatca 240
gtaacattga cttctataat tctgttttta cagattctct tgattggaga ttgttacagg 300
agctatcaaa ccagtataaa aacgtagtga tatctcccat cagcctaaaa atcatattat 360
ccctattata tcaaggatct accggacaga cagaaaggga attccaaaca cttttaaatt 420
atcaaaataa agaatatgtc aggaacaatt acagccaaat tgtcgctgcc ctttataatg 480
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acgttttatc taaattcgaa gaccttgcaa gaaaaagctt caaaacagac atcataaaga 600
ctaactttga caaacaggaa aaggctagta aagatattaa ttcgtgggtg gaacagctta 660
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aagcactgag gatacctgat attaatcaaa aaggtgtcag aagtgttctt gtagaacttc 1920
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acactaaaaa tataatcttt gaaggaattg tacaaaatcc tttagaaaaa tagtatctaa 2820
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ctgtagttac gtgtaaaaat tggtctgtat ttgctttt 2918

<210> 372
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 372
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<210> 373
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 373
ccttcttcat caacttctat tcccgatttc 30

<210> 374

<211> 1036
<212> DNA
<213> Diabrotica virgifera

<400> 374
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tagtgatatc tcccatcagc ctaaaaatca tattatccct attatatcaa ggatctaccg 180
gacagacaga aagggaattc caaacacttt taaattatca aaataaagaa tatgtcagga 240
acaattacag ccaaattgtc gctgcccttt ataatgcaga cagaactgaa tatatgctca 300
acattgggac atcgatgttt gtagatgaag gtctatacgt tttatctaaa ttcgaagacc 360
ttgcaagaaa aagcttcaaa acagacatca taaagactaa ctttgacaaa caggaaaagg 420
ctagtaaaga tattaattcg tgggtggaac agcttactca tggtaaagtg aagaaaatag 480
tcaatgctga tgatctgtcg ctagcactaa tgataattac caatgccatt tacttcaaag 540
gaacatggac tcgtaaattt gataaaaata gatcaacgct tggaaacttc tatacatctc 600
ctgataatat aagatctagc agaaacttaa aattagttca atacatgact accactgacg 660
aatttcttta ttacgaggac agatctttgg atgcgaaaat tgtcaggttg gaatacaagg 720
gaagtgacta tgccatgtat atagtcctac cgaacacttt gggaggatta agcagcctta 780
tcaaaaatgt ggacataaac aaaataggaa ctataaagtt ccaaatgaca caacaagttg 840
ttgaggttac tattccaaag tttaagttca attttgacat caagttggga aagattcttc 900
aaaagtttgg actacgcgaa gcattccaaa acacggccag ttttacaggc atcgtgcaaa 960
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aagttgatga agaagg 1036

<210> 375
<211> 620
<212> DNA
<213> Diabrotica virgifera

<400> 375
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ttaattggtt tattttaaat taggtattaa gaaaaaatca aaatatggct attaatctac 120
aatatgacgc cataggcaaa agttttgtcc aacaatatta tatgcttttc gatgatccaa 180
accaaaggcc taatttggta aacatgtata atgtagaaca ttcatttatg acctttgaag 240
gcaagcaatt acaaggatct gcaaagataa tggagaaatt aaattcctta ggattccaaa 300
atataaatag acaacttact gaagtagact ctcaacctat gtttgatggt ggtgtactga 360
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ttgttttaaa accattaaat ggatcatttt ttgttcaaca tgacattttt aggctgaaca 480
tacacaatag tgcctgattt tattacatct cctctccttc tttatgttgt atgttcgaat 540
caactgaaaa tatgcaattt ttaaaatctc ctgtatctgt ttctgcttaa tatgaattca 600
caataataaa cttatttttct 620

<210> 376
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 376
ctattaatct acaatatgac gccataggca aaag 34

<210> 377
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 377
cgaacataca acataaagaa ggagaggaga tg 32

<210> 378
<211> 429
<212> DNA
<213> Diabrotica virgifera

<400> 378

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tgacctttga aggcaagcaa ttacaaggat ctgcaaagat aatggagaaa ttaaattcct 180
taggattcca aaatataaat agacaactta ctgaagtaga ctctcaacct atgtttgatg 240
gtggtgtact gataaatgta ttaggtagat tgcaagttga taatgatcca ccacacgctt 300
atacacaagt ttttgtttta aaaccattaa atggatcatt ttttgttcaa catgacattt 360
ttaggctgaa catacacaat agtgcctgat tttattacat ctcctctcct tctttatgtt 420
gtatgttcg 429

<210> 379
<211> 846
<212> DNA
<213> Diabrotica virgifera

<400> 379
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ttatagaaga aaacatggaa actcccggcg ccagcagagc cccttccaaa ctggagcaga 180
cccagcaaca ggtgaatgaa gttgtgggta ttatgagagt aaacgtcgag aaagttctag 240
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ctaatgcagt taagggcgac gacaccacat cctcaagcgt aacgtcggct cctccaaaat 480
gaaattaaat gtttacggat ctttctgtat ttgattatat attctgtatt tgattatata 540
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aacacctatc agttgtgtaa gtattgagaa tttgtttttc attattatgg gcataggcgc 720
aaaatgtcgc ctgtcaaaat gttcaatgtg ttttaaatgt attcattttt tttttcgaat 780
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tactga 846

<210> 380
<211> 35
<212> DNA
<213> Diabrotica virgifera

<400> 380
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<210> 381
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 381
cacattgaac attttgacag gcgaca 26

<210> 382
<211> 656
<212> DNA
<213> Diabrotica virgifera

<400> 382
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cagagccctt tccaaactgg agcagaccca gcaacaggtg aatgaagttg tgggtattat 120
gagagtaaac gtcgagaaag ttctagagag ggaccagaaa ctttcagagc tcgatagtcg 180
agctgatgcc cttcaagaag gcggcaaaag gttcgagcag caagcacaaa agttgaaacg 240
aaagtattgg tggaaaaata taaagatgat gattattatg ggggttatag gcctcattat 300
tttaattatc attataattt ccattgctaa tgcagttaag ggcgacgaca ccacatcctc 360
aagcgtaacg tcggctcctc caaaatgaaa ttaaatgttt acggatcttt ctgtatttga 420
ttatatattc tgtatttgat tatatatatt tattgttgca ttatacttaa aaataagaac 480
aaaatatttt acaattctat gtttgcttta tgtcattatt ttaaatatat tattccatag 540
aatatggtgt ttctgtttaa aaagtgaaca cctatcagtt gtgtaagtat tgagaatttg 600
tttttcatta ttatgggcat aggcgcaaaa tgtcgcctgt caaaatgttc aatgtg 656

<210> 383
<211> 841
<212> DNA
<213> Diabrotica virgifera

<400> 383
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ccaaggagaa tacagagaat cgttttggca acctttatat tttccgttct acatatattt 180
ggagtttttc atcatatttt tgagactgat ttttatacaa actttcatta tccctacgat 240
ggggatatag aacatttaat acagcaattg aaggatggca agccacctga tgttttacct 300
attaattcct atcactttga atataacaag aaatgtgttt caaaatgttc cagtatgaaa 360
cagttaagat tggtttatat aataaagagt gctccagagc attttgatcg cagaattgga 420
atacgcaatt catgggggta tgaaaggcga ttttctgatg cagaaataag aactgtcttt 480
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tttcatgata ttgtccatgc caattttaca gatagttact acaacaatac ttacaaaact 600
atgatgggct tgcagtgggc tgtcaggtat tgtccaaatt cacaatatta tatgtttgtt 660
gatgatgatt actacgtgtc caccaaaaat gttttaaagg atttgaaaat cccacaagta 720
ttcagaatat gtaaagaacc tcttaatgga gttagtccac tttttaataa aaaaaaaatc 780
ttgtttataa tgatttaaat gaggatgaaa aattattttc aggttatgta tttccatccc 840
c 841

<210> 384
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 384
ggagaataca gagaatcgtt ttggcaac 28

<210> 385
<211> 36
<212> DNA
<213> Diabrotica virgifera

<400> 385
ggactaactc cattaagagg ttctttacat attctg 36

<210> 386
<211> 636
<212> DNA
<213> Diabrotica virgifera

<400> 386
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tttttcatca tatttttgag actgattttt atacaaactt tcattatccc tacgatgggg 120
atatagaaca tttaatacag caattgaagg atggcaagcc acctgatgtt ttacctatta 180
attcctatca ctttgaatat aacaagaaat gtttttcaaa atgttccagt atgaaacagt 240
taagattggt ttatataata aagagtgctc cagagcattt tgatcgcaga attggaatac 300
gcaattcatg ggggtatgaa aggcgatttt ctgatgcaga aataagaact gtctttttgg 360
ttggagaacg aaattcacat gctttaaaag agtcattaaa agaagaatac tcaaagtttc 420
atgatattgt ccatgccaat tttacagata gttactacaa caatacttac aaaactatga 480
tgggcttgca gtgggctgtc aggtattgtc caaattcaca atattatatg tttgttgatg 540
atgattacta cgtgtccaca aaaaatgttt taaggtattt gaaacatccc acaaagtatc 600
cagaatatgt aaagaacctc ttaatggagt tagtcc 636

<210> 387
<211> 2158
<212> DNA
<213> Diabrotica virgifera

<400> 387

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aactataact atacaaatta ggttgaatca ttatcaaaga ttgagtaaga tcttccctca 180
tcaacatgtg tctgtagaat gaagtctcgt ccggagaatt attgaatact tgaagaaatt 240
gagatcttct taagtgatac atgaactgtg ggtaaagact gaagttttga ccaagtctga 300
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tgtcaaccca tctaagaaca tctggactat catcagattc tgccctataa acggccatcc 420
tagccattat tacagcagca gcttcttgat cgaatccggc actgatatgg tgtatattag 480
cagttgcgtc agcccaattt cgagccactg ttgttactct gatttttctt tgaccacttg 540
aatgctggta ctgcgtaata aattgtatac aacctctacc accttgaggt atgggagcag 600
aatgttgatt tacgacctca aagaataaag acatggtagt acttggcgtt aaagtacaca 660
ttttccattg cacagtatta cccattccta tttctgtgtc ggaaaccaag gggctcttca 720
cgttaagtga tacacacgaa ccgatacctc cttgaacttt taattctcgg gaacacttca 780
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caatggtgga aaacataggc atcaattccg ctggttgatg ttgttctgaa atagcagcat 1740
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aatctacctg acacagtggg tttaatattg ctctacaagt atttctagta cataaaacag 1860
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taatcccatc tcgatcttca ttttgttgta tatactcttc atatgtgctc atttttgaag 2040
attacaagtc ggaattccct aaggaaattc ctcaatatat attattagga ttctatcatg 2100
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<210> 388
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 388
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<210> 389
<211> 35
<212> DNA
<213> Diabrotica virgifera

<400> 389
ctgtcaggtt gaatggagct agtatctagt aatac 35

<210> 390
<211> 913
<212> DNA
<213> Diabrotica virgifera

<400> 390
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aatgctgtaa ttctactggg ggacacatgg taatggggga ttcatttaat tcttccttgt 120
ttaagcaaac tttccaacgt gtgtttacca gagatcaaaa aagtgatctg aaaatggcat 180
ttaacggtac tttggaagtg aagtgttccc gagaattaaa agttcaagga ggtatcggtt 240
cgtgtgtatc acttaacgtg aagagcccct tggtttccga cacagaaata ggaatgggta 300
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tctacagaca catgttgatg agggaagatc ttactcaatc tttgataatg attcaaccta 840
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<210> 391
<211> 2158
<212> DNA
<213> Diabrotica virgifera

<400> 391
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aactataact atacaaatta ggttgaatca ttatcaaaga ttgagtaaga tcttccctca 180
tcaacatgtg tctgtagaat gaagtctcgt ccggagaatt attgaatact tgaagaaatt 240
gagatcttct taagtgatac atgaactgtg ggtaaagact gaagttttga ccaagtctga 300
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tgtcaaccca tctaagaaca tctggactat catcagattc tgccctataa acggccatcc 420
tagccattat tacagcagca gcttcttgat cgaatccggc actgatatgg tgtatattag 480
cagttgcgtc agcccaattt cgagccactg ttgttactct gatttttctt tgaccacttg 540
aatgctggta ctgcgtaata aattgtatac aacctctacc accttgaggt atgggagcag 600
aatgttgatt tacgacctca aagaataaag acatggtagt acttggcgtt aaagtacaca 660
ttttccattg cacagtatta cccattccta tttctgtgtc ggaaaccaag gggctcttca 720
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<210> 392
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 392
ccgacttgta atcttcaaaa atgagcac 28

<210> 393
<211> 33
<212> DNA

<213> Diabrotica virgifera

<400> 393
gctaacgcat cataatgttt aataccttte ttc 33

<210> 394
<211> 1054
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (234)
<223> n = a, c, g or t/u

<400> 394
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tcgtagtacc cttagcttgt ctgtaccagc ctataaagga acgtctggat cttccaccaa 180
tacaatatga ccctgtttta tgtactagaa atacttgtag agcaatatta aacnccactg 240
tgtcaggtag attatcgagc aaaactctgg gtatgcaact tttgtttcca gagaaatcca 300
tttccacctc aatatgctgc tatttcagaa caacatcaac cagcggaatt gatgcctatg 360
ttttccacca ttgaatacac aataactaga gctcaatgtt taccaccaat atttttgtat 420
gttgttgaca cctgcatgga tgatgaagaa ctgggttccc tgaaagactc attgcaaatg 480
tcccttagtt tgttgccacc taatgcgtta ataggactaa tacatttggg aaaatggttc 540
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atcttagtgc taaacaggtt caagaaatgc tgggaatagg caaagtggct ttaggtcagc 660
aagcccctca acagccaggg cagcctctaa gacctgggca aatgcaacct actgttgttg 720
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cccgagttat gctatttgtt ggaggacctt gctcacaagg acctggtcag gtagttaatg 960
atgatttaaa acagcctatt agatcacatc atgatattca gaaagataat gcaaaatata 1020
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<210> 395
<211> 910
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (833)..(8938)
<223> n = a, c, g or t/u

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gcagcagtct gcacgaaagc aggcaaaaca attgtgtctc gacaatttgt tgaaatgacc 180
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gcattttcac ttatatttgc ttttgatgaa atagtggcat taggttatag ggaaagtgtc 480
aatctgtctc aaattcgcac atttgtggaa atggactcgc acgaagaaaa agtttatcag 540
gccgtgagac agactcaaga gcgcgaggcc aagaatatga tgagagaaaa ggcaaaagaa 600
cttcagagac agaagatcga agcggccaaa aaaggaggga agacctcgtt tggtagtagc 660
ggtggctttg gcagctcgac aggttatact cctacgccat ctgttggtga tgtagctaac 720
cagacaaatg atgttaaaac ttcttcatac acaccagccc ctgcgcaaaa acctcggggt 780
atgaaattag gtggaaaagg tagagatgta gaatcattcg tagatcagct tanatcggaa 840
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gctatcaaaa 910

<210> 396
<211> 29

<212> DNA
<213> Diabrotica virgifera

<400> 396
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<210> 397
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 397
gctgatctac gaatgattct acatctctac ct 32

<210> 398
<211> 826
<212> DNA
<213> Diabrotica virgifera

<400> 398
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gcagtctgca cgaaagcagg caaaacaatt gtgtctcgac aatttgttga aatgaccaaa 180
gctagaatag aaggtttgtt ggctgccttt cctaaattaa ttcctacagg aacccagcat 240
acatttgtgg aaacagattc agtacggtat gtttatcaac ccctagagaa actgtatatg 300
gttcttatta caactagagc tagcaacata ttagaagatc ttgaaaccct ccgtctattc 360
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ggctttggca gctcgacagg ttatactcct acgccatctg ttggtgatgt agctaaccag 720
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aaattaggtg gaaaaggtag agatgtagaa tcattcgtag atcagc 826

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<212> DNA
<213> Diabrotica virgifera

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cccggtgcgg gggcggcggg tagcggcggc gacgatggca ttgtgggcgg tccgcgaacg 180
ccacaacaaa tcgcggccca acgacggctt caacaaacac aggcgcaagt cgacgaagtc 240
gtggatatca tgaaaacgaa tgtagaaaaa gtattggaaa gagatcagaa actatcagaa 300
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ggtcttgtaa tcttaataat catagtcatg aacttcatgt aactcatggg ccaaaaattc 480
gttcgaataa ttggcatata cagaaaacct acaattattg aatacaacac accaatacaa 540
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tggttgaaaa aaatataatc agttgttaaa ggttcaataa atggacactg gtgtttcacc 660
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<213> Diabrotica virgifera

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<210> 401
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 401
ccaacttgcc taatcgtcta tttcaatcc 29

<210> 402
<211> 511
<212> DNA
<213> Diabrotica virgifera

<400> 402
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tattggaaag agatcagaaa ctatcagaat tagatgatag agcagatgct ttacaacaag 240
gtgcttcaca atttgaacag caagcgggaa aactaaagag aaaattttgg ttacagaatt 300
taaagatgat gataataatg ggtgttattg gtcttgtaat cttaataatc atagtcatga 360
acttcatgta actcatgggc caaaaattcg ttcgaataat tggcatatac agaaaatcta 420
caattattga atacaacaca ccaatacaaa aaatcaatat taaagtaatt taatctatag 480
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<212> DNA
<213> Diabrotica virgifera

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<222> (818)
<223> n = a, c, g or t/u

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actccttatg ttgccagaca acagagtctc aaaacaagaa atattgttgt taaataatga 180
aataattaga ttattaaaat tctgctatga aactattgac aaatgcttca taactgaaaa 240
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tcctgaagga agaaggtatt tgctaatagt ggaaagtgga aaagatctgt tagcggtaat 780
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<211> 32
<212> DNA
<213> Diabrotica virgifera

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<210> 405
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 405
cttggatgtg ggctaaagta gcttgc 26

<210> 406
<211> 763
<212> DNA
<213> Diabrotica virgifera

<400> 406
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tgaaaaatac ctcccacaag tagaccactt cttttcgaaa ttttttgcaa gaactcttag 180
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<212> DNA
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ttaatgtttg agtttctcgg ttaaatattc acaatttttt ttctcttttc aacaaaatta 180
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ttagagactt ctcgcgaaat tgcgaaagag aactaaaacc gaatcaaatg caacactggc 420
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<210> 408
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 408
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<210> 409
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 409
gctaacaaaa ttgacctcaa ggactctgt 29

<210> 410
<211> 1125
<212> DNA
<213> Diabrotica virgifera

<400> 410
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agtttcctgg aatcagtcgg agtatgatat tatattttga aaggttggca acgttatgga 180
aacgtatcca acatcgatgt tgccaaattt ccaatgtgat ctgggattgc cgcgcaatct 240
gcacattctt gtcgagtttt tgtactaagg ggaaacgaaa aatgaaaacg aaaaaaacga 300
tctaaagtgt ctggaccgtg tctccatata tgcatacttg tcgcatatca ttgtgttatc 360
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cagtacttaa tacatttgtt tgtaaaattt tgagttttgc tgttaatcat tgtatatatg 1080
ataaatatat tattttacag agtccttgag gtcaattttg ttagc 1125

<210> 411
<211> 1844

<212> DNA
<213> Diabrotica virgifera

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tctactaagc attgtggatt tggtcgatct tccgatttag tttaagaaat aaaaatatat 360
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<210> 412
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 412
ggagactgaa ggagacgttg acaggg 26

<210> 413
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 413
ctcacgtatc cccatgctca gtaagttac 29

<210> 414
<211> 948
<212> DNA
<213> Diabrotica virgifera

<220>
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<222> (38)
<223> n = a, c, g or t/u

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gcattgtgga tttggtcgat cttccgattt agtttaagaa ataaaaatat atgggcaact 180
ttttttggtt ttgtttcctg gccttggtgt gaaaccttag ccacgtaatt actataacta 240
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<210> 415
<211> 1700
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (49)
<223> n = a, c, g or t/u

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gtttactttn gcggggaagg ttagtttaga gataattcaa aaatttggta gtaagatatt 240
ggatttctta taattagatc ttttaaagaa taaattatat acagacgtgg atttaattga 300
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tgtccagcta ttcaagcatt ttttttatca atataacaac ttgaaggtgt tataatattg 420
gaatctatcg ttttcgttct catttggagt acccatctca aaatatgatc tctctagtta 480
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aagtagaaaa tgtatgaata tgttcttcct ctgtactagt cggtagagga cttttgaaat 600
tactctttta tatatatgaa tcgtcgtcag tttttctcta tacgttagag tttccgttcc 660
accaattctt cggacgggta gatagacgaa tgcattccac aaaactaaag gattgatttt 720
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<210> 416
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 416
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<210> 417

<211> 40
<212> DNA
<213> Diabrotica virgifera

<400> 417
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<210> 418
<211> 764
<212> DNA
<213> Diabrotica virgifera

<400> 418
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tatacacatg acagctcgag cacagtcacg acctcttcaa actgtcaaca gcacgatgaa 120
aatccatcgt gctgttgaca gctcgagagc ggttgcaagg caacaagtga caactcaagt 180
agtcaacgac tgctccagat atcaacgacg accgctcgag cagtccgtgt atgtcgctca 240
gtggtaaact gcttcaacag tccttgtacg gccgcccttа gagctatatt atattcttaa 300
aatctacagt taaagctgat tttgattccg ttttataatt cctccaaatc aagagggtag 360
gtcaaagcag agtgagttgt gttgattttt ccttatgtgt gtgacgattt cacctggagg 420
tatttccctt tgtaggaaga tctttgaaga tctcttaatg gaaaattatt ttctgtaata 480
tattattcat actccattta tgtaataaca acattatagt acactaaagt atctaaaatg 540
tttttatatt aacaggtatg tgaaaaagta acaaaatgag aattattaaa aagactagta 600
gtacttgaag ctgatgctta caaaggccct caatatcaac ttacccattt tagaaattgg 660
aattatttga gtaatactaa aactttgagg agttacttag gttctggaga ctttgattga 720
agatcctctt gagattttaa tactacaaag atatttaaca ctgc 764

<210> 419
<211> 1638
<212> DNA
<213> Diabrotica virgifera

<400> 419
gaatatcaac aaaatgccaa gggaaaaaac aaaaaatgat taataaaact aaaatctttt 60
ttgtttttcc ctttctcaa aactagaaca tacaacagta taactctggg ctaacaaaat 120
gccaaggtac agaagtattc aacagcatga ggtcactttt gaatgtggtt tatctaatgt 180
tgccgcaaca cacttcactg tgtgttattt gttatgcacc ttattcagcc acataggact 240
aagtgtggag ggttcattca tcaaaattcg ctttatgtgc acacatagca cataagcata 300
catggcaaat atgcctatcc atccagttgt cagttttac acacttcaaa agacaaatat 360
ttgggtgcat acagagtagc cacgtaacaa atagcacata gcgaagtgtt gtaccagcat 420
aatgtataag cttatacaaa actaggttta cctgtatctg ttacagtaac gctgtaactt 480
gcatacacat cagtatatcg agttgtctac aagtacattg tatttttttt tataaagacc 540
tgtcataata ttcatttaat ctgtctggca gatgtttgta tgtttactga gtcaatgatt 600
tggtgatatt ttcaagtaaa tttacgggaa aattaactat ttaataaaaa cagatcacat 660
agataactgt gtggttaggg gacacaagca gacaagtcaa cttttcagtt ttatagttaa 720
aattaatttg acgggtccac tgaataatgt aagtgcctaa tcacttgttt ttaagaaata 780
gaaaaaaagt gttaaaatta taacaatggc aaacttatac atttaaaggt tgtactcacc 840
tttaaaatgt ataaactcac cattatcaca attttaaaac tttttcttca acttctcaaa 900
aacgaacaat gggatactta caatgttatt cggcggaccc attcaattaa agctaaaatc 960
gtgagtgtga aaaagatcac tatttcatat atgaaactag acatttaaca ttttgaactg 1020
tcatctattt cagcagtaga ttattgtttt aggtgttttt aaccctgcag cggacaggcg 1080
aaataaaatt acattgtatt tccatatggc tgctgtccac tggaggtttc ataaataaaa 1140
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ttatgtttta cctgtaatta acatgtctaa tgttgataat tttaacaaaa cagcataatc 1260
aatttgtatt tttaaatgta ttattaaata ttttgtattt tgatactaaa tattttgtat 1320
tttgataata aattagatat taaagataaa gatttatata ccctattcca cgaacatacg 1380
actgttgtgg attatctcga caacgaatat tttactgtgt aaattataaa gaatgaaagt 1440
aaattgcaaa atacattgtt gtttattgga acaattagta gagccattta ctttcgcact 1500
tcttatgttg cacactaaaa tattcgttgt ggcgataatc caagatagtc gtatattcgt 1560
ggaatagccc atactaaaat tataaaaaaa atgcactaga aataaacaac ccaagacacg 1620
ttgaatgtta caaggagc 1638

<210> 420
<211> 31
<212> DNA

<213> Diabrotica virgifera

<400> 420
ggtacagaag tattcaacag catgaggtca c 31

<210> 421
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 421
gaaacctcca gtggacagca gcc 23

<210> 422
<211> 1005
<212> DNA
<213> Diabrotica virgifera

<400> 422
ggtacagaag tattcaacag catgaggtca cttttgaatg tggtttatct aatgttgccg 60
caacacactt cactgtgtgt tatttgttat gcaccttatt cagccacata ggactaagtg 120
tggagggttc attcatcaaa attcgcttta tgtgcacaca tagcacataa gcatacatgg 180
caaatatgcc tatccatcca gttgtcagtt tttacacact tcaaaagaca aatatttggg 240
tgcatacaga gtagccacgt aacaaatagc acatagcgaa gtgttgtacc agcataatgt 300
ataagcttat acaaaactag gtttacctgt atctgttaca gtaacgctgt aacttgcata 360
cacatcagta tatcgagttg tctacaagta cattgtattt ttttttataa agacctgtca 420
taatattcat ttaatctgtc tggcagatgt ttgtatgttt actgagtcaa tgatttggtg 480
atattttcaa gtaaatttac gggaaaatta actatttaat aaaaacagat cacatagata 540
actgtgtggt taggggacac aagcagacaa gtcaactttt cagttttata gttaaaatta 600
atttgacggg tccactgaat aatgtaagtg cctaatcact tgtttttaag aaatagaaaa 660
aaagtgttaa aattataaca atggcaaact tatacattta aaggttgtac tcacccttaa 720
aatgtataaa ctcaccatta tcacaatttt aaaacttttt cttcaacttc tcaaaaacga 780
acaatgggat acttacaatg ttattcggcg gacccattca attaaagcta aaatcgtgag 840
tgtgaaaaag atcactattt catatatgaa actagacatt taacattttg aactgtcatc 900
tatttcagca gtagattatt gttttaggtg tttttaaccc tgcagcggac aggcgaaata 960
aaattacatt gtatttccat atggctgctg tccactggag gtttc 1005

<210> 423
<211> 1602
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (1543)
<223> n = a, c, g or t/u

<400> 423
ctaatttagg ggcttagatt agtatttcct tatacaataa gttaaaaaat atttatttтc 60
ttttagttta attgtttcgt ctgtagcact ataagattat taaataattt gtgttaatta 120
ctacttaaat tacaaagttt attgttactc tagactctag acctaacaaa ttatatgtta 180
tcttaaaaaa atagtgtgtt cactgcatga tactccacaa ataagaatag ttcagacagt 240
aactttcttt taactatcga cacataagat aacatttact ccttggcaag ttcattggtg 300
ccctaatcaa tcacaatagg gaacttgcac ttttttgttt tattatataa tattgtttag 360
tttcctttaa aaataagatt tccaaaattt cacgcctcaa aatctcataa taacttagaa 420
gtacaaattt aaaatcttct atgtatttaa atcatttcaa acgatctaaa aatcgcgcga 480
attcttgtga cgtcatatga tcatattttg tatgtcattt ctaacgtctc atttaaatta 540
catacaattt tgtttacttt ggagttcaaa aacacagttt ttgaagagat agtaatgaat 600
tgtgtgtatt tttattatgg aaaataaaag taaatactat gaaagtgttg tttaataaca 660
ttctgttaaa ttaaaaccat tgaaactccc aataaaatat ttattagatt accagcggat 720
aagaaacgga gattaataaa gtggttacaa aggacattaa agacatgtta gttcattctc 780
aaggtcttca tggatgcgaa gctaatgcta atataggtgt ctgttgtttt aatgtaatat 840
gtgttgtctg cttaatagtc ttttttata aatcaagtat atatagatgg aaaagataaa 900
aataatatat aatatcaatt gtgtgaaaaa ttttcttcct tttgaaaata tgtggcacct 960
ggacaacata aatatattta caatgggtaa agttatcaga ctgcccttta ggaaaaccct 1020

cttcggtcat tttaaaaaat tgtcttaaca aaaacactca aatattatga aatatatagt 1080
tcacagcaac tatctaaaga tttataaact gaaatagacc ataaaatgat tacaataatc 1140
ataaacaata ttaaacaaaa acttaatgaa ttaacgacgc tgaatttaaa cattataata 1200
atacgacgtc gcgaccaatc aggtcgcctt ttgggctggc cgctataatg tgaattgtct 1260
ctcgatatta atcatcttta ggggccaaat gaaagaaaaa aacaactttt ttcctttggt 1320
atatatttta aattatggtc tgttgggatt tatagcattt tgtcgaattt aaaattctat 1380
gtaagttccc tattcattta ggattgatga gagattgtaa agatcaatta tgtcaacaaa 1440
gctaaaatca ttgtgaaaaa gtggttattt acatagctac ataaatagct ttttcttaca 1500
tttgtcaaag aatagagttg aaagggacac tacatagtct tanaactaat tatttcaaga 1560
agtattattc attgtcttga gtatttcaaa ctgaaacatc gt 1602

<210> 424
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 424
ctccttggca agttcattgg tgc 23

<210> 425
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 425
ctccgtttct tatccgctgg taatct 26

<210> 426
<211> 453
<212> DNA
<213> Diabrotica virgifera

<400> 426
ctccttggca agttcattgg tgccctaatc aatcacaata gggaacttgc acttttttgt 60
tttattatat aatattgttt agtttccttt aaaaataaga tttccaaaat ttcacgcctc 120
aaaatctcat aataacttag aagtacaaat ttaaaatctt ctatgtattt aaatcatttc 180
aaacgatcta aaaatcgcgc gaattcttgt gacgtcatat gatcatattt tgtatgtcat 240
ttctaacgtc tcatttaaat tacatacaat tttgtttact ttggagttca aaaacacagt 300
ttttgaagag atagtaatga attgtgtgta tttttattat ggaaaataaa agtaaatact 360
atgaaagtgt tgtttaataa cattctgtta aattaaaacc attgaaactc ccaataaaat 420
atttattaga ttaccagcgg ataagaaacg gag 453

<210> 427
<211> 1529
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (874)
<223> n = a, c, g or t/u

<400> 427
gagatatttg tagtatagtt ttgctttgaa gattcattat aggtttttaa ttatgattaa 60
tgaaatgatg gaactatcga acaattagaa tctgtatatc tttaggcaaa tctgtaaata 120
atcattgtag ttattcttgg aactagtttg caactaagaa atataattta agacttttg 180
aacacagtca aaagaccatg actatcacag atgtggatta gtaccacttt aaatttgtta 240
ataaaacata gaatttatag aatagtttcc ccgttttata ccgcatatgc gactttagga 300
ttatagcagg ctgtcatctc tagggctacg gtatacaaga aagataacag ggccagtgct 360
acgcttcaac cgcctattat taccccctggt tttagccaag gaactcattt tattcaggct 420
gagtcgacct ggggcctatt taaaaatgtc tagttgttct tgccggcgct gggtctcgaa 480
cccaggtcta ccagcaagcg agtcagacat cctaccgctg aactacgccg gcccatacgt 540
agagtttata attatcttat atataataaa ggaatttgat taaaaaaggt aaaaatacat 600
tgtattgggt tgcttaggcc taaatacata tctcttccta ttagtaagtt acaaaatggt 660

gagattcgat cattttgtg ggatatgtag ttgatgaatt aagtagtaag tagtagttga 720
atacacgtta cattttctca acattgatta atacatttat ttttttccaa aataagaaaa 780
atttagctac taaaaaaata tatgctaaat attgtttatc atcagctaaa agttaggaga 840
tctgttaaat cctataaaat atgaaaacaa tganaatgtg ttgtttcggt aagtacatag 900
tttgcagaca actggacgat acaagggatc taataacttt tagcaattga taaattgaac 960
gaaaaaatca caatgtttaa tcaaaagctc aaacacaaga acacaaagtt tttatgatgt 1020
taaataaatg aagactttct accgttcaca cgaaaggcgc ttatcctgat ctggttacat 1080
tttcttaaga taaaaccgtg ggtacataat atacacaatc aaacttatat ggaatcacca 1140
tgtatttcaa accaatattt atttcttttg aaaaaaactt gttaccaggc gcggatacag 1200
gggagggtca aggggtctat agacccccct attgtattta gtctataaga attttttttat 1260
tatttattat ttttttctgt caactctaaa ctttaagcca ccagtagaac actaaaatta 1320
aacgacaacc acttccaaag aattattgaa agaagcaata aaatctaata aaaccgagcc 1380
ttttctgaaa aataaattga agccgcattt gtttgggtac cgatggagcc gtaaacaact 1440
gaaatatttt tctcaattca aagaataacg gaaatgatat cttaaaatgc aaatactttt 1500
cgtgaggtaa ggtttatacc cggtgtaat 1529

<210> 428
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 428
gtcaaaagac catgactatc acagatgtgg 30

<210> 429
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 429
cgtccagttg tctgcaaact atgtacttac c 31

<210> 430
<211> 731
<212> DNA
<213> Diabrotica virgifera

<400> 430
gtcaaaagac catgactatc acagatgtgg attagtacca cttcaaattt gttaataaaa 60
catagaattt atagaatagt ttccccgttt tataccgcat atgcgacttt aggattatag 120
caggctgtca tctctagggc tacggtatac aagaaagata acagggccag tgctacgctt 180
caaccgccta ttattacccc tggttttagc caaggaactc attttattca ggctgagtcg 240
acctggggcc tatttaaaaa tgtctagttg ttcttgccgg cgctgggtct cgaacccagg 300
tctaccagca agcgagtcag acatcctacc gctgaactac gccggcccat acgtagagtt 360
tataattatc ttatatataa taaaggaatt tgattaaaaa aggtaaaaat acattgtatt 420
gggttgctta ggcctaaata catatctctt cctattagta agttacaaaa tggtgagatt 480
cgatcatttt tgtgggatat gtagttgatg aattaagtag taagtagtag ttgaatacac 540
gttacatttt ctcaacattg attaatacat ttatttttt ccaaaataag aaaaatttag 600
ctactaaaaa aatatatgct aaatattgtt tatcatcagc taaaagttag gagatctgtt 660
aaatcctata aaatatgaaa acaatgaaat gtgttgtttc ggtaagtaca tagtttgcag 720
acaactggac g 731

<210> 431
<211> 1208
<212> DNA
<213> Diabrotica virgifera

<400> 431
atattatttg ttctgtgaag cagctttgtt aggaaaaatc aaaatgtttt cagctacgtt 60
taaactgtta tttttgataa cagtaatatt ggtatccctt tcgccatcca gtgcagacaa 120
ttataacaaa tgtcctgaaa ccagccatat acgatcccta atttaccaga atacattgaa 180
ggggagagtt atacatgtac gcattccagg cacaggtttc tttgaagctc caatcacttg 240
tcttcaggtt accgatataa atgaaagttt cagtacacca gttgtagaag aaggtggata 300
tggaagggag tacgtagttt tacgtattga cccagttgaa tcaggagaac agttacaata 360

cgatgttcag atttatattg acgaagctgt tacagcctat cctcaataaa tgttcggtat 420
aaatgtttaa gaaattcgag tagccccttt aaagataagc agttgctggt attttaacag 480
cattactgat tgtaagttaa tcatttcaga ccttcacgta aactatgttg ttacaaaaac 540
gcatattagg acaataatcc aaattattag acaataaata ttaggcaaga gaaattaaac 600
gagtttctag ttttaagtac aaacaagtga agttcatcag caaaacagaa ttcagaatta 660
ttctacgtat tatattaaaa gcactatttg gttaaaagtt atcatttttg ggggtaaaag 720
aatctattaa tttgtcttga gtaaaggtag tatttgttta aatttgccga ccgatgatag 780
gtagattggg ccaagtacag tgggtgatca tattattaga gccacctaat atgttcagtg 840
ttttggagga atgtttacaa tgttttgtaa tttaatgttt acaatgttta gaatgtttac 900
attaaattac aaaaacgcat attaggacaa taatccaaat tattagacaa taaatattag 960
gcaagagaaa ttaaacgagt ttctagtttt aagtacaaac aagtgaagtt catcagcaaa 1020
acagaattca gaattattct acgtattata ttaaaagcac tatttggtta aaagttatca 1080
ttttgggggg taaaagaatc tattaatttg tcttgagtaa aggtagtatt tgtttaaatt 1140
tgccgaccga tgataggtag attgggccaa gtacagtggg tgatcatatt attagagcca 1200
cctaatat 1208

<210> 432
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 432
cctttcgcca tccagtgcag aca 23

<210> 433
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 433
ctccaaaaca ctgaacatat taggtggctc 30

<210> 434
<211> 752
<212> DNA
<213> Diabrotica virgifera

<400> 434
cctttcgcca tccagtgcag acaattataa caaatgtcct gaaaccagcc atatacgatc 60
cctaatttac cagaatacat tgaaggggag agttatacat gtacgcattc caggcacagg 120
tttctttgaa gctccaatca cttgtcttca ggttaccgat ataaatgaaa gtttcagtac 180
accagttgta gaagaaggtg gatatggaag ggagtacgta gttttacgta ttgacccagt 240
tgaatcagga gaacagttac aatacgatgt tcagatttat attgacgaag ctgttacagc 300
ctatcctcaa taaatgttcg gtataaatgt ttaagaaatt cgagtagccc ctttaaagat 360
aagcagttgc tggtatttta acagcattac tgattgtaag ctaatcattt cagaccttca 420
cgtaaactat gttgttacaa aaacgcatat taggacaata atccaaatta ttagacaata 480
aatattaggc aagagaaatt aaacgagttt ctagttttaa gtacaaacaa gtgaagttca 540
tcagcaaaac agaattcaga attattctac gtattatatt aaaagcacta tttggttaaa 600
agttatcatt tttgggggta aaagaatcta ttaatttgtc ttgagtaaag gtagtatttg 660
tttaaatttg ccgaccgatg ataggtagat tgggccaagt acagtgggtg atcatattat 720
tagagccacc taatatgttc agtgttttgg ag 752

<210> 435
<211> 1290
<212> DNA
<213> Diabrotica virgifera

<400> 435
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aaaaccggtg tatattattg tgaataaatg tgtcaaatat aggatatata cctgaaacag 120
attaactgca cttgtttaat aaaaggcact actacttact aacacaagat gtccgtattg 180
ggaatggtat cagccgtagc gggctttgtc aaagtccgct acttggttga taaagctcta 240
atcgacaata tggtgtttag agcccactat agagtcacgt cggccatatt gtttttatgc 300
tgtatcatcg ttactgcgaa taatctaatt ggtgacccca ttcagtgcat caacgacagg 360

ggtgttccag gtcatgtaat aaatacgttt tgctggataa cgcatacttt tacgttacca 420
catgaacaag gaaaacgcgt cgggacagaa gttgctcatc ctggtcttgg taacgaaaat 480
caggataaga gataccacag ctactaccaa tgggttccat tcgttttatt cttccagggc 540
gtcctctttt acatccctca ttggttgtgg aaaaattggg aacaaggaaa aattcgtatg 600
atcaccgaag gtatgagagg atcgatggtc ggagttgggg aaaaggcaga gagagaacat 660
agacagaata gactcgtaca atatcttatc gaaacgatgc acatgcacac ttcctatgca 720
ttcggatact ttatttgtga agctctaaac ttcgttaatg tgatggtaaa catattcatg 780
actgacaaat tcctcggtgg agcgttccta acctacggca ctgacgtagt ttcctttttcg 840
aacatgaatc aagaaaatcg cacggatccc atggtagcca tctttccaag ggtaacaaaa 900
tgtacattcc acaaattcgg tccttcagga tcaattcaga agcatgacgc cctctgcgtg 960
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acaagagaaa cgattttgaa gaggagattc agattcaagg tacccaatgc tgttgagact 1140
attgtcagaa aaacacaggt tggtgatttc cttttgattc acttactggg acaaaacaca 1200
aaccaattgg tatttggcga aattttggac gaattcgtaa gaagactgaa tttcggtagt 1260
aacagcaact taccgtctgc tcccagcacg 1290

<210> 436
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 436
cacaagatgt ccgtattggg aatggtatc 29

<210> 437
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 437
gtaagtgaat caaaaggaaa tcaccaacct g 31

<210> 438
<211> 1023
<212> DNA
<213> Diabrotica virgifera

<400> 438
cacaagatgt ccgtattggg aatggtatca gccgtagcgg gctttgtcaa agtccgctac 60
ttggttgata aagctctaat cgacaatatg gtgtttagag cccactatag agtcacgtcg 120
gccatattgt ttttatgctg tatcatcgtt actgcgaata atctaattgg tgaccccatt 180
cagtgcatca acgacagggg tgttccaggt catgtaataa atacgttttg ctggataacg 240
catactttta cgttaccaca tgaacaagga aaacgcgtcg ggacagaagt tgctcatcct 300
ggtcttggta acgaaaatca ggataagaga taccacagct actaccaatg ggttccattc 360
gttttattct tccagggcgt cctcttttac atccctcatt ggtttgtggaa aaattgggaa 420
caaggaaaaa ttcgtatgat caccgaaggt atgagaggat cgatggtcgg agttggggaa 480
aaggcagaga gagaacatag acagaataga ctcgtacaat atcttatcga aacgatgcac 540
atgcacactt cctatgcatt cggatacttt atttgtgaag ctctaaactt cgttaatgtg 600
attgtaaaca tattcatgac tgacaaattc ctcggtggag cgttcctaac ctacggcact 660
gacgtagttt ccttttcgaa catgaatcaa gaaaatcgca cggatcccat ggtagccatc 720
tttccaaggg taacaaaatg tacattccac aaattcggtc cttcaggatc aattcagaag 780
catgacgccc tctgcgtgtt agccttgaac attctcaacg agaagattta cattttccta 840
tggttctggt ttattatttt agctatactg tccggtttgg ctattgtgta ttcggcagct 900
gttgtattac tacctagtac aagagaaacg atttgaagag gagattcaga ttcaaggtac 960
ccaatgctgt tgagactatt gtcagaaaaa cacaggttgg tgatttcctt ttgattcact 1020
tac 1023

<210> 439
<211> 845
<212> DNA
<213> Diabrotica virgifera

<400> 439

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catatgtttc gtgttaaagt gcagtgtaag tgaagttaca actttgcggt gcatcgccta 120
aaagtcatgg ctcttgtagc cagctcctgg cgagagacat ccttaggtaa cccggtgagc 180
ctgaactctt tgcccaacgg tttgaatcct ttacctcaga ctagtacttt aactccttta 240
cccaccaaca ttaatcctat taatcttgaa acatccgatc cttcgctgat caatcgacaa 300
acgccgtcac aaaactcaca aaatagtaat aacagtgtag ataagaacca gaacattgag 360
tgtgttgtgt gtggggacaa aagttctggt aaacactacg gacaattcac atgcgaagga 420
tgcaaatcat tttttaaaag gagtgttaga agaaatttaa cgtactcatg tcgagggagc 480
cgaaattgtc cgatagatca acatcataga aaccagtgcc aatattgtcg tttaaaaaaa 540
tgtatgaaaa tgggcatgcg gagagaagct gtgcagcgtg gcagagtacc accgtcgcag 600
ccttcgcttc caggtttacc aaatcagttc cttaactcaa cagactcgat gaatacatct 660
ctaagcaacc acacgtacct cagtagttac atatcactat tattaagagc agagccgtac 720
cctacgagtc gatatggtca atgtctgcaa agtaataaca ttatgggcat tgacaatata 780
tgcgagttag cagcgcggct gctattctca gcagtagaat gggcaaggaa tataccgttc 840
tttcc 845

<210> 440
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 440
gctcctggcg agagacatcc ttagg 25

<210> 441
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 441
gcagacattg accatatcga ctcgtagg 28

<210> 442
<211> 606
<212> DNA
<213> Diabrotica virgifera

<400> 442
gctcctggcg agagacatcc ttaggtaacc cggtgagcct gaactctttg cccaacggtt 60
tgaatccttt acctcagact agtactttaa ctcctttacc caccaacatt aatcctatta 120
atcttgaaac atccgatcct tcgctgatca atcgacaaac gccgtcacaa aactcacaaa 180
atagtaataa cagtgtagat aagaaccaga acattgagtg tgttgtgtgt ggggacaaaa 240
gttctggtaa acactacgga caattcacat gcgaaggatg caaatcattt tttaaaagga 300
gtgttagaag aaatttaacg tactcatgtc gagggagccg aaattgtccg atagatcaac 360
atcatagaaa ccagtgccaa tattgtcgtt taaaaaaatg tatgaaaatg ggcatgcgga 420
gagaagctgt gcagcgtggc agagtaccac cgtcgcagcc ttcgcttcca ggtttaccaa 480
atcagttcct taactcaaca gactcgatga atacatctct aagcaaccat acgtacctca 540
gtagttacat atcactatta ttaagagcag agccgtaccc tacgagtcga tatggtcaat 600
gtctgc 606

<210> 443
<211> 932
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (650)..(836)
<223> n = a, c, g or t/u

<400> 443
aaagagtatg tggtgtttaa tgttatttcg agtgggatta tctatcttat ttttctttca 60
tacaacatta gctcttcctg atgaatgtag ttctatttcg cctgtaagaa gttgtttact 120
gaggacaaac tacatagata tacggctgtg gagatattac gctggctatt tttgctacat 180

ttatacaaat gaagccaggt tggatatcaa atataattcc actagttaca acataacatg 240
tggcggtgaa aacgcaacga ttcccgtagc aagggtggag gagaacataa tagctagtta 300
tgattataca gataaagaag atgtccagca tatcagaaaa tcgtttaaga ctgacgaggt 360
ttttaaaaat tatatatctt gttgccaagg agctataagg tgttgcaatg atcacatgga 420
cgaggaaaat gttattccaa cgcaatcaca atgtcctgta atatgggatg cctggtcttg 480
ttttccacaa actaaagtta atactacagc caagctacca tgtagtagcc aagcatacca 540
atctcccgat gaagtctgta ctttagaaag cgaaaaacac tgcatctgga acggaacaaa 600
tcaaaaagca caatggatcc aacaaactga ctacacaacg tgtgccatan gcgccggttt 660
acgaacgaag atacaacttc catattatat ttctggggag tctgtatcgg cttttgtata 720
ccggcaatat ctatattttt ctttttcgaa aaacttcgaa agaccatcag agttattctg 780
cataggaacc ttttgatagc ccattgtgng tcaggaatgt cttgacaatt atgtgncaag 840
aactagtgct gctagacgct ttaaaagctt cggctctaag tcatcgtacg atggacaaca 900
atggagtccc atggtcggat attggctttt at 932

<210> 444
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 444
gctcttcctg atgaatgtag ttctatttcg c 31

<210> 445
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 445
cgtacgatga cttagagccg aagctt 26

<210> 446
<211> 817
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (627)
<223> n = a, c, g or t/u

<400> 446
gctcttcctg atgaatgtag ttctatttcg cctgtaagaa gttgtttact gaggacaaac 60
tacatagata tacggctgtg gagatattac gctggctatt tttgctacat ttatacaaat 120
gaagccaggt tggatatcaa atataattcc actagttaca acataacatg tggcggtgaa 180
aacgcaacga ttcccgtagc aagggtggag gagaacataa tagctagtta tgattataca 240
gataaagaag atgtccagca tatcagaaaa tcgtttaaga ctgacgaggt ttttaaaaat 300
tatatatctt gttgccaagg agctataagg tgttgcaatg atcacatgga cgaggaaaat 360
gttattccaa cgcaatcaca atgtcctgta atatgggatg cctggtcttg ttttccacaa 420
actaaagtta atactacagc caagctacca tgtagtagcc aagcatacca atctcccgat 480
gaagtctgta ctttagaaag cgaaaaacac tgcatctgga acggaacaaa tcaaaaagca 540
caatggatcc aacaaactga ctacacaacg tgtgccatag cgccggttta cgaacgaaga 600
tacaacttcc atattatatt tctgggnagt ctgtatcggc ttttgtatac cggcaatatc 660
tatatttttc ttttttcgaaa aacttcgaaa gaccatcaga gttattctgc ataggaacct 720
tttgatagcc attgtggtca ggaatgtctt gacaattatg tgcaaagaac tagtgctgct 780
agacgcttta aaagcttcgg ctctaagtca tcgtacg 817

<210> 447
<211> 880
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (737)..(851)

<223> n = a, c, g or t/u

<400> 447
ccaaattcag atttggttgg aggagataat tttgaagcct ctaaatattt aaggatactt 60
caacaggcaa tgaatgaaga tgaagaagga ttagtagaaa gacatagagg aatctatgga 120
ttgaaagtag tgaaaaaatc aggtgaaact ggatattggg tgatcaatac taaggtaggc 180
aaaggacaga tagtatttaa tggaaaagac aagccagatg ttactttcat tgttaaggaa 240
gaggatgttt tagaattatt gtctggcaaa attccaccac agaaggcatt tttccaaggc 300
aaagtaaaaa ttcaagggaa tatgggtgta gccatgcgat taatagaatt acagaaaaca 360
gccgctgcca aaattgaggt acttagggct aagttataaa ttacgtttat aggtaatttt 420
ctttatcttt ctgtattgtg tacactaagg ttttgttta tctttttggg agtatatatt 480
atataagtga caaaacatac tttcttgttt tacacatcac ttcctgtaaa aatattgtac 540
acgctgtaca atgagtcctt tatgtaaaca aatatgtaag tataaatact tgctctgtta 600
tctcctttt attacatatt tttgttgata acttcagaat ctattgacct tttgtgaaat 660
actttcaata ttttgttaac agttgaagac cagtgtaatt tttcctgaga tactaaattc 720
aaatattttt gtttcanaca agtttgttcc gtaaataaac tagacatgta tatcattgta 780
tattattaat aatatgaaac cttgatgtct gtaggtaaat ggtcttaatg atttaatggt 840
ttttcataat ncatagtccn aagtcacaaa atagcatata 880

<210> 448
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 448
ggcaatgaat gaagatgaag aaggattagt 30

<210> 449
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 449
ccattaaatc attaagacca tttacctaca gaca 34

<210> 450
<211> 774
<212> DNA
<213> Diabrotica virgifera

<400> 450
ggcaatgaat gaagatgaag aaggattagt agaaagacat agaggaatct atggattgaa 60
agtagtgaaa aaatcaggtg aaactggata ttgggtgatc aatactaagg taggcaatgg 120
acagatagtg tttaatggaa aagacaagcc agatgttact ttcattgtta aggaagagga 180
tgttttagaa ttattgtctg gcaaaattcc accacagaag gcatttttcc aaggcaaagt 240
aaaaattcaa gggaatatgg gtgtagccat gcgattaata gaattacaga aaacagccgc 300
tgccaaaatt gaggtactta gggctaagtt ataaattacg tttataggta attttcttta 360
tcttttctgta ttgtgtacac taaggttttg ttttatcttt ttgggagtat atattatata 420
agtgacaaaa catactttct tgttttacac atcacttcct gtaaaaatat tgtacacgct 480
gtacaatgag tcctttatgt aaacaaatat gtaagtataa atacttgctc tgttatctcc 540
tttttattac atatttttgt tgataacttc ggaatctatt gacctttttgt gaaatacttt 600
caatattttg ttaacagttg aagaccagtg taatttttcc tgagatacta aattcaaata 660
tttttgtttc aaacaagttt gttccgtaaa taaactagac atgtatatca ttgtatatta 720
ttaataatat gcaaccttga tgtctgtagg taaatggtct taatgattta atgg 774

<210> 451
<211> 576
<212> DNA
<213> Diabrotica virgifera

<400> 451
aaattatcgg catatattat gcaggataac caactacatg ctaatctaag agtggatgaa 60
gctatggctg tcgcagctgc acttaaaatt ggcgccaaaa gtccaaaaga tcgagaagat 120

atcattaacg aaatcctaga cacacttgga ctgctggatc ataagaaaac aatgacaagc 180
gggttgtcgg ggggccaaaa gaagagattg tcaatcgcct tagaattagt tagtaatcct 240
ccagttatgt ttttcgatga acctactagt ggattggatt cttcatcatg ttttcaatgt 300
atatcactgt tgaaaacctt agctaaaggt ggaagaacta taatatgtac tattcaccaa 360
ccttcagcta gactgtttga aatgttcgac caactttata cactcgctga tggtcaatgt 420
gtttaccaag gttctacgat attcttggtg ccctttttgg caagtctgca gttacagtgt 480
ccttcatacc acaatccagc ctcctatatt atagaagtag catgtgggga atatggagat 540
cacacgagaa cgttagttaa cgctatagaa aatggt 576

<210> 452
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 452
ggataaccaa ctacatgcta atctaagagt ggat 34

<210> 453
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 453
ggaggctgga ttgtggtatg aaggac 26

<210> 454
<211> 482
<212> DNA
<213> Diabrotica virgifera

<400> 454
ggataaccaa ctacatgcta atctaagagt ggatgaagct atggctgtcg cagctgcact 60
taaaattggc gccaaaagtc caaaaagatc gagaagatat cattaacgaa atcctagaca 120
cacttggact gctggatcat aagaaaacaa tgacaagcgg gttgtcgggg ggccaaaaga 180
agagattgtc aatcgcctta gaattagtta gtaatcctcc agttatgttt ttcgatgaac 240
ctactagtgg attggattct tcatcatgtt ttcaatgtat atcactgttg aaaaccttag 300
ctaaaggtgg aagaactata atatgtacta ttcaccaacc ttcagctaga ctgtttgaaa 360
tgttcgacca actttataca ctcgctgatg gtcaatgtgt ttaccaaggt tctacgacat 420
tcttggtgcc ctttttggca agtctgcagt tacagtgtcc ttcataccac aatccagcct 480
cc 482

<210> 455
<211> 759
<212> DNA
<213> Diabrotica virgifera

<400> 455
cccacgcgtc cggtactaca tgtatggtac tgctttagtt gtgttttgac agattcgttc 60
aataatatca tttcttttat ttatttatat attaatcttt gaagatgttg tctggtggct 120
atatattgga attgtgcaat gtttttttatt ctggacaggt aaaaaagcgc tctgttcttc 180
aaagaatggt tggcaacatt aaaactgcag taatcttaaa agatgtgtcc atgttggtac 240
attctggtga ggtcctagca gtgctgggat caaaaggtag tgggaagaaa gccttacttg 300
atgttatttc aagacgagca caaggcccta taagaggaca gatatatctg aacaaccatc 360
cagtcagtat gggtttattc cagcagaaat gtgcatatgt tacacataaa tgtgatttta 420
taccaggact aaatgttgaa cagacgttgt attatactcc gactaagttc actggctatt 480
taaaaatgtc taaagtaaag caagtgatag cagatttagc attgtcacaa gtcgctaaaa 540
aatgcgttga agatttgaca aaaagtgaat acagaagact gatgattggt gtccaactaa 600
tcaaaaaccc agtggtacta ttactagacg aacccacctg ggatctggac ccactaaaca 660
catacctaat aatttcaata ctttcaaatg cagctaaaaa gtatggaact gctataatct 720
tgacgatgga gaagcctaga tctgatgttt tcccgttct 759

<210> 456
<211> 32

<212> DNA
<213> Diabrotica virgifera

<400> 456
ggtactgctt tagttgtgtt ttgacagatt cg 32

<210> 457
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 457
gcttctccat cgtcaagatt atagcagttc c 31

<210> 458
<211> 710
<212> DNA
<213> Diabrotica virgifera

<400> 458
ggtactgctt tagttgtgtt ttgacagatt cgttcaataa tatcatttct tttatttatt 60
tatatattaa tctttgaaga tgttgtctgg tggctatata ttggaattgt gcaatgtttt 120
ttattctgga caggtagaaa agcgctctgt tcttcaaaga atggttggca acattaaaac 180
tgcagtaatc ttaaaagatg tgtccatgtt ggtacattct ggtgaggtcc tagcagtgct 240
gggatcaaaa ggtagtggga agaaagcctt acttgatgtt atttcaagac gagcacaagg 300
ccctataaga ggacagatat atctgaacaa ccatccagtc agtatgtgtt tattccagca 360
gaaatgtgca tatgttacac ataaatgtga ttttatacca ggactaaatg ttgaacagac 420
gttgtattat actccgacta agttcactgg ctatttaaaa atgtctaaag taaagcaagt 480
gatagcagat ttagcattgt cacaagtcgc taaaaaatgc gttgaagatt tgacaaaaag 540
tgaatacaga agactgatga ttggtgtcca actaatcaaa aacccagtgg tactattact 600
agacgaaccc acctgggatc tggacccact aaacacatac ctaataattt caatactttc 660
aaatgcagct aaaaagtatg gaactgctat aatcttgacg atggagaagc 710

<210> 459
<211> 837
<212> DNA
<213> Diabrotica virgifera

<400> 459
cttaaaaggg agagatctct tcgaggaaaa aaaagtaggt ctctattccg acgaaacgaa 60
agcagtgccc gcagcaatca ttatgcagtt tttgttattg tataagagga atctgctgat 120
aataaagaga tgttacggtc catcgctgaa cagagtattg gcccacattg ttattggtct 180
gatctttggc tatttgtata gaaacgttgg aagtgccgcg gatacagttt tagcaaatta 240
tgtatatttg tatggtactc ttttactcac agtatatact ggtaaaatgc ccgtaacttt 300
atcatttcct ctagaaatga agatactctc tagagagcat tttaaccgtt ggtataagct 360
aactccatat ttattgtctg tgatattagt tgaaattcct ttccaagtta tatgtacatg 420
gatgtacata gcagtatctt attcgttaac gaaccagcca ttagacttta ggttattctt 480
gtttgtcatt tttgtaacag cgtgttctct ctgtggccaa tccatgggat attttatagg 540
agccacaaca ccagtaaagg tagctgtatt catcgcccca gtgttagcct gcttcttatc 600
agtcttcggt ttttgcatca gagcaataga cacctctacc atgttcaaac cgatcttctt 660
catcagttac tttagagcag cattccaaag cgtcgtttat agtatttacg gctttaaccg 720
agagatattg gtttgcccaa tagaggagga atactgtcat tataaagatc ctcacaagtt 780
cctctcggaa atgaaatttt agatgtagat tttagttcaa attttatatt gattggt 837

<210> 460
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 460
ggtctctatt ccgacgaaac gaaagcag 28

<210> 461

<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 461
cgtaaatact ataaacgacg ctttggaatg c 31

<210> 462
<211> 673
<212> DNA
<213> Diabrotica virgifera

<400> 462
ggtctctatt ccgacgaaac gaaagcagtg cccgcagcaa tcattatgca gtttttgtta 60
ttgtataaga ggaatctgct gataataaag agatgttacg gtccatcgct gaacagagta 120
ttggcccaca ttgttattgg tctgatcttt ggctatttgt atagaaacgt tggaagtgcc 180
gcggatacag ttttagcaaa ttatgtatat ttgtatggta ctcttttact cacagtatat 240
actggtaaaa tgcccgtaac tttatcattt cctctagaaa tgaagatact ctctagagag 300
catttaacc gttggtataa gctaactcca tatttattgt ctgtgatatt agttgaaatt 360
cctttccaag ttatatgtac atggatgtac atagcagtat cttattggtt aacgaaccag 420
ccattagact ttaggttatt cttgtttgtc atttttgtaa cagcgtgttc tctctgtggc 480
caatccatgg gatattttat aggagccaca acaccagtaa aggtagctgt attcatcgcc 540
ccagtgttag cctgcttctt atcagtcttc ggtttttgca tcagagcaat agacacctct 600
accatgttca aaccgatctt cttcatcagt tactttagag cagcattcca aagcgtcgtt 660
tatagtattt acg 673

<210> 463
<211> 660
<212> DNA
<213> Diabrotica virgifera

<400> 463
ttcgtccgaa atcatctagt gtggttcgac tacgcgttta tactaagtaa tctgaagtgg 60
ctggacattc acggtaactt tattgaacat ctcgctaatt attacaagat tcaagacgta 120
atcagagtca aaactttaga tgctagtcat aatcgtatta ccgaaatttc tcctatgtct 180
attcctaata gtatagaact tttatttatt aataacaatt ttatcaaatc ggtgcaacca 240
aatactttcc tcgataaatc aaacttagct cgtgtcgata tgtatgctaa cgacatgaca 300
aatttagatt taaattctct gagaatcgct ccagttcatt cgaaccgttc cttaccagaa 360
atatatcttg gtggcaatac ctttcattgt gactgtacta tggagtggct acagcttatc 420
aacaacatgt cagcatccag gcagtatcct cgtgtaatgg acatggacaa cattgtatgc 480
aaaatgacac attctagagg tatgacacat atgccattaa atcaggcaaa acaaagtgac 540
tttctttgta actacgaaac acattggttt gctctttgcc attgctggga ttttgatgca 600
tgtgattgtg aaatgacttg tcctaataat tggacttgtt accacgatca gacgtggaat 660

<210> 464
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 464
ctaagtaatc tgaagtggct ggacattcac g 31

<210> 465
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 465
gcaatggcaa agagcaaacc aatgtg 26

<210> 466
<211> 543
<212> DNA

<213> Diabrotica virgifera

<400> 466
ctaagtaatc tgaagtggct ggacattcac ggtaacttta ttgaacatct cgctaattat 60
tacaagattc aagacgaaat cagagtcaaa actttagatg ctagtcataa tcgtattacc 120
gaaatttctc ctatgtctat tcctaatagt atagaacttt tatttattaa taacaatttt 180
atcaaatcgg tgcaaccaaa tactttcctc gataaatcaa acttagctcg tgtcgatatg 240
tatgctaacg acatgacaaa tttagattta aattctctga gaatcgctcc agttcattcg 300
aaccgttcct taccagaaat atatcttggt ggcaatacct ttcattgtga ctgtactatg 360
gagtggctac agcttatcaa caacatgtca gcatccaggc agtatcctcg tgtaatggac 420
atggacaaca ttgtatgcaa aatgacacat tctagaggta tgacacatat gccattaaat 480
caggcaaaac aaagtgactt tctttgtaac tacgaaacac attggtttgc tctttgccat 540
tgc 543

<210> 467
<211> 894
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (745)..(784)
<223> n = a, c, g or t/u

<400> 467
cgtaaataag attcttgtgt tattatttct tccttttttgc ttcggcaaaa gtgtagaagt 60
gacttttaaa gatgtcacgt tcaaaggctt tagtgttttt acagaaaagt tcaagaaaaa 120
gatcccatct ggaaacaaac tagcagattt tttgcccccg aaaactgttt atgatgccat 180
tgaaatgaag gaacaacata tacctgtact tgccaaaggc tcgttggcag atctagacca 240
gttggacgaa ttggttattg agtactgtgg tgttgaagaa gttgaatctg gagctatcag 300
taatgtacct aacctaagaa aactgtcact taaaggtaat gccatcaagt cgattgcaaa 360
ggacgtattt tcccatttag gaatatctac actagacctt agcctcaatc agatatcaac 420
aatccatcca caggcctttg acaacatgcc ggatctctta aacattcaac ttgctgacaa 480
ttttataacg caatggaatc cagaatggct caagaataca ccgctattga ccaggatctc 540
gcttcagaat aattccatag aaaagctacc agcccatgca tttaaaaaca tggtaggaga 600
taaaaagtat ggaaaaatag acctcactat taatctggta tttagtcata ataaaataag 660
tgagatagat cctgaagctt tcgcggatct cagcagaatt aacaacttgt ggttagataa 720
caatgttcta gaaagtttcg atganaacct tttatcggga ataaaagtta atgatttgag 780
actncacaaa aataatatca aatgtttaga tggtaatcta gataaaatac taaaagcaga 840
aacgaacaca tagattcgaa tccgtcgact gtaattgctt gagaagatca agga 894

<210> 468
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 468
gatgccattg aaatgaagga acaaca 26

<210> 469
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 469
ctaaccacaa gttgttaatt ctgctgagat cc 32

<210> 470
<211> 544
<212> DNA
<213> Diabrotica virgifera

<400> 470
gatgccattg aaatgaagga acaacatata cctgtactta ccaaaggctc gttggcagat 60

ctagaccagt tggacgaatt ggttattgag tactgtggtg ttgaagaagt tgaatctgga 120
gctatcagta atgtacctaa cctaagaaaa ctgtcactta aaggtaatgc catcaagtcg 180
attgcaaagg atgtattttc ccatttagga atatctacac tagaccttag cctcaatcag 240
atatcaacaa tccatccaca ggcctttgac aacatgccgg atctcttaaa cattcaactt 300
gctgacaatt tcataacgca atggaatcca gaatggctca agaatacacc gctattgacc 360
aggatctcgc ttcagaataa ttccatagaa aagctaccag cccatgcatt taaaaacatg 420
gtaggtgata aaaagtatgg aaaaatagac ctcactatta atctggtatt tagtcataat 480
aaaataagtg agatagatcc tgaagctttc gcggatctca gcagaattaa caacttgtgg 540
ttag 544

<210> 471
<211> 210
<212> DNA
<213> Diabrotica virgifera

<400> 471
gagcgctgac ataaccaaaa agcgcaagcg ccaccacaca aaaaaccgtc ttcattttcc 60
tgagtcgaac gaacctttca caactcaccg tactaatggt actatggtac tagctagcga 120
atgccaaata caaacacggg ctctttgccg gcaaaagact tcttcctcac tgaagatatc 180
ttgtaagttc ttcctctttt caaacgggcg 210

<210> 472
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 472
gctgacataa ccaaaaagcg caagc 25

<210> 473
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 473
ccgtttgaaa agaggaagaa cttacaagat atc 33

<210> 474
<211> 203
<212> DNA
<213> Diabrotica virgifera

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tcgaacgaac ctttcacaac tcaccgtact aatggtacta tggtactagc tagcgaatgc 120
caaatacaaa cacgggctct ttgccggcaa aagacttctt cctcactgaa gatatcttgt 180
aagttcttcc tcttttcaaa cgg 203

<210> 475
<211> 1139
<212> DNA
<213> Diabrotica virgifera

<400> 475
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caagaaaatg gaactcggct agggccgttc tgttaaaagg cgcctgactg attggcgcgt 180
gaatggcact tgactgaagt aaccatatca cgcgctggag tgtgatcgtc agcgaatggg 240
ttaaatgaca agtggttata gatgtttata cagtctaaat atatacagtg agttaaatat 300
tgggtcgagc tctccgtggg taataataat tattggttca aaaggatcca aacttgtcac 360
gggttagctc tgccggacaa tagattcagt aaaacacagg tttaatttaa ataaaaatat 420
atttttgtaa tccaatacaa taaaataaca acaaaatagt attcaattct ccgactattg 480
tctccctttt ggcacccata tcgagccgct gttgatgaaa tcgggtctca agatatcgtt 540

ggtaagttct ctgcatagtc gaatgattca cattcaattg tcttgccaca tacctttggt 600
ttgctccatt ttccgggaat gtaaccatct gaacacactt tctatacttt ttcatcgtta 660
taaaaataga cttcactgtc aggaggccag tgtaccacga agatatctca gaaactcttt 720
agaagactac aacagttcac acagttctta aaaccatcaa ttctgcgaag cttcgttgat 780
tcgtaaataa cgattggcac ccatatcgag ccgctgttga tgaaatcggg tctcaagata 840
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ttggcttgct ccatttttcg ggaatgtaac catctgaaca cactttctat acttttttcat 960
cgttataaaa atagacttca ctgtcaggag gccagtgtac cacgaagata tctcagaaac 1020
tctttagaag actacaacag ttcacacagt tcttaaaacc atcaattctg cgaagcttcg 1080
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<210> 476
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 476
ctcattcgct gcctgtcaag aaaatg 26

<210> 477
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 477
gcagagaact taccaacgat atcttgagac c 31

<210> 478
<211> 444
<212> DNA
<213> Diabrotica virgifera

<400> 478
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attggcgcgt gaatggcacc tgactgaagt aaccatatca cgcgctggag tgtgatcgtc 120
agcgaatggg ttaaatgaca agtggttata gatgtttata cagtctaaat aaatacagtg 180
agttaaatat tgggtcgagc tctccgtggg taataataat tattggttca aaaggatcca 240
aacttgtcac gggttagctc tgccggacaa tagattcagt aaaacacagg tttaatttaa 300
ataaaaatat atttttgtaa tccaatacaa taaaataaca acaaaatagt attcaattct 360
ccgactattg tctccctttt ggcaccata tcgagccgct gttgatgaaa tcgggtctca 420
agatatcgtt ggtaagttct ctgc 444

<210> 479
<211> 851
<212> DNA
<213> Diabrotica virgifera

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taaagaaacc taactggtgt cgcctgatac caggaattgg gtatactctc catctatatt 180
tgtttgcgcc tttcaagtag acttgcacct agtctcgttt ggcttctttc aatagatact 240
caaacctttt cgtctaagca ccacaaatgc acaccctttg gacatttttc ggccaatgtt 300
gagctctacc acggttttct gttctgttcc tattctattc ttgccccaca agaagctggg 360
gaattgatga tctctacggc ataccctcac atgcgggaaa aggctaaaga gatctatgtg 420
gtatcacctg caagatcttt ttgtggatac cctgcttctt ttagaattaa agcgtttatt 480
tgaggctttt ggatagactt taacgcctct agagcttttt tgttttgttt caacagatac 540
tcaaaccttt tccaaattga acttcttagc agtttttta ttcgttccta gtctacacat 600
gtcccaggag aagttactga gtcgcccta gcttcaactc gaccgtgcgc accttataaa 660
tggcgcgtat acgtataatc ctttcccggg cctaccacat cgaataaaaa tgtttcttga 720
ttgatcgatt acatgtttct tacattgtct gtgtatatgt tgtaaatgct tgtttgtttg 780
atgtgcctaa atccgttcta tgtataaata cattcctaga tacttcttat gagtgatgaa 840
atcatagtga t 851

<210> 480
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 480
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<210> 481
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 481
gaacggattt aggcacatca aacaaac 27

<210> 482
<211> 797
<212> DNA
<213> Diabrotica virgifera

<400> 482
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tctaagaagc tggaacaggg atagtcactg cgggcataac tgcacaagct tgagaaggct 120
aaagaaacct aactggtgtc gcctgatacc aggaattggg tatactctcc atctatattt 180
gtttgcgcct ttcaagtaga cttgcaccta gtctcgtttg gcttctttca atagatactc 240
aaaccttttc gtctaagcac cacaaatgca cacccttgg acatttttcg gccaatgttg 300
agctctacca cggttttctg ttctgttcct attctattct tgccccacaa gaagctgggg 360
aattgatgat ctctacggca taccctcaca tgcgggaaaa ggctaaagag atctatgtgg 420
tatcacctgc aagatctttt tgtggatacc ctgcttcttt tagaattaaa gcgtttattt 480
gaggcttttg gatagacttt aacgcctcta gagcttttc gttttgtttc aacagatact 540
caaacctttt ccaaattgaa cttcttagca gttttttat tcgttcctag tctacacatg 600
tcccaggaga agttactgag tcgcccctag cttcaactcg accgtgcgca ccttataaat 660
ggcgcgtata cgtataatcc tttcccgggc ctaccacatc gaataaaaat gtttcttgat 720
tgatcgatta catgtttctt acattgtctg tgtatatgtt gtaaatgctt gtttgtttga 780
tgtgcctaaa tccgttc 797

<210> 483
<211> 1612
<212> DNA
<213> Diabrotica virgifera

<400> 483
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ctcttcatac cctttcttcc cagcttcagg cactataatt atttactgta agatttcgca 180
ttaatgatat agagcatttt ttatatgaac cataaaaaga tcagtatgtt taaaatagtg 240
tacctcgatg gttttgatgg ttttttcgtt tgttggattg attgtttaaa aatattattt 300
gttttggtat tggtttcaat gtgacaaaag tcaagaatca agcatttttg ttgtatccac 360
agtaggaata gtatagcaaa caatattcaa gtatttttat ttaaaatgaa aaattatttt 420
tagctttttа ggtcacctgt tggcaaataa ccttgaaaat gtagaacata ttgctgatga 480
attatgattc tcatatttgt tttttatgag tcaaaatacg ccgtaatatt ataacaatat 540
tatttattta aattattata aaatcagaag attttcatta aatgatgaat taggattgaa 600
cgagctgtga taaattaccc gaaaatatcc acaatgttgc caaaagcaac attttggaca 660
cagtaatgcg acattacagg atgtattatt ttaactgtaa aaggattgta ttcagacaaa 720
ttaatgatag ggcttgtcca gatagatcca tttatatctg ttcgaacagt caagcacctc 780
taaaggctct ggaagcaccc aagcaagtca gctctaagtt gattcttgaa tgcaagatag 840
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tgggtccttc cccgatctac catgacatta ttaacattgt gcttttggta aaaagtacgc 1200
tacacaacat aatattttaa attctgctta gcgccaatgt taggggacc taatatgaca 1260

cagaaataag cttatcgttc aaatctcggc accaacgaca ttttcatttc tacaaatgat 1320
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gcattgacac tagctacttg aaacagggtt aaagctgcaa ttgaccggaa gctgtccgaa 1440
aggatcaccc cggtaaaaat accatacgat attattatat aatcatacaa aaacgctata 1500
tatcaataat acgaaaattt cttatgtaaa atgttttcca aaatatttct attatactct 1560
taattataag acattctaaa ttttgcgaaa taaactttaa gctctgctta tc 1612

<210> 484
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 484
ctcttcatac cctttcttcc cagcttca 28

<210> 485
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 485
gcacaatgtt aataatgtca tggtagatcg 30

<210> 486
<211> 1081
<212> DNA
<213> Diabrotica virgifera

<400> 486
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tacctcgatg gttttgatgg ttttttcgtt tgttggattg attgtttaaa aatattattt 180
gttttggtat tggtttcaat gtgacaaaag tcaagaatca agcatttttg ttgtatccac 240
agtaggactg gaatagtata gcaaacaata ttcaagtatt tttatttaaa atgaaaaatt 300
atttttagct ttttaggtca cctgttggca aataaccttg aaaatgtaga acatattgct 360
gatgaattat gattctcata tttgtttttt atgagtcaaa atacgccgta atattataac 420
aatattattt atttaaatta ttataaaatc agaagatttt cattaaatga tgaattagga 480
ttgaacgagc tgtgataaat tacccgaaaa tatccacaat gttgccaaaa gcaacatttt 540
ggacacagta atgcgacatt acaggatgta ttattttaac tgtaaaagga ttgtattcag 600
acaaattaat gatagggctt gtccagatag atccatttat atctgttcga acagtcaagc 660
acctctaaag gctctggaag cacccaagca agtcagctct aagttgattc ttgaatgcaa 720
gatagcattg tctgattggt cagaggtgaa agatcctgga ttcgaccttt acgcaaccga 780
gctcaatgaa ggagttacct ctaaatataa ttgtggcttt ctgtgagacc acaagtttat 840
ttaagcatta gacgtgagga acggcacgaa agagctcata tttagagacc ctgctggtcc 900
tagcagatat gggagctcga aatagcctgg acccagaaa cggcgaagag gggtttatgg 960
tttattttct taggggcata gtctggacga taggagcgac acaactgacc cgccttagaa 1020
tgtctaaagg gctcacaaat gggtcctttc ccgatctacc atgacattat taacattgtg 1080
c 1081

<210> 487
<211> 919
<212> DNA
<213> Diabrotica virgifera

<400> 487
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tatgaaatgt catcttaaaa cgtgagagca aattggcaca aacttgagcg ttgaatcagt 120
agtggataaa catcattcga atgatgaatt tgttttattc tcacctgtaa aaaaaacaaa 180
gtgtaaatag tataagatta agtgtatatt gatattagaa ataaatggcg gcgtaccaat 240
tttctaaaag aaggagttct tcaatcaaaa aggaattcaa cgagagtgag ctagaaggtc 300
tgaaaattgc ttttgagctg ctggatcgga accaagatgg acaggtcaca ccgggagagt 360
tcaagatcat gctgaataat ttaggaattg acattaagta ttaaaaaagc tgaagagata 420
attaggattg ccagtcattc aggctcagac ttaatagacc aaaacgactt cctttcittc 480
gttaaacaga ttcaaaaagc atgtccagga gacgtagacg aggatatagc tagtgaccta 540

aaggcagcct ttcaagtttt tgatttggac ggagatggtt atattacaaa agaggaatta 600
aaaactgcca tggaaatgat tggggaagct gttacagatc aacaattgga acaggttatt 660
cgactggctg atactgataa ggatggaagg ataaactatg aagaatttgt taagttatta 720
acatcgtaaa gagagtaaga agaacaaagc ttaaaatggt tccaatgttc tatggtaaat 780
atttggtttt aagtaaaagc caggctgtga tccatgttta caattaaata tcattaagca 840
aacatatttt gactgaattg agaaatattt aatggatatt tttgtttcct aagtagatac 900
ctaggtaatt attgtaaag 919

<210> 488
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 488
cttgagcgtt gaatcagtag tggataaaca t 31

<210> 489
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 489
ccttccatcc ttatcagtat cagccag 27

<210> 490
<211> 589
<212> DNA
<213> Diabrotica virgifera

<400> 490
cttgagcgtt gaatcagtag tggataaaca tcattcgaat gatgaatttg ttttattctc 60
acctgtaaaa aaaaaacaaa gtgtaaatag tataagatta agtgtatatt gatattagca 120
ataaatggcg gcgtaccaat tttctaaaag aaggagttct tcaatcaaaa aggaattcaa 180
cgagagtgag ctagaaggtc tgaaaattgc ttttgagctg ctggatcgta accaagatgg 240
acaggtcaca ccgggagagt tcaagatcat gctgaataat ttaggaattg acattaagta 300
tgaaaaagct gaagagataa ttaggattgc cagtcattca ggctcagact taatagacca 360
aaacgacttc ctttctttcg ttaaacagat tcaaaaagca tgtccaggag acgtagacga 420
ggatatagct agtgacctaa aggcagcctt tcaagttttt gatttggacg gagatggtta 480
tattacaaaa gaggaattaa aaactgccat ggaaatgatt ggggaagctg ttacagatca 540
acaattagaa caggttattc gactggctga tactgataag gatggaagg 589

<210> 491
<211> 914
<212> DNA
<213> Diabrotica virgifera

<220>
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<222> (833)..(862)
<223> n = a, c, g or t/u

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cagacttacc aagaagtatg atccacaagg aaactttaaa aaacgttacg aggaacactt 180
gcaaaaagaa aagaaagcgg cttagaaaat tatctttaaa gaagatgaaa agtcaaacat 240
tttgttgtgt ttaataattt tattgtaatt ttttttcac ttatagggga gtgcaattag 300
aacgaaaaga tacaatgttt cggaaaaaat caaacaaggt tatatttttc taaaactttt 360
tttgttagtt tataaatatg ttaaagtaaa aacttctact cacaaatttt gccgctaatt 420
gtttattaat tgtttaaaca ataacaattg ctttgtataa ataatgttaa gaatatgggt 480
gaattcaaca ttttatttg ataaaaaatg tttttatttt agttttgatt atgctgaacc 540
cgaatctgac attacaattt gcaaattcaa aatggcggat tttttcctaa aaatccttaa 600
aaagtagttg taaaatccga ttttttttta taaaatgtgt ttgtttgcat attatatgtg 660
gatatttttg agaggttgct gaacctgaat aaaattttga taatttaaat tataaaatgg 720

cagatccaaa atggcggata gcttaaaaaa tagttgtaaa atcataattt ctttacaaga 780
tgtatttatt tctacatata tttatttttg agtgctttga taaacctaac ttnnaatgta 840
acattataaa ctanntaaat gncggatcca aaatgcggct tttcataaaa gaacataaaa 900
aagacatttt tcta 914

<210> 492
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 492
cggctgagaa ggtaatgaaa catcttatg 29

<210> 493
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 493
gttcagcaac ctctcaaaaa tatccaca 28

<210> 494
<211> 616
<212> DNA
<213> Diabrotica virgifera

<400> 494
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ccaagaagta tgatccacaa ggaaacttta aaaaacgtta cgaggaacac ttgcaaaaag 120
aaaagaaagc ggcttagaaa attatcttta aagaagatga aaagtcaaac attttgttgt 180
gtttaataat tttattgtaa ttttttttc acttataggg gagtgcaatt agaacgaaaa 240
gatacaatgt ttcggaaaaa atcaaacaag gttatatttt tctaaaactt tttttgttag 300
tttataaata tgttaaagta aaaacttcta ctcacaaatt ttgccgctaa ttgtttatta 360
attgtttaaa caataacaat tgctttgtat aaataatgtt aagaatatgg gtgaattcaa 420
catttattt tgataaaaaa tgtttttatt ttagttttga ttatgctgaa cccgaatctg 480
acattacaat ttgcaaattc aaaatggcgg atttttcct aaaaatcctt aaaaagtagt 540
tgtaaaatcc gatttttttt tataaaatgt gtttgtttgc atattatatg tggatatttt 600
tgagaggttg ctgaac 616

<210> 495
<211> 802
<212> DNA
<213> Diabrotica virgifera

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atacaacagg ttttaagaca tcaatatgac actaaaagtg gttttatatt ttgggatgta 120
tctaattgca gagatatctg gacatgggat gatgttaaat cccccaggaa gaagttcttt 180
ctggaggttt aacgacactg cacctcgaaa ttttgacgat aatcaagtgt tctgtggtgg 240
agcttatgtc caaaatgaac tgaatgatgg caagtgtggt gtatgtggag atccttatac 300
agatcctcat ccccaaagaa acgaaaatac cggatttat ggtataggaa ttgtcgtcaa 360
gacctatgaa ccaggctcag ttattgatgt taaaatcatg ctaactgcta atcatctagg 420
aaatttcaca tacagtctat gtgaactcga agattttgac gctccagaac ctgaaaattg 480
ttttgaagat ttgttactgg aggatggttc agctaactat aatgtagagt gggaagatga 540
agtagtcttc aataaggttc gactgccaaa tttccaatgc gagagatgtg ttcttagatg 600
gacttataaa gcaggaaaca actgggggct atgtgaggat ggaaaatgga gaagaggatg 660
tggacctcaa gaacatttca tatcatgcgc agatattgca ctattataat tataaagaca 720
tttaacacta ttcagtaatt ttatagatct tatcctggat aagcgcaccc gcgtaccaaa 780
gaaggttgat tgatggcaag ct 802

<210> 496
<211> 27
<212> DNA

<213> Diabrotica virgifera

<400> 496
ctttctggag gtttaacgac actgcac 27

<210> 497
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 497
gcttgccatc aatcaacctt ctttgg 26

<210> 498
<211> 625
<212> DNA
<213> Diabrotica virgifera

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atacagatcc tcatccccaa agaaacgaaa ataccggatt ttatggtata ggaattgtcg 180
tcaagacCta tgaaccaggc tcagttattg atgttaaaat catgctaact gctaatcatc 240
taggaaattt cacatacagt ctatgtgaac tcgaagattt tgacgctcca gaacctgaaa 300
attgttttga agatttgcta ctggaggatg gttcagctaa ctataatgta gagtgggaag 360
atgaagtagt cttcaataag gttcgactgc caaatttcca atgcgagaga tgtgttctta 420
gatggactta taaagcagga aacaactggg ggctatgtga ggatggaaaa tggagaagag 480
gatgtggacc tcaagaacat ttcatatcat gcgcagatat tgcactatta taattataaa 540
aacatttaac actattcagt aattttatag atcttatcct ggataagcgt acccgcgtac 600
caaagaaggt tgattgatgg caagc 625

<210> 499
<211> 899
<212> DNA
<213> Diabrotica virgifera

<220>
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<222> (793) (880)
<223> n = a, c, g or t/u

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gagcagatgc aatttccagg agagttacta cgatggaacc tacatctacg actcctccag 120
aactgataat tccttcaatt acgacaactc tacctccaac aaccacaggc ataaggacaa 180
gggtcgaaac gggcgacgaa gctgtaagct tgggtttacc atgcgtgact gacatgcaat 240
gcaaaatggc tgattcatct tcaaaatgca tagaaggaat ttgcgactgt attattcgga 300
caaatggcac acgatcttgt tcggctaaaa atcgtggatg tattcccgga acatttcagt 360
gtcgaagcac cggtacatgc atcagttggt ttttcgtttg cgatggtaga aaagactgca 420
gcgatggatc agatgaagaa tgcttaccta acaaatgtcc ccaagaagct tttagttgca 480
aatcatcagg aaaatgcata tcgagagcga gcagatgcga tggatccaag gactgtgcct 540
tgggagagga cgaaatgaac tgtcaggcta tcggaagaaa aggttgtcca ccagatactt 600
ttcagtgcag agatgggaaa tgtctacccg agtacgaatt ttgtaatgct ataattggtt 660
gtagtgatgg cagtgacgaa ccacctcaca tttgcaaagg acgagcgaga aggagaagaa 720
cagaatattg tcctttacga tgtggaaatg gcagatgccg atctagcgca attgcttgtt 780
ctggaagaga tgngtgcggt gatggcacag atgaaagtca atgttcagtt tgtagatgtc 840
ccgtgattaa gagcgcactt atangtcgtt aatttttcgn ttgacttgta catgccaaa 899

<210> 500
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 500

gcaatttcca ggagagttac tacgatgg 28

<210> 501
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 501
ggtggttcgt cactgccatc actac 25

<210> 502
<211> 617
<212> DNA
<213> Diabrotica virgifera

<400> 502
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attccttcaa ttacgacaac tctacctcca acaaccacag gcataaggac aagggtcgaa 120
acgggcgacg aagctgtaag cttgggttta ccatgcgtga ctgacatgca atgcaaaatg 180
gctgattcat cttcaaaatg catagaagga atttgcgact gtattattcg gacaaatggc 240
acacgatctt gttcggctaa aaatcgtgga tgtattcccg gaacatttca gtgtcgaagc 300
accggtacat gcatcagttg gtttttcgtt tgcgatggta gaaaagactg cagcgatgga 360
tcagatgaag aatgcttacc taacaaatgt ccccaagaag cttttagttg caaatcatca 420
ggaaaatgca tatcgagagc gagcagatgc gatggatcca aggactgtgc cttgggagag 480
gacgaaatga actgtcaggc tatcggaaga aaaggttgtc caccagatac ttttcagtgc 540
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ggcagtgacg aaccacc 617

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<211> 1103
<212> DNA
<213> Diabrotica virgifera

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tataaaagtt acatgcagct acaacaatcg tgatatttat actgatttat ttgcttttgt 180
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tggtgacaat acatttccca atctaattcc agcattaaca ggaaaaactg taaaggaaat 420
cgagaacgat tgctggccaa ctaaaacaca ccattttgat aaatgtccgt tcatatggaa 480
gagctacaaa caaaaaggat atgtaacagc tttcgacgaa gactcttctt gggtgggaac 540
atttaatcat ataaaaaacg gtttcaaaaa acaaccaacg gactatgctt tcaactattt 600
tgattttgag gctataagat tactgggaaa tactgggttg gaaactgttg aaatttgtca 660
aggagcaagg tgggtatata aagttcattt gaactactta tccaatttcg ttcgaacgat 720
ggaagataac ttactaaagt attttggctt tttctggcag aacagtatat ctcatgatga 780
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tttaaaaaaa aaaatttttt ttggcgttta acaacacccc tttttgtatt ttttattgga 1080
aaatttttt tttcttttgg ttt 1103

<210> 504
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 504
ggagagaaga tcctgatgat gatgttgc 28

<210> 505

<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 505
cgaacgaaat tggataagta gttcaaatga 30

<210> 506
<211> 691
<212> DNA
<213> Diabrotica virgifera

<400> 506
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aagcatttgt taatacgact gaagtaaaag aagagtttat aaaagttaca tgcagctaca 120
acaatcgtga tatttatact gatttatttg cttttgtccc tgtaaaaaac ctatcggaaa 180
atgtgaaaaa cgatctgatc caagacgagt cctctttaaa tattttagtg ttgggcttag 240
atgctatttc aagattaaat tttcatagac aaatgccaaa gacattaagt tatttagaac 300
aaattggagc cgtagaaatg atgggatata ataaggttgg tgacaataca tttcccaatc 360
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taacagcttt cgacgaagac tcttcttggg tgggaacatt taatcatata aaaaacggtt 540
tcaaaaaaca accaacggac tatgctttca actattttga ttttgaggct ataagattac 600
tgggaaatac tgggttggaa actgttgaaa tttgtcaagg agcaaggtgg gtatataaag 660
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<210> 507
<211> 813
<212> DNA
<213> Diabrotica virgifera

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agttgcattc acacttacag agcactgcca cggagctcag tacttcggaa aactcatagg 180
aaaactttcg gaattacacc acggcgtctc cggagaagtt tacgcagtag atgcgaggac 240
tttgtacatc aaggatttca cttatgacgg acaaggaccc gccgcttatt tttacgccag 300
cgtccacaaa gcggctgaca aacacggttt ccggttgaga gatgagacgg gaagcggaga 360
agtaatcagg aggtacagga aggagggaat cactctcacg ctgccagaag gaaagaccat 420
acacagcatc aagatatttt atctttggtg cgaggaattt gacgttaact ttggtgatgt 480
taaagttcct cgtggttttg actatccacg accacaaaaa attgaatctc tcaaaggtgt 540
ccacgcaatt tcgtcagaca acatcgtcat cgtggatgcc cagacgctgt tgattccaaa 600
cttgtcttat gatggcgaag caccagatgc caaattctcg ggttggtcgt ggcagcaaac 660
ctactccaca aggtatccga gtccctgacg agaatggcaa agaagtgccc cttagaagat 720
atgacagaaa gacagtggta cttacacttc caggcgattt gacagttttt gacattggac 780
attttggaat ctggtgcgag atgtttactg ttg 813

<210> 508
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 508
tgctaaggtg aaattgaatc ggttacg 27

<210> 509
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 509
caacagtaaa catctcgcac cagattc 27

<210> 510
<211> 799
<212> DNA
<213> Diabrotica virgifera

<400> 510
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cttacagagc actgccacgg agctcagtac ttcggaaaac tcataggaaa actttcggaa 180
ttacaccacg gcgtctccgg agaagtttac gcagtagatg cgaggacttt gtacatcaag 240
gatttcactt atgacggaca aggacccgcc gcctatttt acgccagcgt ccacaaagcg 300
gctgacaaac acggtttccg gttgagagat gagacgggaa gcggagaagt aatcaggagg 360
tacaggaagg agggaatcac tctcacgctg ccagaaggaa agaccataca cagcatcaag 420
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ggttttgact atccacgacc acaaaaaatt gaatctctca aaggtgtcca cgcaatttcg 540
tcagacaaca tcgtcatcgt ggatgcccag acgctgttga ttccaaactt gtcttatgat 600
ggcgaagcac cagatgccaa attctgggtt ggtcgtggca gcaaacctac tccacaaggt 660
atccgagtcc ctgacgagaa tggcaaagaa gtgcccctta gaagatatga cagaaagaca 720
gtggtactta cacttccagg cgatttgaca gtttttgaca ttggacattt tggaatctgg 780
tgcgagatgt ttactgttg 799

<210> 511
<211> 1550
<212> DNA
<213> Diabrotica virgifera

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tttctgagga agttaacaaa taatatttcc tgagccgaaa ctgaaagaat acagcatgca 180
tcacagtaat taaaaaaaat ctattatctg tatctgttat tataatagtc tcccgtttta 240
taccgctaaa gcggctttgg gattatagca gggtagtctg ctatatctag tgcctacggt 300
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tacccaaagt actaatttta ttcaggctga gtcgacctgg ggcctataga cattttaaa 420
aatgtctaga tgttctcgcc ggcgcgggtt tcgaacccg gcctaccagc atgcgagtca 480
gatatcctac agcctgagct acggcggccc ttattaaata gcaaaatgtt aacggacaaa 540
ttaacaataa ttttatatat cttaaggtct aggttatagc gtatttttaa tcgactaata 600
aattatttaa catatccatt atttgaatca aaaataaaga agccattcta aaatttacat 660
aaagacacat aataatatat taactaactt cttgaaaata cgccactgaa tgaatgcaga 720
aaatctgatc gtttcgccgg acgggcctta ggtaactctt agcgaaaatc gccatttgc 780
gcacgttatt cgcactatac gttatacatt gtaacgctag acatacccag actagtagat 840
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aataggacta gctttgaaat gcaaaactat attacgcaat aatgacatgt aatcctaaaa 1140
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gtgactcgat aaatcaaacg tattttggta gcgtaaaaac caaggaaaca gtattgaaga 1260
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tatttcactt taccttctaa ttgtttatta ataactttaa atagttaatt aacttattac 1380
ttctaagaat tttaacaaac aaaagatttg gttatttttt tataacttta ccatgcttaa 1440
taatttaca cttaatttaa tagcaccaaa atttacatgt ttataattta tataaacata 1500
aatcaagttt tgcataatgc agaacgaaat tttggaattt tagtttaatc 1550

<210> 512
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 512
cagggtagtc tgctatatct agtgcctacg g 31

<210> 513
<211> 34
<212> DNA

<213> Diabrotica virgifera

<400> 513
gctagtccta ttgaactgga ttctacttgt tagg 34

<210> 514
<211> 824
<212> DNA
<213> Diabrotica virgifera

<400> 514
cagggtagtc tgctatatct agtgcttacg gtatacaaga aaggtaacag ggtcagtgct 60
acgcttcaac cgcctattat taccccctggt tttacccaaa gtactaattt tattcaggct 120
gagtcgacct ggggcctata gacattttta aaaatgtcta gatgttctcg ccggcgcggg 180
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ccttattaaa tagcaaaatg ttaacggaca aattaacaat aattttatat atcttaaggt 300
ctaggttata gcgtatttt aatcgactaa taaattattt aacatatcca ttatttgaat 360
caaaaataaa gaagccattc taaaatttac ataaagacac ataataatat attaactaac 420
ttcttgaaaa tacgccactg aatgaatgca gaaaatctga tcgtttcgcc ggacgggcct 480
taggtaactc ttagcgaaaa tcgccatttt gcgcacgtta ttcgcagtat acgttataca 540
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atcaatcttt atctaccacc aattttatcg gatcaggaat atagtacaaa tttaataact 660
aaaggcagct ataaagcaaa tatagattgt cttgaaattt gatttaaatg aaattttgaa 720
acagcaaaaa gacattcatg gaatattgaa aattgtaaaa gatttatgaa atttctaatc 780
atttcttttt tcctaacaag tagaatccag ttcaatggat aagg 824

<210> 515
<211> 1452
<212> DNA
<213> Diabrotica virgifera

<220>
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<222> (1400)..(1420)
<223> n = a, c, g or t/u

<400> 515
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tttcataaag tttataagtt atgctgatga gttttgttat cagaagatta cgtacctatc 180
agcttttaat cattcgcata ctttggtgtg tttttatcaa ataaggctaa taagaaaatt 240
catgataaaa cattcggaaa tgtttaaata caacacgcaa ttaaaaaaaa gcagcataaa 300
atttagacga attagtacaa agtgtaccta cttaaaattt acctttttga gtaatttttt 360
atgctgagaa tttaaaaaaa aatccgataa ttttgtctaa aagtacagaa aatatttttt 420
ttaggttata ctttaataag ttacatggtt ttgaatagca tttgaaatgt tttctaagta 480
ctagctagga ttttttttatt tattatctaa tcaatcacat tttacactaa tattctcaaa 540
atcacattta gattttaata aaaaaattct ccatttgtaa aatttaaatt gttctccata 600
gtaaatgcaa atttataaag taaaaaaaca ctaaactatc tatcattaat ataggtccca 660
tagataataa taaatagaaa gaatattata atagttattt tcctaagaag tgcagatagt 720
cattattttc cgcacgcgac tgcagtttgc cgaacgacgc gaagcgggag ttcggcaacc 780
agtcgagtgc ggaaaagaga ctttctgtaa gagttaggaa caatattttt tacgagtctt 840
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gcgtgcggaa tagtgaaact ttctaaacta aaatgggtgc gcgaaagtag acatttttgc 1260
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ctgctctgct ga 1452

<210> 516
<211> 31

<212> DNA
<213> Diabrotica virgifera

<400> 516
tgctgatgag ttttgttatc agaagattac g 31

<210> 517
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 517
ggaaaccaag atcgtcgtca tgctaac 27

<210> 518
<211> 828
<212> DNA
<213> Diabrotica virgifera

<400> 518
tgctgatgag ttttgttatc agaagattac gtacctatca gcttttaatc attcgcatac 60
tttggtgtgt ttttatcaaa taaggctaat aagaaaattc atgataaaac attcggaaat 120
gtttaaatac aacacgcaat taaaaaaaag cagcataaaa tttagacgaa ttagtgcaaa 180
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<210> 519
<211> 1380
<212> DNA
<213> Diabrotica virgifera

<400> 519
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tactaatatc tcctctatag aaactaaata atataaaaaa tatataagac aaatataaaa 180
tctgttacac aactgtcatt agagattgaa ataaagctta agatttttta acttgcctac 240
aatagagttg ataacaggtt ttgtttcaca tctctatact tatgcctgta aactgtagaa 300
tctgttccga atgtcagcat taagttacac attaactgcc gatatctgtt ctttcttaaa 360
taattgccag aaaatttcgt ctaatcttca acgccataaa tgcaatgtaa aaattaatct 420
tagtatactt gtgagtgcag aaggtgtgct attgcctttt taaacacatg gcatacttac 480
attatattat cgttaaatgt attcctatcc agacctcgtt ccaacatatt gcggctagga 540
gcagaagaat aagacagctg acaagctaac ctactgacag ttgacattga cattattatt 600
atgaatgaca caaaatgtat ttaagttcag tcatcatttt tatataaaat tcacatctta 660
ttgctaaata ttatttttcca gttatttgat tataaagatc agtgcaacgt agtagcctat 720
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<210> 520
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 520
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<210> 521
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 521
gcttaacaca tatcgtaggt gtccgtaagt g 31

<210> 522
<211> 993
<212> DNA
<213> Diabrotica virgifera

<400> 522
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aattaatctt agtatacttg tgagtgcaga aggtgtgcta ttgccttttt aaacacatgg 240
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cggctaggag cagaagaata agacagctga caagctaacc tactgacagt tgacattgac 360
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cacatcttat tgctaaatat tattttccag ttatttgatt ataaagatca gtgcaacgta 480
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<210> 523
<211> 1253
<212> DNA
<213> Diabrotica virgifera

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tcgtcaacca atacagatca atttgaatat aaactttcaa atttgatata taaattaaga 180
gtcattacct atgcttgtaa ttaggaatta ttgtactctc aaaataatta atattaaatc 240
cagtagtgat tgatcatatt ggaaggtaaa gtacaggaca aaagattagt aagaagacgc 300
tcgaactcgt ggctgaagga cctgacaaaa cggtttgacc gctcatccgc agaaattttt 360
cttgcagcag ttttcaaagc tacagttgcc atttggatcg ccaatctttg aaaggagacg 420
gcgcaataag aagaaatgat tgatataacc tcaacaaaca gtgacttact ttactttcat 480
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taatgtttac ttttatttaa tacgtttgtt taattgttgg gacatttgta atactgtagc 1140
aaaaaccgaa aatattattt atttgcgatt gcaatgacat gatgttattt catttaaatg 1200
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<210> 524
<211> 22
<212> DNA
<213> Diabrotica virgifera

<400> 524
gacgctcgaa ctcgtggctg aa 22

<210> 525
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 525
gctacagtat tacaaatgtc ccaacaatta aac 33

<210> 526
<211> 845
<212> DNA
<213> Diabrotica virgifera

<400> 526
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ttcattatca acaaaacaaa tgttttgtag agaaagcaaa ctagtgctgc tgctagtggt 240
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gagatttgtg tctgtttcac gacagagatg catgcgacga tagagttgta gacgacgaag 420
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tatcacgata ctggtacttg cgacatatat cttaaaattc taaaattttt aatctttcta 540
cagaagtatc ttataattag aaattgttta taatataaat gaaaaattta tttaacttta 600
ctctagatta tttaataaaa caattctagt ttaattgtat taatattatt atatttacaa 660
taaaaccaag tttaagaata ttctcatgta taataaatga acttcaaaaa cgacagacac 720
tatcttgaca catcttgtaa ataatcacat gtgttaaatt tttggtaaaa atattttata 780
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<211> 1205
<212> DNA
<213> Diabrotica virgifera

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tatgttatta acttctgtaa tcctgaattt cctaaaaaat aattaaatgt tgaccttacg 180
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ccattttatg ttcaaagagc cgatattgta gccccttaa taattatttt tatgtttgtc 540
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atttgctgga taacttcctt ttttgacgga atgccccctg atgatgctat gagagcgaaa 660
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tatattcgag cattgaacta tatattattg aattgtaata tagttaaaag gcaattaaga 780
taaatttta cagagtttat cgtgttcttc tatgattatt aaataattct agtttatttg 840
ttatctcatt actagatcta gtaagagata acccatgaat tttttaaaat gtttatccaa 900
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gtaaatatat caaaaatatt atcagtagta attgcacaag agctctaaaa ttattgaatt 1080
tttcccgagt gacactttga cagttttaat ttcacgagcc gaagtgtcac gagggcaaaa 1140
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ttcaa 1205

<210> 528
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 528
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<210> 529
<211> 36
<212> DNA
<213> Diabrotica virgifera

<400> 529
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<210> 530
<211> 947
<212> DNA
<213> Diabrotica virgifera

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tctgtaatcc tgaatttcct aaaaaataat taaatgttga ccttacgaat tataccgtta 180
cgaatatgta gttacgaact ctcgccgtta cgaattgtcc gttaccattt gtcgggttac 240
gaactgtcgc gttacgagat gtcatggaac cataataaca cacgcaagga taaaaagata 300
caaggataag ataacagatt gtacgtggcc gacattatca gttatgtttg gagataaaat 360
ggttccggtt cgttagaatt taacagaaat attcaagtgt tcaaggttag aaaactaaac 420
tgtttgatta aaaaaaattt ttttcattaa tttctaagta aaaataccat tttatgttca 480
aagagccgat attgtagccc ccttaataat tatttttatg tttgtccctt gtccagtgtg 540
tgttatctat ttgtattatt tttaattaaa tgtctgacat tccgggattt gctggataac 600
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gtttatcgtg ttcttctatg attattaaat aattctagtt tatttgttat ctcattacta 840
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<211> 1194
<212> DNA
<213> Diabrotica virgifera

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atcagtagga aaactcaaag taggttattc tcatcggtta cattcgttct tcggggttta 180
tagaccgagc tcggaattat ttcttcctcg gcctcgcaac ttccatcgag acgtcaaagg 240
cagcgtgtaa actatcaatg agtagaagac agttcataac ggtcttctac ccgacagtta 300
tgacctatgt tgcatagtct tcgatgtctg tcacagttga aaggcacaag aaagaaatag 360
atccacatca cgaccaatta taaagcccaa aaagaattta ccattacaga acaccagccg 420
tgaaggctta cattcctcaa aatcatgtca gtcatatgtg gggatggtga catggttata 480
gtcatggggt tttatggtat tatttctata catggttttg aataatgtaa gtctcgtcat 540
taaatatgta tctgacaata catttgaatt taaatactcg agattaaatt ataagcaatg 600
atcagaagaa atgagatact tagtgccttg gatatgtgtt aaccattgct tcgctttttt 660
aaagacaaat gttcactgca caatgtaaaa cgactagtaa ctagtaaaac aaaaattccc 720
tggtttgttc ttgcagacta ttaaaaagaa gtagttttta atagctgatg gacaaaacag 780

gcacaaatat tgacaaattg cacagtagtg aggctccaaa agccttagta attaggaaca 840
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ccatccttgg aatagttgat gaaagagaaa gaatttaatg aaggtgaaaa tgaaacatga 960
tatgaaccag atgagatgtg ataggaatgt ggatttggaa acgaaggact atggatatta 1020
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taacccacct ccacccagtc cgaatatttc ttgaggagaa atattcggcc tacttactaa 1140
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<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 532
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<210> 533
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 533
gaggtgggtt aagtaacttc ccttcagg 28

<210> 534
<211> 1031
<212> DNA
<213> Diabrotica virgifera

<400> 534
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gtttatagac cgagctggaa ttatttcttc ctggcctgca acttccatga gacgtcaaag 180
gcagcgtgga aactatcaat gagtaggaga cagttcataa cggtcttcta cccgacagtt 240
atgacctatg ttgcatagtc ttcgatgtct gtcacagttg aaaggcacaa gaaagaaata 300
gatccacatc acgaccaatt ataaagccca aaaagaattt accattacag aacaccagcc 360
gtgaaggctt acattcctca aaatcatgtc agtcatatgt ggggatggtg acatggttat 420
agtcatgggg ttttatggta ttatttctat acatggtttt gaataatgta agtctcgtca 480
ttaaatatgt atctgacaat acatttgaat ttaaatactc gagattaaat tataagcaat 540
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taaagacaaa tgttcactgc acaatgtaaa acgactagta actagtaaaa caaaaattcc 660
ctggtttgtt cttgcagact attaaaaaga agtagttttt aatagctgat ggacaaaaca 720
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atatgaacca gatgagatgt gataggaatg tggatttgga aacgaaggac tatggatatt 960
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<210> 535
<211> 1024
<212> DNA
<213> Diabrotica virgifera

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atgctgtcaa atctaaatca atatgggggc tggtaggcaa acctaaatgt cattctatca 180
gttttcaatg tgttttagat cattttagtt gcgtttcttt gtaattttgt tttgtacaat 240
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tgtgttttga agtgtataat gcgaagtcat catgataaaa agttcagttt tattggttgc 360
catcagtgct acattttaag cataaacaac taaataaagt tatcatctta gggacaaaaa 420
caatggttaa atgctataaa acgtcctata aaaatgctaa ataactatat ccgtgttact 480
caagcttgga aaactgtctc caccgtaggc taacaccgac cacttgagga aaatggacct 540

atattgtaca aagactgtgc caattacaga gatccttcat tatggatttc ttcaagattt 600
gtaaatgtcc tctgtaataa ctattattca ccataggtca gtaattattg atttctaacc 660
ttcaaaatag tcgagaagtg acctattatt tactttacta tctccactgt ctaggaaagt 720
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ttaatgatat attatgacta aaatagtata catatgtata ctcgggagaa tgtatttcag 900
cctcgcgtct gtagcttact ttggtaattc ctgaacaagc taatttgaca atcaattctc 960
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<212> DNA
<213> Diabrotica virgifera

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<210> 537
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 537
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<210> 538
<211> 917
<212> DNA
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aatatggggg ctggtaggca aacctaaatg tcattctatc agttttcaat gtgttttaga 180
tcattttagt tgcgtttctt tgtaattttg ttttgtacaa tgattaatta acattttcac 240
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tgcgaagtca tcatgataaa aagttcagtt ttattggttg ccatcagtgc tacattttaa 360
gcataaacaa ctaaataagg ttatcatctt agggacaaaa acaatggtta aatgctataa 420
aacgtcctat aaaaatgcta aataactata tccgtgttac ttaagcttgg aaaactgtct 480
ccaccgtagg ctaacaccga ccactggagg aaaatggacc tatattgtac aaagactgtg 540
ccaattacag agatccttca ttatggattt cttcaagatt tgtaaatgtc ctctgtaata 600
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tcactttcct tgccgtcaaa tgtcacttgt cataaatgtc aaaataattt atcaaattat 780
aataaaagtt aatgtagata ttattatttg aaacttaatt attaatgata tattatgact 840
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<211> 1017
<212> DNA
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<213> Diabrotica virgifera

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<210> 541
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<400> 541
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tgtaagtgac agagatagag ctatattgca cttttaatac acgtttaaat gaaactattc 180
gtgcctggct cgacaaggca ggaagatcta atatttttta ctatgctcat catagtgaat 240
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<211> 999
<212> DNA
<213> Diabrotica virgifera

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attaagaatt taagcaagtt ttaagaattt aggcaagtta tctccacagc actaaagaaa 180
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gtttgtagca ttttagaaaa aaaaattaga agataacttg aaaacggaga ctaaacttta 540
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caaatattat ttatggagta gaaaaaataa tgtttgttcc acttctgtca agaagacaga 660
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gatatcttca cctgattgtc acatgcctgt cgaaaatatc tagctatatc agaataataa 780
ggactttcat aaattacgaa aaattaacga agcaaagaaa actgtttgaa aatcaattaa 840
gaaacattcg gaaaggccaa tattttgttt ttttgtgttt acataaaatc taaagatata 900
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<212> DNA
<213> Diabrotica virgifera

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<210> 545
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<212> DNA
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<400> 545
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<210> 546
<211> 508
<212> DNA
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attaagaatt taagcaagtt ttaagaattt agggccagtt ttgtcaagtt tagaaacaag 180
atttgggcaa gaggttcgta agagggaaga atagaagaaa gcaactaata cagtttgtag 240
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actatcaagt ttattatcat taacaccttt tattctcggt aacaagtatg taaaagcaaa 360
tattatttat ggagtagaaa aaataatgtt tgttccactt ctgtcaagaa gacagaatga 420
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tcttcacctg attgtcacat gcctgtcg 508

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<211> 969
<212> DNA
<213> Diabrotica virgifera

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gtgcataata atagtttatt ttaaaatttg cagtttattt tcaagagatt ttcaaaaaat 180
gatttttct ttactgtaca ctcctgtatt agaagtagaa atcagcgagt gttaattact 240
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aaataatatc tgtttaatga agtattatga atagttgtac ttttttagtt aatatttaat 360
aacttcacta tccaatcaac tatataattc aagaacctta atgtgtccct aatatgtatg 420
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cacatttaga aaaaaactaa aggtaattag ttttcaaatc gtacaattat tgttctcaaa 600
acataaaaca gcattctaat attctttacc tattaatact ctattctgtt ttcaattgtt 660
ttaaatccat aaataaacag ctgtcaaaca atcataacat tctacaatca agaaaccatg 720
aaatgtccat gccacattaa tattgaaaca aatttttgg tttatgttac aacaaacagt 780
cattttagta tattaaatca cctaaagtat atgacttaat atatcaaaac aacaatttgt 840
ctgaggacat gtgaatatcc tagaagcaac tttttaaacc aaacaaatta ataagattaa 900
ctatataaat gcagcattta tatttgatgg tttctagtat caatgacatc caaaatacaa 960
acaagtgtt 969

<210> 548
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 548
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<210> 549
<211> 37
<212> DNA
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<400> 549
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<210> 550
<211> 754
<212> DNA
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aatgaagtat tatgaatagt tgtacttttt tagttaatat ttaataactt cactatccaa 180
tcaactatat aattcaagaa ccttaatgtg tccctaatat gtatgtccat gaatcaaatg 240
tgattcaagg atagaagcta ttctaaaatt aaaatagtat tggacataga ctcctgatta 300
tgttaacatt gggtcagtgg agttatcaat atcactaaga aatggcacat ttagaaaaaa 360
actaaaggta attagttttc aaatcgtaca attattgttc tcaaaacata agacagcatt 420
ctaatattct ttacctatta atactctatt ctgttttcaa ttgttttaaa tccataaata 480
aacagctgtc aaacaatcat aacattctac aaccaagaaa ccatgaaatg tccatgccac 540
attaatattg aaacaaattt tttggtttat gttacaacaa acagtcattt tagtatatta 600
aatcacctaa agtatatgac ttaatatatc aaaacaacaa tttgtctgag gacatgtgaa 660
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<210> 551
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<212> DNA
<213> Diabrotica virgifera

<400> 551
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aaatatacac tcgttctaat attatttttc acctaacctt tactaacttc tatatctaga 120
tccttatccg tcaaatacgg caacttaacc ttttcgtgga gggaaataac cgtagtcgct 180
aacacttttc ggtgcccggt agatggttaa atacaaagag gactcgttta ggtaccgtta 240
attatcgtaa ataccagtaa atgattcatt taggattaaa attacttgct aaagtaagct 300
gagtaagttt tatcggtgat aatattacag ccttctagtt tgtcaacgat acgccatcta 360
ggttttcaaa gatatattcc aggacccggt ataaaaccgt gggagaaata atacccacct 420
tgatgtattc ctcgatttac ggtgttttgt ctgcatctat ccagacttca tccaaatacc 480
atcactttca tgtatgtact tgataaggct cgaatgcctg gagtcaaatc ttgcttaatc 540
cagggcctta caaattgacc aaatttccaa gacttttcgg ttctacaaat ttaatctaca 600
caattaagtg tatggataca ttgtattctg cgtaatattt ctttattaca gttcttattg 660
cataaaggtg gttagtaata tttaacgcgt ttcaaaaacc cgcctgttcg acagtgaaga 720
gtgatcaatt caaatagcac agacctataa gtgatgtatt ggcaaccgta aactatattt 780
gttataatca aatcaataat tttataagct aaatcagggt agttctcgga agttggctgt 840
ataccattta gttaaaaaac tttcaacatc aaagtaaaaa aacttctgtt gtaatttgtg 900
aagtattaaa ttaaaaatcc aaacgg 926

<210> 552
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 552
cttcggttac cattcgtact taaatataca ctcg 34

<210> 553
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 553
ggtatacagc caacttccga gaactacc 28

<210> 554
<211> 804
<212> DNA
<213> Diabrotica virgifera

<400> 554
cttcggttac cattcgtact taaatataca ctgttctaat attatttttc acctaacctt 60
tactaacttc tatatctaga tccttatctg tcaaatatgg caacttaacc ttttcgtgga 120
gggaaataac cgtagtcgct aacacttttg gtgcccggta gatggttaaa tacaaagagg 180
acttgtttag gtaccgttaa ttatcgtaaa taccagtaaa tgattcattt aggattaaaa 240
ttacttgcta aagtaagctg agtaagtttt atcggtgata atattacagc cttctagttt 300
gtcaacgata cgccatctag gttttcaaag atatattcca ggacccggta taaaaccgtg 360
ggagaaataa tacccaccct gatgtattcc tcgatttacg gtgttttgtc tgcatctatc 420
cagacttcat ccaaatacca tcactttcat gtatgtactt gataaggctc gaatgcctgg 480
agtcaaatct tgcttaatcc agggccttac aaattgacca aatttccaag acttttcggt 540
tctacaaatt taatctacac aattaagtgt atggatacat tgtattctgc gtaatatttc 600
tttattacag ttcttattgc ataaaggtgg ttagtaatat ttaacgcgtt tcaaaaaccc 660
gcctgttcga cagtgaagag tgatcaattc aaatagcaca gacctataag tgaagtattg 720
gcaaccgtaa actatatttg ttataatcaa atcaataatt ttataagcta aattagggta 780
gttctcggaa gttggctgta tacc 804

<210> 555
<211> 904
<212> DNA
<213> Diabrotica virgifera

<400> 555
gcaaaagtta aacttttgaa ctattttgat ctatcgtcaa tgtttgcaga aaatatttga 60
ttaaatacaa ttgaaaaaac aatggaacat catagaaact tgatgaagac ttacaagaac 120
aacaagtact cggtcaaata aacattttgg aaagtttacc tttttaaaat agttggactt 180
tttttctgaa ctcctgccag gctctcgata atcttagaat aatgggttgt tttatgtata 240
cttgtttatt ggctgaggta tttaatatct agattaagat tccaatcaaa gtttttggcc 300
taggtgaact gtagttttat agaaaaatct caaacgcatt tagttgcgtt tataaatgtc 360
tactacctaa ttgtatagaa cgcacaggtt atattttaca gatttctcga ctttttgact 420
tctatccgtg atgatttgac gtgagaggcg tccaaagtct ctttgaaaa tttgtaaatg 480
tgttaaggtg ctttgagttc gaaagttagc tgtcttttcg aagcattaat ttgtcaaaaa 540
catagttata gtataaacca ataagcgctt acctcaggaa tatttgtctt gtagaggtaa 600
aatgaagagt tatattttta ttgttcgtca gagataaaag atttgtttt gtgagaatat 660
cgctaaatat tatatttttg atacattaat aaatatacag attgggcaag ctagtttttg 720
aataacatat tgacatttat ttatcggatt cactgtgttc agaagagcct ttggaaattt 780
agattagggt gcaagtatat taaagatgat aagagattga tacatatcat actatacata 840
tcatattaac tatatcgatg ttattctata ttataaaatt aatatttaat aaatgtctac 900
cagc 904

<210> 556
<211> 36
<212> DNA
<213> Diabrotica virgifera

<400> 556
catagaaact tgatgaagac ttacaagaac aacaag 36

<210> 557
<211> 36
<212> DNA
<213> Diabrotica virgifera

<400> 557
tctcttatca tctttaatat acttgcaccc taatct 36

<210> 558
<211> 725
<212> DNA
<213> Diabrotica virgifera

<400> 558
catagaaact tgatgaagac ttacaagaac aacaagtgct ggtcaaataa acattttgga 60
aagtttacct ttttaaaata gttggacttt ttttctgaac tcctgccagg ctctcgataa 120
tcttagaata atgggttgtt ttatgtatac ttgtttattg gctgaggtat ttaatatcta 180
gattaagatt ccaatcaaag tttttggcct aggtgaactg tagttttata gaaaaatctc 240
aaacgcattt agttgcgttt ataaatgtct actacctaat tgtatagaac gcacaggtta 300
tattttacag atttctcgac tttttgactt ctatctgtga tgatttgacg tgagaggcgt 360
ccaaagtctc ttttgaaaat ttgtaaatgt gttaaggtgc tttgagttcg aaagttagct 420
gtcttttcga agcattaatt tgtcaaaaac atagttatag tataaaccaa taagcgctta 480
cctcaggaat atttgtcttg tagaggtaaa atgaagagtt atatttttat tgttcgtcag 540
agataaaaga ttttgttttg tgagaatatc gctaaatatt atatttttga tacattaata 600
aatatacaga ttgggcaagc tagtttttga ataacatatt gacatttatt tatcggattc 660
actgtgttca gaagagcctt tggaaattta gattagggtg caagtatatt aaagatgata 720
agaga 725

<210> 559
<211> 874
<212> DNA
<213> Diabrotica virgifera

<400> 559
taataaataa atctacttta aaatgtacat ataatatatt atatctgaat tgtcaatatg 60
aatgagtgag ataaaattaa attattagag aaaaattttt taccaagcat caaaaacaaa 120
atttgattaa attattaaag ttttgtattt tgataatgat ttccaagttg gaaattgaaa 180
cgtcaaataa atttaattta aaacttaaac tgtggcttga tcccctgtca caagaaaaaa 240
aaacacacca cgtctacgtc tatgcagata aggacacctg ttaacgagta aaatatttct 300
tggattctca ccctgccttg gacgtaaata tatagaccag cgaagtattg ataaggttac 360
caatgattca cagtgttcaa ggaatttgtt caacttagcc gcccgtaaat atgacccata 420
gaccggaggt atattgttac cgaggcaaat tttatgaaat catcttcctt tttcccttat 480
gcacattggc aaggcatacc caataaaaat gaccccggta taaatttagt tttaaaattt 540
aacattgttg ctgttctcag ttcaatttgt agatgagtcg ccttcaatta aaaatggttg 600
gagagagaac aaatgattga gtaaattagt aaaaaaacat taattagtag tcatcttaat 660
tataaatcaa attaataata aaaatatccc aactaaaata ttttactaaa cgtcataccg 720
ttggtcatac taaacgtcat acatatttat acctaattat gacagaagtc aacaagcact 780
taagataacg tctaaatgtg agaaactact atgtaatgta aatgtatagg tgtctaacga 840
caattttcca cctctacaag tttgatctct tttt 874

<210> 560
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 560
tgtggcttga tcccctgtca caag 24

<210> 561
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 561
gagatcaaac ttgtagaggt ggaaaattgt cg 32

<210> 562
<211> 658
<212> DNA
<213> Diabrotica virgifera

<400> 562
tgtggcttga tcccctgtca caagaaaaaa aaacacacca cgtctacgtc tatgcagata 60
aggacacctg ttaacgagta aaatatttct tggattctca ccctgccttg gacgtaaata 120
tatagaccag cgaagtattg ataaggttac caatgattca cagtgttcaa ggaatttgtt 180
caacttagcc gcccgtaaat atgacccata gaccggaggt atattgttac cgaggcaaat 240
tttatgaaat catcttcctc tttcccttat gcacattggc aaggcatacc caataaaaat 300
gaccccggta taaatttagt tttaaaattt aacattgttg ctgttctcag ttcaatttgt 360
agatgagtcg ccttcattaa aaatggttgg agagagaaca aatgattgag taaattagta 420
aaaaaacatt aattagtagt catcttaatt ataaatcaaa ctaataataa aaatatccca 480
actaaaatat tttactaaac gtcataccgt tggtcatact aaacgtcata catatttata 540
cctaattatg acagaagtca acaagcactt aagataacgt ctaaatgtga gaaactacta 600
tgtaatgtaa atttataggt gtctaacgac aattttccac ctctacaagt ttgatctc 658

<210> 563
<211> 849
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (765)
<223> n = a, c, g or t/u

<400> 563
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ttcagtggac caaaggatac atatcgatac ctcagagcaa cagtgagata agtggaaaat 120
ttcagttttt ttaagtctgc ttatttacat agaatgtgtt gccagtgtgg agtgcagtgc 180
attctatgta aatggcgtac ttaaacaagg ttgaggtttt ggacttctca ctgttgcttt 240
gatgtatcga tataagctac atagtagata catagaggaa atcttgtgct ttattctttt 300
ttagaatttc aatggttaat atattagata ttaaaataat gacccaaaaa atctatatag 360
tgctatctaa atattgctgc tgcaagaatt tttttattag ttctttaacc cagttttatg 420
accttcatgt acatatatcc aaatctatat tgccagggta ttggaaataa taccctggat 480
ttttagcctg aagtatatta ccaatgatgt acacaaacta ctagtctaaa gaaacaccga 540
ctattgaaga atattaagaa gctacaggtt acttttcatt tttccaaaat atcatttgta 600
tttttcagtt ctattctgtc acaactaaat tttattccac tttaccacga gagtaatctg 660
ttttttcgta actaaaagag gatcgatggg tagccaagaa gttgagaaac agtaagattt 720
caaatattgc aaaacgttgc aaatattttt aagaatgtat tttanaatgt taaatggata 780
catgaactaa tcagaaagca gtcttcaaaa aagaaaaagc agtgttaaga cacagtattc 840
gaaaacatc 849

<210> 564
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 564
cattcagtgg accaaaggat acatatcg 28

<210> 565
<211> 35
<212> DNA
<213> Diabrotica virgifera

<400> 565
gactgctttc tgattagttc atgtatccat ttaac 35

<210> 566
<211> 655
<212> DNA
<213> Diabrotica virgifera

<400> 566
cattcagtgg accaaggata catatcgata cattctatgt aaatagcgta cttaaacaaa 60
attgaaattt tggacttctc actgttgctt tgatgtatcg atataagcta catagtagat 120
acatagagga aatcttgtgc tttattcttt tttagaattt caatggttaa tatattagat 180
attaaaataa tgacccaaaa aatctatata gtgctatcta aatattgctg ctgcaagaat 240
ttttttatta gttctttaac ccagttttat gaccttcatg tacatatatc ccaaatctat 300
attgccaggg tattggaaat aataccctgg atttttagca tgaagtatat taccaatgat 360
gtacacaaac tactagtcta aagaaacacc gactattgaa gaatattaag aagctacagg 420
ttacttttca tttttccaaa atatcatttg tatttttcag ttctattctg tcacaactaa 480
attttattcc actttaccac gagagtaatc tgtttttttcg taactaaaag aggatcgatg 540
ggtagccaag aagttaagaa acagtaagat ttcaaatatt gcaaaacgct gcaaatattt 600
ttaagaatgt attttaaaat gttaaatgga tacatgaact aatcagaaag cagtc 655

<210> 567
<211> 848
<212> DNA
<213> Diabrotica virgifera

<400> 567
cggacgcgtg ggtaatgatc ttaacgttta tagtactata tagagaattg aataaccttt 60
caaatgagcc ggcacacgac atccgttctc atttataaag aaaaaatcga ttacgtcatc 120
acgcccagat ggatcgccgt caccggtgcg atatatgtgt caagggtcat aattggaaag 180
tcgaactttt gtattttaca ttttttttct agttctgtaa ataaggcagt ttgcaggggg 240
gtcaaaatat ggtgaatagc cctgtacatt cattggggcc gaccgatcgg ctctgtcccg 300
tcatgcagct gaccgactgt aataactttt atttatattc aatttggaat gtgtgtactg 360
attttcaacc ttagtaaatg gatttaatta ccttcgtagg aaagcaactt tgataccctc 420
ttagtaacca ctggttctac gtttcgtttg accgaccgca gtatgtttct ctacctacac 480
aatcacagtg atcaattatg aaaagtttag cttttgtgaa ttcacagatt ttttagcgct 540
ttatattgga aaattaacat ttttcaatat aaaccgtcca ctatattaat agatacaaaa 600
ttaggagctg tagcagaaaa gtatctcaac tgactcaatt tattttatta ataagtcctg 660
gtatttatta cgtttgaaaa cggacatttt ggatgctttc tatcttcgat ctttgtaaag 720
aaaccgtgga ataaagtaaa acaatgttaa atattaccta ggtattttaa tgcataaaat 780
tatatactca atgcttgaag gataatataa agaagcattt gttttttttt taatattttt 840
tctcttcg 848

<210> 568
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 568
cgattacgtc atcacgccca gatg 24

<210> 569
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 569
ctttacaaag atcgaagata gaaagcatcc a 31

<210> 570
<211> 610
<212> DNA
<213> Diabrotica virgifera

<400> 570
cgattacgtc atcacgccca gatggatgcc gtcaccagta cgatatatat gtcagggatc 60

ataattggaa aatcgaacct ttgtattttg catttttttt ctgattctgt aaataaagcg 120
gtttacaagg gggtcaaaat atggtgaatg gccctgtaca ttcattgggg ccgaccgatc 180
ggctctgtcc cgtcatacag ctgaccgact gtaataactt ttatttatat tcgatttaga 240
atgtgtgtac tgattttcaa ccttagtaaa tggatttaat taccttcgta ggaaagcaac 300
tttgttaccc tcttagtaac cactgttcta cgtttcgttt gaccgaccgc agtatgtttc 360
tctacctgca cagtcacagt aatcaattgt gaaaagttta gcttttgtaa attcacagat 420
tttttagcgc tttatattgg aaaattaaca tttttcaata taaaccgtcc actatattaa 480
tagatacaaa attaggagct gtagcagaaa agtatctcaa ctgactcaat ttatttttatt 540
aataagtcct ggtatttatt acgtttgaaa acggacattt tggatgcttt ctatcttcga 600
tcttgtaaag 610

<210> 571
<211> 828
<212> DNA
<213> Diabrotica virgifera

<400> 571
gacaataatc gtgtagatgg cgctaagatt ataatagatt atttataatt agatattacg 60
gaacattaaa aaaaacttaa attcagtatt taaaacgtaa gtatatttaa ggtaaaaata 120
tataccacag ctttgaccaa ctaatattgt ttataattaa tgtttttaat tttaatttta 180
aattaatcac tttgacattt atgtcaaatt tccgataaac gtttacaaac ttgtcactac 240
tgcgttcgcg aatttgtaaa tatcccctct acgtacgagc tcacagcgta tacgctgtgt 300
gcttcgctgg tgtcgttcct agcggactac tattcaactt tcaccggtaa tttttaaatt 360
tattatttaa ttgttatcgc ttaatattta caacgcaaaa aagtaattaa attgtaatgg 420
atttttaag atttgctaa tcattttgac gttctattga caaaatatga atttcttact 480
tcggatactt tcacaattat cgtgtagatg gcgctaagat taatggatta atagattaat 540
agaacattaa aaaaacttaa attcagtatt taaaacgtaa gcatatttaa ggtaaaaata 600
tataccacag ctttgactaa ctaatatttt ttataattaa tgtttttaat tttaatttta 660
aattaatcac tttgacattt atgtcaaatt tccggtaaag gtttacagac ttgtcactaa 720
tggcgttcgc gaatttgtaa atatcccctc tacgtacgag ctcacagcgt ataactgaac 780
gacaacgaac gaacgaacac gaacactgaa cacagattca cagatagc 828

<210> 572
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 572
cgtttacaaa cttgtcacta ctgcgttcg 29

<210> 573
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 573
gctatctgtg aatctgtgtt cagtgttcg 29

<210> 574
<211> 609
<212> DNA
<213> Diabrotica virgifera

<400> 574
cgtttacaaa cttgtcacta ctgcgttcgc gaatttgtaa atatcccctc tacgtacgag 60
ctcacagcgt atacgctgtg tgcttcgctg gtgtcgttcc tagcggacta ctattcaact 120
ttcaccggta atttttaaat ttattattta attgttatcg cttaatattt acaacgcaaa 180
aaagtaatta aattgtaatg gatttttaa gattttgcta atcattttga cgtcctattg 240
acaaaatatg aatttcttac ttcggatact ttcacaatta tcgtgtagat ggcgctaaga 300
ttaatggatt aatagattaa tagaacatta aaaaaactta aattcagtat ttaaaacgta 360
agcatattta aggtaaaaat atataccaca gctttgacta actaatattt tttataatta 420
atgttttaa ttttaatttt aaattaatca ctttgacatt tatgtcaaat ttccggtaaa 480
ggtttacaga cttgtcacta atggcgttcg cgaatttgta aatatcccct ctacgtacga 540
gctcacagcg tataactgaa cgacaacgaa cgaacgaaca cgaacactga acacagattc 600

acagatagc 609

<210> 575
<211> 824
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (785)
<223> n = a, c, g or t/u

<400> 575
gcgatgcgat accgacaaag ctccctttga ctcggacgcg ccagaccgac agagaacgga 60
agtagagcga agcgaggcaa agttgcacaa ggtgtccgtc tacactctcg tacttgttga 120
acctcgatcg acttcggcga gagtgtggag ctcacataac atttttttcat agagagtaat 180
aatgtaacag tttgtagttt ctaccagttg tgatgtaaca ggcgtaacgc tatgttattt 240
cacaatatgg agaagatcta ctacttcttc atttgtgacg agatctacca gcgaaatttc 300
aaaaattgtc ctcgagatgg acatttcaaa ctttttagg ttctatgatc ttaatttaac 360
ttccatcaac aataagattt actgtttttg attaaatagt taatctagca aagatagacc 420
agcaggtact tccttaaatc tagtaatggt cagcgtttac atagaccaat aatagtttat 480
taagcttttt tcggtcaact ttttaagtct tgtttttaaa ggaatgtttg tataacattt 540
taaacctttg taaaacatgt accattaatg ttgccccttct actcctttat aaaaataatt 600
gttaaaataa cttataaaat taatcttgtt taatgactcg aaatataaat tttaattttc 660
gtataaggtt cagatttaca gtattagtta tattataatt tacagaaatt tttcaatttc 720
ttttctaata actacacata cagcaaaaag tatgcctggt ggtaacgttc attaaattaa 780
gaagnttgtc gttgcttgaa acttgtgaaa attttgatag tttt 824

<210> 576
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 576
cgatgcgata ccgacaaagc tcc 23

<210> 577
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 577
cacaagtttc aagcaacgac aatcttc 27

<210> 578
<211> 804
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (27) (165)
<223> n = a, c, g or t/u

<400> 578
cgatgcgata ccgacaaagc tcccttngac tcggacgcgc cagaccgaca gagaacggaa 60
gtagagcgaa gcgaggcaaa gttgcacaag gtgtccgtct acactctcgt acttgttgaa 120
cctcgatcga cttcggcgag agtgtggagc tcacataaca ttttntcata gagagtaata 180
atgtaacagt ttgtagtttc taccagttgt gatgtaacag gcgtaacgct atgttatttc 240
acaatatgga gaagatctac tacttcttca tttgtgacga gatctaccag cgaaatttca 300
aaaattgtcc tcgagatgga catttcaaac ttttttaggt tctatgatct taatttaact 360
tccatcaaca ataagattta ctgtttttga ttaaatagtt aatctagcaa agatagacca 420
gcaggtactt ccttaaatct agtaatggtc agcgtttaca tagaccaata atagtttatt 480
aagcttttt cggtcaactt tttaagtctt gttttaaag gaatgtttgt ataacatttt 540

aaacctttgt aaaacatgta ccattaatgt tgcccttcta ctcctttata aaaataattg 600
ttaaaataac ttataaaatt aatcttgttt aatgactcga aatataaatt ttaattttcg 660
tataaggttc agatttacag tattagttat attataattt acagaaattt ttcaatttct 720
tttctaataa ctacacatac agcaaaaagt atgcctgtgg taacgttcat aaattaagaa 780
gattgtcgtt gcttgaaact tgtg 804

<210> 579
<211> 812
<212> DNA
<213> Diabrotica virgifera

<400> 579
cggagacgag tcatttgcgg acatgtgttt gtcgagcaaa ccggcattat tttttcatgt 60
agaattgccc tttaaagttt ttcatactta tttactaaca ccctgtatgt gtcgacaaca 120
catgtacaag tatgcatgca caatgcgcca ttttaaactt gaacatcagt agttgaagca 180
tccagtatcg tatgtctaca cgaatggtca aaactcaact gtattaaact ttgtacaagt 240
ctttcacaca cacactctca attacacttg cgtaaaaaat taacaagtaa aaattacaaa 300
atgttcacaa gtctcttgcc acttgtacag ttaacgtact tgtgctagca ttacccaaca 360
cccgttccag tatacttgtg caataaactt gtgcatggga acacgttggg aagaaaaatg 420
tgtaaggtta ggtcgaacac gttgaccatt cgcaaaatta aattccaaca gagggcgctc 480
aaaatttcaa agatggacga caactctagg aaaacaattc attttgtcat ttgaattcac 540
agttctaaaa cgttacatta aaatcattta caggagtgtt ttgccaaagt aaccactaag 600
ttttgcaact aagacatctt ataagttaaa gacgactcaa aattatgttt aaactgtatg 660
cattcattaa aatttgatgc taactactga tttgttttta ccttttttc ataaaaaaat 720
ctggcccccg ataatcacac agcgttctaa aaattattaa tctatcttag gatttctaat 780
tttgttttta atttaattaa taggtgcact ac 812

<210> 580
<211> 24
<212> DNA
<213> Diabrotica virgifera

<400> 580
ggagacgagt catttgcgga catg 24

<210> 581
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 581
cttagtggtt actttggcaa aacactcctg 30

<210> 582
<211> 599
<212> DNA
<213> Diabrotica virgifera

<400> 582
ggagacgagt catttgcgga catgtgtttg tcgagcaaac cggcattgtt ttttcatgta 60
gaattaccct ttaaagtttt tcatacttgt ttgctaacac cccgtatgtg tcgacaacac 120
atgtacaagt atgcatgcac aatgcgccat tttaaacttg aacatcagta gttgaagcat 180
ccagtatcgt atgtctacac gaatggtcaa aactcaactg tattaaactt tgtacaagtc 240
tttcacacac acactctcaa ttacacttgc gtaaaaaatt aacaagtaaa aattacaaaa 300
tgttcacaag tctcttgcca cttgtacagt taacgtactt gtgctagcat tacccaacac 360
ccgttccagt atacttgtgc aataaacttg tgcatgggaa cacgttggga agaaaaatgt 420
gtaaggttag gtcgaacacg ttgaccattc gcaaaattaa attccaacag agggcgctca 480
aaatttcaaa gatggacgac aactctagga aaacaattca ttttgtcatt tgaattcaca 540
gttctaaaac gttacattaa aatcatttac aggagtgttt tgccaaagta accactaag 599

<210> 583
<211> 802
<212> DNA

<213> Diabrotica virgifera

<400> 583
cgtggcgttt ttctatttac agtatgtgaa tgtgtcaaag taactgtgtt tttcaaaaat 60
taacaaaaga aattcaaaat gtacaagtgg acaaaaaata ttaaacaaat gtatatagtg 120
tatctatttc taatcgaatc aacaaaatat gatcttactg aacagaatat gatgcaagct 180
aatattaaat gcaactcgta tgttttatta tatcctaaac caaagactta ttcatcttga 240
aggtgactgt gtgccgtcat ctcttttatt gagacaatta ggacgttttt cgttctcagc 300
ggcttctcgg aaatccctgg cttacagaaa cggatggtga ctatagtcac ggaactgtca 360
aaattaattt tgtatcttat atgaagcctc aaacgttttg gaaatatttc ttctctttat 420
caggaactgg aaagaagtat atgccctcag tttgttatct ttctctagat gatgggagga 480
aaaattttta aaatacctgt ttgtcagagt tttattacta ttaagaagaa ttcttcatct 540
taaaggtaac cgggtgtcgt catcactttt attgacacaa ttaggacgtt ttttgatctc 600
aatggctttt ggtgtggaca atagttatag aactttcaaa accaattttg tgtcctgtct 660
agatcatcaa acggttttga gaagatttct tcccttcata tggagctgga aagaagtatt 720
tgacacctgt tagttatctt tctctagatg atggaaagaa aatctttttg aaagctatac 780
agaagtctta aaatacctgt tt 802

<210> 584
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 584
gtggcgtttt tctatttaca gtatgtgaat gtg 33

<210> 585
<211> 35
<212> DNA
<213> Diabrotica virgifera

<400> 585
gataactaac aggtgtcaaa tacttctttc cagct 35

<210> 586
<211> 737
<212> DNA
<213> Diabrotica virgifera

<400> 586
gtggcgtttt tctatttaca gtatgtgaat gtgtcaaagt aactgtgttt ttcaaaaatt 60
aacaaaagaa attcaaaatg tacaagtgga caaaaaatat taaacaaatg tatatagtgt 120
atctatttct aatcgaatca acaaaatatg atcttactga acagaatatg atgcaagcta 180
atattaaatg caactcgtat gttttattat atcctaaacc aaagacttat tcatcttgaa 240
ggtgactgtg tgccgtcatc tcttttattg agacaattag gacgtttttc gttctcagcg 300
gcttctcgga aatccctggc ttacagaaac ggatggtgac tatagtcacg gaactgtcaa 360
aattaatttt gtatcttata tgaagcctca aacgttttgg aaatatttct tctctttatc 420
aggaactgga aagaagtata tgccctcagt ttgttatctt tctctagatg atgggaggaa 480
aaattttaa aatacctgtt tgtcagagtt ttattactat taagaagaat tcttcatctt 540
aaaggtaacc gggtgtcgtc atcactttta ttgacacaat taggacgttt tttgatctca 600
atggcttttg gtgtggacaa tagttataga actttcaaaa ccaattttgt gtcctgtcta 660
gatcatcaaa cggttttgag aagatttctt cccttcatat ggagctggaa agaagtattt 720
gacacctgtt agttatc 737

<210> 587
<211> 778
<212> DNA
<213> Diabrotica virgifera

<400> 587
tcaaaaaatt catgaaagtc agatgacgat aaccaaggag ctgtcatgcg tctgcgcgaa 60
gaactaaaat gtttgacgcg ccgtcaccaa aatggaacat ggagaacaaa ggattttcgc 120
ggagtgaccc tactgattat ttagcattat actaatctca aatacattag gtttgttcta 180
gcatcagttt caagcggttt gaaatcatca gaagcatgcg catttgtttg atggcgttta 240

agcacacaaa ttactagttt gaaactacta gtccagcgtt ctaactttga tttggaaact 300
agctttaaac ggtcaaaagg gtttgcggat tttgttctga gtcaatttgt gacttgcgag 360
gtggaattat tgtttgaggt ttataaattt taaatgaaaa tgatatgttt tgactgtttg 420
ttacttacca ttatttacgt ttataacatt aattttctca caatggagca ctgaggaacg 480
tttgtttttc tatacttcca caaaattttg tggaagtatg gaaaaacaaa cgtttttcag 540
tgttttattg tgagataaaa tgaacttcca tcaagtaacg gtcgaatcca tcaattacat 600
tgattttcaa tatttaacgt aaatcttgaa aatttggata acacaagaaa aatatatttc 660
taatctaacc tcaaaattat aaataaaaac aaacatgaac cagtctcatt tgacgttagt 720
attttctccg aaaaaaaagc gttctagcaa aaaacagttt gctaccagtt tgtggatt 778

<210> 588
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 588
catgaaagtc agatgacgat aaccaaggag 30

<210> 589
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 589
ctaacgtcaa atgagactgg ttcatgtttg 30

<210> 590
<211> 709
<212> DNA
<213> Diabrotica virgifera

<400> 590
catgaaagtc agatgacgat aaccaaggag ctgtcatgcg tctgcgcgaa gaactaaaat 60
gtttgacgcg ccgtcaccaa aatggaacat ggagaacaaa ggatttcgc ggagtgaccc 120
tactgattat ttagcattat actaatctca aatacattag gtttgttcta gcatcagttt 180
caagcggttt gaaatcatca gaagcatgcg catttgtttg atggcgttta agcacacaaa 240
ttactagttt gaaactacta gtccagcgtt ctaactttga tttggaaact agctttaaac 300
ggtcaaaagg gtttgcggat tttgttctga gtcaatttgt gacttgcgag gtggaattat 360
tgtttgaggt ttataaattt taaatgaaaa tgatatgttt tgactgtttg ttacttacca 420
ttatttacgt ttataacatt aattttctca caataaagcg ctgaagggcg tttgtttttc 480
tatacttcca caaaattttg tggaagtatg gaaaagcaag cgtttttcag tgttttattg 540
tgagataaaa tgaacttcca tcaagtaacg gtcgaatcca tcaattacat tgattttcaa 600
tatttaacgt aaatcttgaa aatttggata acacaagaaa aatatatttc taatctaacc 660
tcaaaattat aaataaaaac aaacatgaac cagtctcatt tgacgttag 709

<210> 591
<211> 765
<212> DNA
<213> Diabrotica virgifera

<400> 591
gacaatttgg aatttaattc tttggaatcg ttgtcagtgg actttcataa ttttttacat 60
aatttaattt tacggtagaa taatttttc aacgttactg tttagtgctg gcctttaaac 120
gaatgtgatt ctagatgata gttgttaaat gatcgtcaag tcgaatagtg gtgatctctg 180
agagtctcct gaagtagtaa ggcagataaa tgaatagctg tgagtttgtt gaaataagtg 240
tcctgacgga ggctcatcac gtaaagcatt gtaagttata ttgttctact tatattccaa 300
gagtcaccgt tgcatgccgg aacgagaaat agattcagtt tattgagagg agaaaaggct 360
agcatggttt tttgaacgat acgtgcatct gaaggggctc attgatgaca ataggcttgc 420
aatagtttgt tgcgagattg ctgactacat agggggctgc taagagtaaa ttgtaggcga 480
ccagagacaa gaatttggac aactcatcat ccgagagaca gttttatttt ttttgtagaa 540
ttattcataa cgcaaatttc aataagtact ttagatagtg gtaggagtat ttcaataatc 600
agaataggag atattatttt tagaggatat tttgagggtg aatttatttc aatagatgtt 660
tttgtaccat atatgtgttt tattccgtta gtctttgacc ttatttatca tatgtaaagc 720
aaaggagata ttgaagcacg agaatataaa accctgagat tagag 765

<210> 592
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 592
ctttggaatc gttgtcagtg gactttc 27

<210> 593
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 593
ctcgtgcttc aatatctcct ttgctttac 29

<210> 594
<211> 726
<212> DNA
<213> Diabrotica virgifera

<400> 594
ctttggaatc gttgtcagtg gactttcata atttttaca taatttaatt ttacggtaga 60
ataatttttt caacgttact gtttagtgct ggcctttaaa cgaatgtgat tctagacgat 120
agttgttaaa tgatcgtcaa gtcgaatagt ggtggtctct gagagtctcc tgaagtagta 180
aggcagataa atgaatagct gtgagtttgt tgaaataagt ttcctgacgg aggctcatca 240
cgtaaagcat tgtaagttat attgttctac ttatattcca agagtcaccg ttgcatgccg 300
gaacgagaaa tagattcagt ttattgagag gagaaaaggc tagcattgtt ttttgaaaga 360
tacgtgcatc tgtagggggt cattgatgac aataggcttg caatagtttg ttgcgagatt 420
gctgactaca taggggctg ctaagagtaa attgtaggcg accagagaca agaatttgga 480
caactcatca tccgagagac agttttattt tttttttgt agaattattc ataacgcaaa 540
tttcaataag tactttagat agtggtagga gtatttcaat aatcagaata ggagatatta 600
tttttagagg atattttgag ggtgaattta tttcaataga tgtttttgta ccatatatgt 660
gttttattcc gttagtcttt gaccttattt atcatatgta aagcaaagga gatattgaag 720
cacgag 726

<210> 595
<211> 735
<212> DNA
<213> Diabrotica virgifera

<400> 595
ttattttagc acacaaacaa aatgctcggt gttagtatat tatagcatca atgtttcgaa 60
ttttgcacga tccctcttca ggtgattcga aaaacatgaa tgcgtttaaa aataattcga 120
tcgaaatttt gcgcctacgc tctcaaaaaa ggttaaagta ttatacattt ttgtaatcag 180
tatttcaatt gcttttaaat cagctgtcat atgatgtact tttccatttt aaaaaaatta 240
aagttgtgcc tgtcacctga agagggatcg catgaagttc gaaacattga tgttataata 300
cactttgatc attttaaaaa tcgacctgtc cgagcgtttt gcttatgtgc taaaaataaa 360
taagttaata ggggggggggg gtaacaatca ttccagcgca ctgtatggta actacgaggc 420
aagtagaagc tgtacctgga atcaacataa ttagcgttta agccattttg aagaacaaat 480
tccattcata taaaatgtac acctagtaca gaaacttaat gagaatgatt atgaccgacg 540
tttacagttt tgtgaaataa ttagtgagcg agcagtgagt gatccacagt tgcgctttaa 600
tatttttct gcggtgaata cactgttctc ataaaaaatg gaactagtgc aattactgga 660
gatggatatg agctattacc tccgatttcg ttgaacgaaa aatcgtcaca attgccgtta 720
ttggtctgat aaaac 735

<210> 596
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 596

ctcggtgtta gtatattata gcatcaatgt ttcg 34

<210> 597
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 597
gaaatcggag gtaatagctc atatccatct c 31

<210> 598
<211> 662
<212> DNA
<213> Diabrotica virgifera

<400> 598
ctcggtgtta gtatattata gcatcaatgt ttcgaacccc gcacgatccc tcttcaggtg 60
actcgaaaaa catgaatgcg tttaaaaata attcgatcga aattttgcgc ctacgctctc 120
aaaaaggtta aagtattata cattttgtta atcagtattt caattgcttt taaatcagct 180
gtcatatgat gtacttttcc attttaaaaa aattaaagtt gtgcctgtca cctgaagagg 240
gatcgcatga agtccgaaac actgatgcta caatacactt tgatcacttt aaaaatcgac 300
ctgtccgagc gttttgctta tgtgctaaaa ataaataagc caataggggg ggggtaacaa 360
ttattccagc gcactgtatg gtaactacga ggcaagtaga agctgtacct ggaatcaaca 420
taattagcgc ttaagccatt ttgaagaaca aattccattc atataaaatg tacacctagt 480
acagaaactt aatgagaatg attatgaccg acgtttacag ttttgtgaaa taattagtga 540
gcgagcagtg agtgatccac agttgcgctt taatattttt tctgcggtga atacactgtt 600
ctcataaaaa atggaactag tgcaattact ggagatggat atgagctatt acctccgatt 660
tc 662

<210> 599
<211> 711
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (525) (705)
<223> n = a, c, g or t/u

<400> 599
cacactatat ttatttgtga aatgcaagct aacgattgaa aacgatcggt catacacata 60
tattatgtgt cacataactt tggagaggta aaaaaatact cagaaaaact aaaaataata 120
aaaacaaaga acgtcttttc ctcttagttc ataaaggagc aaaattagga aagaaaaccc 180
tatcccacca acacctcttg taaaaatata aacggttaag acaagcagtg gatcttatgt 240
gtcaaattca cgtctattcc acgaattttc tgtttaagta aattgtagat ctttggttgt 300
atatatagtt acttttgttt catctaaaag ttatctacat taaccatata aaatgtttct 360
gaaatgttat tgaagaatta agatttcaag aagaatgtct ccaactaaaa tcgattttgg 420
taaaatcttg ttttgttaca agtgtacaaa tgtttgatgc aaaatatcta ttatgaggtt 480
gtactaaatt gtgagtatat ttaaaaataa aaaatactgt atctncttaa anaaccattc 540
aataaaaaaa taatttctta atttccccca aaaacttaa aattaaatta ataacttttt 600
cttatatcta ttatatctnc ttataatacc accacactca attttaaaaa tcttccaatc 660
attcttttat naatttttan tacaaatata aatttttttt ttacnaactt t 711

<210> 600
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 600
gaaatgcaag ctaacgattg aaaacga 27

<210> 601
<211> 32

<212> DNA
<213> Diabrotica virgifera

<400> 601
cgattttagt tggagacatt cttcttgaaa tc 32

<210> 602
<211> 395
<212> DNA
<213> Diabrotica virgifera

<400> 602
gaaatgcaag ctaacgattg aaaacgatcg gtcatacaca tatattatgt gtcacataac 60
tttggagagg tgttaggata ctcagaaaaa ctaaaaataa taaaaacaaa gaacgtcttt 120
tcctcttagt tcataaagga gcaaaattag gaaagaaaac cctatcccac caacacctct 180
tgtaaaaata taaacggtta agacaagcag tggatcttat gtgtcaaatt cacgtctatt 240
ccacgaattt tctgtttaag taaattgtag atctttggtt gtatatatag ttacttttgt 300
ttcatctaaa agttatctac attaaccata taaaatgttt ctgaaatgtt attgaagaat 360
taagatttca agaagaatgt ctccaactaa aatcg 395

<210> 603
<211> 699
<212> DNA
<213> Diabrotica virgifera

<400> 603
ccgattttaa gaattttcgt ctataagtta caacatttta ccaaaatact gaaaaagaac 60
tgattagtct attgaaataa ctttaaaatg agttgaagta aaatagaatt ggagctttgt 120
ttatcaataa acatcaatga aaggtataca tttgcgatat gccccgtgtt ggcttaatcc 180
gttactgttt aaatttattt cttacgtttt aacctaacta cctgaggtat tagatttaat 240
ccatggtttc gaattcacct gtagaaggtt tcgagttggc agattcaggt agtagaaaag 300
ttacgaattg gccggtgttc tttgtatacc gtagtcccta gagataacgg actaccctgc 360
tttaatccca aagccgcgat agcgctataa aagggagact attattatta tcattttcta 420
tgttgcgttt cctttccgaa ccataaatac caaaaaaatt tgctactttt tgttcaatcg 480
taaatcaatc aatcagtcgt aaatcagaaa attaattaat gccggtacat ggacttcaag 540
gattaaagac aatcacaggt aagatatcag tcattgaaag atagtatagg agtatagcat 600
tgcattctgt ggatgaggca acatatttgg ggaaatataa gtttcttttt attcaattgc 660
gaacaattta agcaacattt tagtacaaac tttttctt 699

<210> 604
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 604
ggtatacatt tgcgatatgc cccgtg 26

<210> 605
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 605
ccaaatatgt tgcctcatcc acagaatg 28

<210> 606
<211> 488
<212> DNA
<213> Diabrotica virgifera

<400> 606
ggtatacatt tgcgatatgc cccgtgttgg cttaatccgt tactgtttaa atttatttct 60
tacgttttaa cctaactacc tgaggtatta gatttaatcc atggtttcga attcacctgt 120

agaaggtttc gagttggcag attcaggtag tagaaaagtt acgaattggc cggtgttctt 180
tgtataccgt agtccctaga gataacggac taccctgctt taatcccaaa gccgcgatag 240
cgctataaaa gggagactat tattattatc attttctatg ttgcgtttcc tttccgaacc 300
ataaatacca aaaaaatttg ctacttttg ttcaatcgta aatcaatcaa tcagtcgtaa 360
atcagaaaat taattaatgc cggtacatgg acttcaagga ttaaagacaa tcacaggtaa 420
gatatcagtc attgaaagat agtataggag tatagcattg cattctgtgg atgaggcaac 480
atatttgg 488

<210> 607
<211> 688
<212> DNA
<213> Diabrotica virgifera

<400> 607
aaagttaaca acaataaaca gaataattta atttgaaccg atttttttag tgcaaacaag 60
taattggact tcgtaagtcc taggttttca cccaaagtaa tcgtcagtag aactgtaatt 120
cgatatttga actcttcgtg taactttgcg tcgatggata tacgatttta ctaattttga 180
gtcattttta ctaaactttg ggttatcatt gtcacagaaa tgacttcaaa accggaacta 240
aatattgaaa ctcaactttt caatacgctt cgattgatgt gttacatgta ctatttctgc 300
gactataatg gcacttctgg ttagaacttt ttaaccggaa atgatataaa aaccaaaact 360
ttatatttgt tctcatcttg ctaaggcacg tcaaatgata tatcgcttac actatttcgg 420
agactttaaa acagtaccta tgattgtaac tctaaaatcg gaagtcagat gtaaagtttc 480
tcatctttaa taccatcctt gggttttaag ctttcattcg acacatcatt tgtcattctg 540
tctgtattaa taacggagga gttttattcg cggacggact gacaaacagt catgaaacct 600
aaagtatata tttgttctcg actaatatat cacttgcact attccgatgc cgttaaaata 660
atacttctgg tcgtatttct aaaaccgc 688

<210> 608
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 608
cgatatttga actcttcgtg taactttgcg tc 32

<210> 609
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 609
ccagaagtat tattttaacg gcatcggaat ag 32

<210> 610
<211> 550
<212> DNA
<213> Diabrotica virgifera

<400> 610
cgatatttga actcttcgtg taactttgcg tcgatggata tacgatttta ctaattttga 60
gtcattttta ctaaactttg ggttatcatt gtcacagaaa tgacttcaaa accggaacta 120
aatattgaaa ctcaactttt caatacgctt cgattgatgt gttacatgta ctatttctgc 180
gactatgatg gcacttctgg ttagaacttt ttaaccggaa atgatataaa aaccaaaact 240
ttatatttgt tctcatcttg ctaaggcacg tcaaatgata tatcgcttac actatttcgg 300
agactttaaa acagtaccta tgattgtaac tctaaaatcg gaagtcagat gtaaagtttc 360
tcatctttaa taccatcctt gggttttaag ctttcattcg acacatcatt tgtcattctg 420
tctgtattaa taacggagga gttttattcg cggacggact gacaaacagt catgaaaccg 480
aaagtatata tttgttctcg actaatatat cacttgcact attccgatgc cgttaaaata 540
atacttctgg 550

<210> 611
<211> 973
<212> DNA

<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (943)
<223> n = a, c, g or t/u

<400> 611
gagcaataaa agaattcgca gtttgagagg aaagtttcaa caccccgtat cttggaaacg 60
aagcatttgc ggacatacgt ttatagagca aactgtcatt atgtaacacc ctgtataggc 120
ccacacaaaa aattattacc tccttcatga gacttttttt tattgagtta ttcatgtcgg 180
gttggacagc gtttctggtg tgaaaaattt tcgggagggg gacggttcgt aaatatgggg 240
gtttataaac tttggtgcat ctatggtggt tcctgtttat ctgaaccatc tcagatagtt 300
aaggggtggt tacccccctac tataggggtt gatgaagtaa cactactcac agtatattca 360
tttatttata agttgaagta actacggtaa agagttggtg gctaaatatt tatccgctgt 420
gatgtttacc cgctgggatc tcaaataccc atgattaatc tttacgcaat gaatttagaa 480
cgtcgaatgt ggaatcccct gtttatgttt tggtatatat aaaaagtgaa agtgtttgta 540
ttataaatgc tgaatcaact tgattataaa taaagaataa tatttgctac tacagctgac 600
cttgcattat cgataactga tacacttgta tagtaatata ggtcaatcat gtttatgata 660
aacaacgcgt attcgtttac caaggacatt taaatattaa aagaattagt cttgccctta 720
ataagatggt tactaagaga tgctgtgaat cccaatacac atccgacaac tggagtaagt 780
atccttgaaa atttgtcgga aaatattacc agtgaattgt atttttatca aaatattctg 840
caaaaaaacc catcatttat gactctatag tggacgcaca tatccacgta tagtccccac 900
atatgagggg tgcatcataa agagtaataa attataccca ttngtaacat tgagttacca 960
agtgtcaaaa atc 973

<210> 612
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 612
gcagtttgag aggaaagttt caacacc 27

<210> 613
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 613
ggatatgtgc gtccactata gagtcataaa tg 32

<210> 614
<211> 867
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (771)
<223> n = a, c, g or t/u

<400> 614
gcagtttgag aggaaagttt caacaccccg tatcttggaa acgaagcatt tgcggacata 60
cgtttataga gcaaactgtc attatttaac accctgtata ggcccacaca aaagattatt 120
acctccttca tgagactttt ttttttattg agttattcat gtcgagttgg acgtttctga 180
tatgaaaaat tttcaggagg gagacggttc gtaaatatgg gggtttataa actttggtgc 240
atctatggtg gttcctgttt atctgaacca tctcagatag ttaaggggtg gttacccccct 300
actatagggg ttgatgaagt aacactactc acagtatatt catttattta taagttgaag 360
taactacggt aaagagttgg tggctaaata tttatccgct gtgatgttta cccgctggga 420
tctcaaatac ccatgattaa tctttacgca atgaatttag aacgtcgaat gtggaatccc 480
ctgtttatgt tttggtatat ataaaaagtg aaagtgtttg tattataaat gctgaatcaa 540
cttgattata aataaagaat aatatttgct actacagctg accttgcatt atcgataact 600
gatacacttg tatagtaata taggtcaatc atgtttatga taaacaacgc gtattcgttt 660
accaaggaca tttaaatatt aaaagaatta gtcttgccct taataagatg gttactaaga 720

gatgctgtga atcccaatac acatccgaca actggagtaa gtatccttga naatttgtcg 780
gaaaatatta ccagtgaatt gtatttttat caaaatatac tgcaaaaaaa cccatcattt 840
atgactctat agtggacgca catatcc 867

<210> 615
<211> 967
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (784) (895)
<223> n = a, c, g or t/u

<400> 615
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gacgtatagc aggttttaca aagcttcggt aattggacac atatttgaca ttaatcagtc 180
aactgtcata caacatactc atttttattt caaggaaata atcttagaat aagtatttt 240
tgcgtaaaca tgttatatga cgtataatag ataatatgat gtatattcca tagacatata 300
tattattatc atagactgag cctaccctcc gcgcttcctg gcgacaagat ctcttggaca 360
ggtttgcggt atctctttct agcacattgt atcgagaaac taacatgaaa ctgagtgggg 420
gtataggcac ggaaagggag gactactgtc gcagctttac tatgcataag agtgaaacag 480
cactgagcca caaaaaaaaa gatggtgtcg tcacttcgcg caacatgaca ctctatgata 540
atgtgtgtgt ctatggtata tcccagtgga catcctaagt cttgacgtca caaaattggg 600
agtagcttat atttggctcc aggcaattct gtttgtgatg ttaagcactc atagggaatt 660
tttaatttat tgtttatgtg gtttgtgtga caaaataaga cttttcattt gggtatttag 720
ttggagagac gtgccggtta agagattttt attcgttttt gcccaggtga gttaatttaa 780
ttanatgatt agaatgtaaa cagttttgag gttatgttta tttttcatca ctaaggaata 840
aaaaacacct gagcnaaaac gaataaaaag tctcctagtt gacacgtttc tttgncggaa 900
tacctaaatg gagtcttatt ttgccgcaca aagcacataa atgaaaaatt ccttatgacc 960
atttgac 967

<210> 616
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 616
gcaagagttg ttcatccact gcatg 25

<210> 617
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 617
gtgcggcaaa ataagactcc atttaggt 28

<210> 618
<211> 846
<212> DNA
<213> Diabrotica virgifera

<400> 618
caagagttgt tcatccactg catggacttt tgggtaaaag acgtatagca ggttttacaa 60
agcttcggta attggacaca tatttgacat tgatcagtca actgttatac aacatactca 120
tttttatttc aaggaaataa tcttagaata agtatttttt gcgtaaacat gttatatgac 180
gtataataga taatatgatg tatattccat agacatgtat attattatca tagactgagc 240
ctaccctccg cgcttcctgg cgacaagatc tcttggacag gtttgcggta tctctttcta 300
gcacattgta tcgagaaact aacatgaaac tgagtggggg tataggcacg gaaagggagg 360
actactgtcg cagctttact atgcataaga gtgaaacagc actgagccac aaaaaaaaag 420
atggtgtcgt cacttcgcgc aacatgacac tctatgataa tgtatgtgtc tatggtatat 480
cccagtggac atcctgagtc ttgacgtcac aaagttggga gtagcttata tttggctcca 540

aacaattctg tttgtagtgt taaacactca tagggaattt ttaatttatt gtttatgtgg 600
tttgtgtgac aaggtaagac ttttcatttg ggtatttagt tggagagacg tgccagttgg 660
gagattttta ttcgtttttg cccaggtgag ttaatttaat taaatgatta gaatgtaaac 720
agttttgagg ttatgtttat tttccatcac taaggaataa aaaccacctg agcaggaacg 780
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tgccgc 846

<210> 619
<211> 967
<212> DNA
<213> Diabrotica virgifera

<400> 619
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tcgagttatt aagccttgaa aatggccatt ttcgcgtttt tcaaatttga aattgcatgt 180
aactcggcaa cagtcaattt tatagaaaaa tcacaagata ccttttttgc tcagcttgat 240
ccagaaaatc taaaacaagt ttgtccgaag tgaaaaaatt gatttttga attcgtttaa 300
aaaaatgtgt agaacaactt tccgaccgcg gtactgcctg gcaccttgtg aatttgttat 360
aaggacctgt ttttgagtaa gtttgtgcaa aaaaattaat cggaataatt tacctaacgg 420
gacaagcata cagcgtggac tatttgcatt atgagccaaa cgtaaatggt ttgtaaaata 480
cactaaacac aaaaaaaatt agcagccatc gccaaaaaaa gttatacgta cctattaaaa 540
aacaaaaaaa atgaggttat aatatgtaca ctcgaccttc gggtccgtaa aaatggatgt 600
tctgtaaaag cctcagctgt gcgtgtgaat tttttgtaat ttataattta ataattacta 660
actgttctaa atacgaaatg agccacagtt tggctaaaaa atgatttttt ctacaaccgt 720
gttaaaaatg caatttttag cactccatac gtgcgttaaa aatgctactt taagacacta 780
gtgctttaaa atatttttaa ggcactgcag ttcgtattga ccgtatagac aattttgatg 840
taatgtcaaa aaaatataaa aatggaatgt cagtcacgtt caaagtaaaa gttttgtaga 900
tattgtcctg taatttacgt tgtaaacaaa tattgtatga gatgttaaag gtacattttt 960
aggcact 967

<210> 620
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 620
gctcagcttg atccagaaaa tctaaaacaa g 31

<210> 621
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 621
ctgtggctca tttcgtattt agaacagtta gt 32

<210> 622
<211> 458
<212> DNA
<213> Diabrotica virgifera

<400> 622
gctcagcttg atccagaaaa tctaaaacaa gtttgtccga agtgaaaaaa ttgatttttt 60
gaattcgttt aagaaaatgg ttaaaacaac tttccgaccg cggtactgaa tggcaccttg 120
tgaatttgtt ataaggacct gtttttgagt aagtttgtgc aaaaaaatta atcggacaag 180
cggattaacg ggacaagcat acagcgtgga ctatttgcat tatgagccaa acgtagatgg 240
tttgtaaaat acactaaaca caaaaaaatt agcagccatc gccaaaaaag ttatacgtac 300
ctattaaaaa acaaaaaaaa atgaggttat aatatgtaca ctcgaccctc gggtccacaa 360
aaatagatgt tctgtaaaag cctcagctgt gcgtgtgaat tttttgtaat ttataattta 420
ataattacta actgttctaa atacgaaatg agccacag 458

<210> 623

<211> 1376
<212> DNA
<213> Diabrotica virgifera

<400> 623
cggacgcgtg ggttcaagca actgttagcc ttgatcctgg ggataacagt catggcgttc 60
gtcaccaacg ctttcgagtg atggcgacca caaaacatta tcacaaatgt acttgaagca 120
atagtttatt tgaaataatc agaaatttcc ataattagtg gttagtatta ttagttgcgg 180
ttttattaat aagtgtcaac tgtcatttgt caaaatgtca actgtcattt gtcaaaatgt 240
catctgttat ttgtcaaaat gacagatgac aataactcaa ctgtcagttg tcaaaaagat 300
ggcgtaaaaa tatataaatt agttctgtag agtataaaag tcctttatgt aattcttact 360
ttcaaataaa ctcttgcact gacaaattaa atgtaatttt gacagtttct gaaaggtttg 420
actaaatgta aatgtcagaa ttatatatct gttgattttt atacaggcac atcaaacata 480
ttaacataca caattgaaga tcgttgtaac tgatatctgc agtcaacaat ttggaaattg 540
cttcacagct aactcaaatt agaagttatg tttcacaact gcataaaata attgttaaca 600
ggatcaatat tttattgttt atattagttt ttgtaaagat atgtttcact agtacttaaa 660
tatcgatcag agacacaaac tgtgttagaa aaggtccatg gaatgtatca atatgatttt 720
atttttata tcaccttcat ttgtgcattc cggtctcaat aattaatgta aaacgtcaaa 780
ttttcgtttc aggcgacaat tactgatact gcctacaaat agtggtataa ggcttttcat 840
cgattgtcat ttgtttcgag cttcttctgt catctagcag gcaagaccgc ctaaatgcgg 900
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gtatactact aagtgtactt gtaaatattt ggttaacgct aattgattgg ctctattaag 1020
tcaaaagata tcaagctttg aatttttcca ttgaaaataa aattggcctg ctagagggat 1080
aatctgtgta taatattaat atacacggat tataccacat attatgacag aagctcgaaa 1140
taaatgactg aatgaaaagc cctatggagc gagacttgtc agaacatgtt ttggtttcac 1200
ctaaccttac ataacctaca atttatctga atagctgtct attgagatat attttgtctg 1260
ccactgtctt ttttatgaat aacaattact gttttaccta aaaacaatta aaaaacatgt 1320
gataatgcgc gcgtacgcat ttaatatttt attaatatgc atacttcctc gtgccg 1376

<210> 624
<211> 26
<212> DNA
<213> Diabrotica virgifera

<400> 624
ggataacagt catggcgttc gtcacc 26

<210> 625
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 625
catgttctga caagtctcgc tccatagg 28

<210> 626
<211> 1148
<212> DNA
<213> Diabrotica virgifera

<400> 626
ggataacagt catggcgttc gtcaccaacg ctttcgagtg atggcgacca caaaacatta 60
tcacaaatgt acttgaagca atagtttatt tgaaataatc agaaatttcc ataattagtg 120
gttagtatta ttagttgcgg ttttattaat aagtgtcaac tgtcatttgt caaaatgtca 180
actgtcattt gtcaaaatgt catctgttat ttgtcaaaat gacagatgac aataactcaa 240
ctgtcagttg tcaaaaagat ggcgtaaaga tatataaatt agttctgtag agtataaaag 300
tcctttatgt aattcttact ttcaaataaa ctcttgcact gacaaattaa atgtaatttt 360
gacagtttct gaaaggtttg actaaatgta aatgtcagaa ttatatatct gttgattttt 420
atacaggcac atcaaacata ttaacataca caattgaaga tcgttgtaac tgatatctgc 480
agtcaacaat ttggaaattg cttcacagct aactcaaatt agaagttatg tttcacaact 540
gcataaaata attgttaaca ggatcaatat tttattgttt atattagttt ttgtaaagat 600
atgtttcact agtacttaaa tatcgatcag agacacaaac tgtgttagaa aaggtccatg 660
gaatgtatca atatgatttt atttttata tcaccttcat ttgtgcattc cggtctcaat 720
aattaatgta aaacgtaaaa ttttcgtttc aggcgacaat tactgatact gcctacaaat 780
agtggtataa ggcttttcat cgattgtcat ttgtttcgag cttcttctgt catctagcag 840

gcaagaccgc ctaaatgcgg tataatttct agctatttca gctatgttta ggtatgcagc 900
atgcaaacct gcttttggtc gtatactact aagtgtactt gtaaatattt ggttaacgct 960
aattgattgg ctctattaag tcaaaagata tcaagctttg aatttttcca ttgaaaataa 1020
aattggcctg ctagagggat aatctgtgta taatattaat atacacggat tataccacat 1080
attatgacag aagctcgaaa taaatgactg aatgaaaagc cctatggagc gagacttgtc 1140
agaacatg 1148

<210> 627
<211> 1142
<212> DNA
<213> Diabrotica virgifera

<400> 627
tttattgtat taatgtataa tgtgcagtat cattcagacc tagtatttaa agaatttatt 60
ttaagttttt attcatacac acatttttct atgattatac tagttaatgc tgttaagtca 120
tagataagat aggtagatgt taagtcatgt ttgttctcat tttttgtaac ttcggcttgt 180
aatatttgtg gaagttaaaa agtagattgt ttcattttct attagtacaa aaatgttgaa 240
caacaattca atattttaca aaagtcaagt ggttttaatg tatctttggt ttatttaaca 300
aaaaaattta attggataga aattgcatat attctgaaaa ccatgctata actgccagat 360
ttgtgaacaa acaatagcaa gttcctaaga agaacttccg tagcagctat acaaatttaa 420
acctctgttt aaaaaatctg aattaagagt atatgatata ggcacataaa agtgatgtcg 480
aaattaggag tacaaaatgt taatttttaa taattaattt ggcatatgag actaactgaa 540
ggcaaacaaa acttaataac atcataaaat cattgcaata aaaaactgaa aacttttgt 600
cttccatgtt tttatgtggc gcagaaggta caaaaacgta aatctgtaat ttaaaacaat 660
tactgttttt ttatacgtag ttctggcaaa gttttacatt tgcattttag aaaaatgtgt 720
ttcatgttgt gtagtaaagc caaatttagt taactgtaaa aataaattac aaatttattt 780
tggttgtgaa ttggcccgaa aatttttttt atatctacat ttattcagtt ttgccaaact 840
actaacagat acgtattttc gaatatcctt ttgattttaa caaagagcat tgattatttt 900
aagcttctag atgtgaaata aacggtcaac cacaaaaaaa aaaaaaaagg gcggccgccc 960
ttttttttt ttttaacat aatagtgaaa tctttatttt aatacatatt atagtgacac 1020
attataaagc caatacatta acggcttata acgcatttgt cgttactcga tccatctact 1080
tgtgacagtt ggaagctgac gaagatattc gcagcttgtc cttcaagtgg gtcaatatca 1140
tt 1142

<210> 628
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 628
ccatgctata actgccagat ttgtgaac 28

<210> 629
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 629
gtggttgacc gtttatttca catctagaag c 31

<210> 630
<211> 593
<212> DNA
<213> Diabrotica virgifera

<400> 630
ccatgctata actgccagat ttgtgaacaa acaatagcaa gttcctaaga agaacttccg 60
tagcagctat acaaatttaa acctctgttt aaaaaatctg aattaagagt atatgatata 120
ggcacataaa agtgatgtcg aaattaggag tacaaaatgt taatttttaa taattaattt 180
ggcatatgag actaactgaa ggcaaacaaa acttaataac atcataaaat cattgcaata 240
aaaaactgaa aacttttttgt cttccatgtt tttatgtggc gcagaaggta caaaaacgta 300
aatctgtaat ttaaaacaat tactgttttt ttatacgtag ttctggcaaa gttttacatt 360
tgcattttag aaaaatgtgt ttcatgttgt gtagtaaagc caaatttagt taactgtaaa 420
aataaattac aaatttattt tggttgtgaa ttggcccgaa aatttttttt atatctacat 480

ttattcagtt ttgccaaact actaacagat acgtattttc gaatatcctt ttgattttaa 540
caaagagcat tgattatttt aagcttctag atgtgaaata aacggtcaac cac 593

<210> 631
<211> 1137
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (1128)
<223> n = a, c, g or t/u

<400> 631
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tcaaaaaatt atttcccatt attactattg ataaaattga ctagcttatt atttactatt 120
gaactggtta tatgcattat gtgataatag gctggcatta ataatatctg tccattagaa 180
aaactgttaa gtgctcctgt tagcgatccg atttttagct aggtttaaag tataggtaac 240
tctgtcgcct gattcctcct cggcacatcg gtcctacatc cgacaatatt ttacggagtg 300
tttcataaca taacacggat atattgatta acaaatatta taaatagttt ctgtgttaaa 360
taagagttgt acaacatcta cagttttgca tcgagctgac ctagtttaaa aaaggatcgt 420
taacaagaga tgtaaagacg cagatatact cgactatcgt ccagatattt gtatatacag 480
cgtcttaaga tgtatcattt aacgaaatat acagttttta caagaagaaa agataatata 540
gtatggtaac cttatcatca aattaacatc gcataaaaac cgttcaagaa acacagagat 600
attgaggaaa agaaaagcac aacattaatt taatcaaaaa tatttctgtt ttacaatata 660
tctcactaag aaacatttct gatttataat attttagata tgtttagagg gagttataga 720
ccagggcgca tctgtaaaaa tattagtaca tttggacgtt gagaggtgac tcaaatttct 780
ttgcagaaat tgcacgaaaa caactcaaac aacaataatt gagtcaatca tcccactcaa 840
aaaggtccgg gaacattgcc taattaatca aaatgtcaaa aactgaagga aaatttcgat 900
tttttccttg gtcttttgat tataacttta aaactattca tttctgagaa aagttgtacc 960
gacatagaag ttgcgtaact aaatttcaca cattatagaa ttggtcaaaa attcaaaaaa 1020
tagtcacccc tgttgcaaaa cagcaataat tgcgaaaaaa ccatacaaaa acaagtattc 1080
gcattttacg cttttcaacc atttatgcta cacttaggac ccttttcngg acgcgtg 1137

<210> 632
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 632
gtgctcctgt tagcgatccg atttttag 28

<210> 633
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 633
gcaacttcta tgtcggtaca acttttctca g 31

<210> 634
<211> 781
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (100) (880)
<223> n = a, c, g or t/u

<400> 634
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attcctcctc ggcacatcgg tcctacatcc gacaatattn tacggagtgt ttcataacat 120
aacacggata tattgattaa caaatattat aaatagtttc tgtgttaaat aagagttgta 180

cacaacatct acagttttgc atcgagctga cctagtttaa aaaaggatcg ttaacaagag 240
atgtaaagac gcagatatac tagactatcg tccagatatt tgtatataca gcgtcttaag 300
atgtatcatt taacgaaata tacagttttt acaagaagaa aagataatat agtatggtaa 360
ccttatcatc aaattaacat cgcataaaaa ccgttcaaga aacacagaga tattgaggaa 420
aagaaaagca caacattaat ttaatcaaaa atatttctgt tttacaatat atctcactaa 480
gaaacatttc tgatttataa tattttagat atgtttagag ggagttatag accagggcgc 540
atctgtaaaa atattagtac atttggacgt tgagaggtta ctcaaatttc cttgcagaaa 600
ttgcccgaaa acaactcaaa caacaatatt tgagttatcc tccctttcaa aaaggtccgg 660
aacattgttc aaacaatcaa aatgtcaaaa ataaaggaaa aactcgattt tttcttcgtc 720
tcttgactac aacttcaaaa gtattcattt ctgagaaaag ttgtaccgac atagaagttg 780
c 781

<210> 635
<211> 1142
<212> DNA
<213> Diabrotica virgifera

<400> 635
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ttaagttttt attcatacac acattttttt atgattatac tagttaatgc tgttaagtca 120
tagataagat aggtagatgt taagtcatgt ttgttctcat tttttgtaac ttcggcttgt 180
aatatttgtg gaagttaaaa agtagattgt ttcattttct attagtacaa aaatgttgaa 240
caacaattca atattttaca aaagtcaagt ggttttaatg tatctttggt ttatttaaca 300
aaaaaattta attggataga aattgcatat attctgaaaa ccatgctata actgccagat 360
ttgtgaacaa acaatagcaa gttcctaaga agaacttccg tagcagctat acaaatttaa 420
acctctgttt aaaaaatctg aattaagagt atatgatata ggcacataaa agtgatgtcg 480
aaattaggag tacaaaatgt taatttttaa taattaattt ggcatatgag actaactgaa 540
ggcaaacaaa acttaataac atcataaaat cattgcaata aaaaactgaa aacttttgt 600
cttccatgtt tttatgtggc gcagaaggta caaaaacgta aatctgtaat ttaaaacaat 660
tactgttttt ttatacgtag ttctggcaaa gttttacatt tgcattttag aaaaatgtgt 720
ttcatgttgt gtagtaaagc caaatttagt taactgtaaa aataaattac aaatttattt 780
tggttgtgaa ttggcccgaa aatttttttt atatctacat ttattcagtt ttgccaaact 840
actaacagat acgtattttc gaatatcctt ttgattttaa caaagagcat tgattatttt 900
aagcttctag atgtgaaata aacggtcaac cacaaaaaaa aaaaaaaagg gcggccgccc 960
ttttttttt ttttaacat aatagtgaaa tctttatttt aatacatatt atagtgacac 1020
attataaagc caatacatta acggcttata acgcatttgt cgttactcga tccatctact 1080
tgtgacagtt ggaagctgac gaagatattc gcagcttgtc cttcaagtgg gtcaatatca 1140
tt 1142

<210> 636
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 636
ggaacgtaca caaaagtttg ggagggt 27

<210> 637
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 637
gaacagcaac cagcctgata cgacg 25

<210> 638
<211> 582
<212> DNA
<213> Diabrotica virgifera

<400> 638
ggaacgtaca caaaagtttg ggagggttta agggaacaaa acccccttaa aatttttatg 60
gggtggacaa atttcactat aattttgttt aaagatggtt ctgccatgag aatgatacat 120
gtccattttc aataaaaagt atctaatagt tttcgatata ttgaaaaaga tcgattttca 180

ttttgtaact tcaaggggct gtaactttta tgatgagcac atttgtacca aggtaagtta 240
gattcaatca aactattttt gaccccagaa tgtgtggtat aatttgtgac caatcttttc 300
gggacaccct gtatacaata tatgttccct atgtccagct gaacgattta cgtaggttag 360
atcgactaat atagtaaacg acaattataa tacgttttgt cgacaattat aatacgtttt 420
gtcgtcatat tttaaaagac tcacatttta atgactgacg ttaaatatac acacttctcc 480
atcaattcga taccatgatg ttgaaatacg atatcaaaat gtaaaagagg cacaaactga 540
atgcagacgt tcagtgacgt cgtatcaggc tggttgctgt tc 582

<210> 639
<211> 1039
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (748) (896)
<223> n = a, c, g or t/u

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atatttgaat aataataatt gatgtaaggc gtacaattaa taaaaagtta tttattgttt 120
atatattatt tatggaaaat ccaagtattt caagtcatta aagttcaaat aaaagtatta 180
ttttataaga gtttgttccg ataaccgtaa ataggtacga gtttagctat aaagtaaagt 240
gaccgtggtg gcataaaatg tagtaaatgc taatgcttca agcacgtact acatttttga 300
agatttcact acacttaaaa agcatatttg cttttctccg tagtatttgc tactatttac 360
cagcctacat agaagaatgt actacgcttt ttaaatatgt gcttgtttag tactatttgg 420
cttcagttta agtgaagttg gtgggtggac gttttcggcg taggtatttt tttgttacaa 480
tatggcagca tttatgaatg tatgtcatag aaaaatttac aaactacgaa gaagattctt 540
aatttttggg gtcattcttt tatcaaataa aatttaataa ttgtgaagaa gattaacaaa 600
taacaattgt ttatttttat ccttgcgtaa ctctttggtc gcttcggatc tgagtcactc 660
atttttactc atgtacaatt ctaatattt ggtacgtaaa atgtgaattc acaaatcaaa 720
agcacatgga aaactaattc catcacgnat ggtgtaatgc agacaccgct ggcgctacgc 780
tttgtagtag atacttctgg tcagtagtag gtactttctg tgtgtactaa gntctcaaca 840
aaagcaccta ctttttatgt aaaagaaaat gctacaaagt aatgactatt tactgnagca 900
ataacatcta ctacgtttat gcattccgcc catttcttga gtgaattatt aaatgtgact 960
tctatttat aaaaaaaatt ttagggtttt aaattaaagg ttccctttta ccgaaagttt 1020
taacaaattt tttttttc 1039

<210> 640
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 640
cgtccgtgat aacaaaatca atcaaagag 29

<210> 641
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 641
ctactgacca gaagtatcta ctacaaagcg tagc 34

<210> 642
<211> 798
<212> DNA
<213> Diabrotica virgifera

<400> 642
cgtccgtgat aacaaaatca atcaaagagt tgtttattaa atagtattga tagtgtattt 60
gaaaaataat aatttattta aggcgtacaa ttaataaaaa gttatttatt gtttatatat 120
tatttatgga aaatccaagt atttcaagtc attaaaattc aaataaaagt attattttat 180
aagagtttgt tccgataacc gtaaataggt atgagtttag ttataaagta aagtgcccat 240

ggtgtcataa aatgtagtaa atgctaatgc ttcaagtacg tactacattt ttgaagattt 300
cactgcactt aaaaagcatt tgcctttctc cgcagtattt gctactattt accagcctac 360
atagaagaat gtactacgct tttgaagtat atgcttgttt agtagtattt tgcttcagtt 420
taagtgaagt tggtgggtgg tcgtcttcgg cgtaggtatt tttttgttac aatatggcag 480
catttatgaa tgtgtgtcat agaaaaattt acaaactaag aagaagattc ttaatttttg 540
gggtcattct tttatcaaat aaaatttaat aattgttaag aagattaaca aataacaata 600
attgttcatt tttatcctcg cgtaactctt tgtcgcttcg gatctgagtc actcatttttt 660
actcatgtac aattctaata atttggtacg taaaaatgtg aatttacaaa tcacaagcac 720
atggaaaact aattccatca cgattggtgt aatgcagaca cggctggcac tacgctttgt 780
agtagatact tctggtca 798

<210> 643
<211> 1035
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (790) (857)
<223> n = a, c, g or t/u

<400> 643
ctaataactg acaaaataac gcaaaagatg gaaaacatat aagttgtgag ataaggggaa 60
aagagactgg tagagatgct aaatttagtg ataaaagcct atgaacttgc attctacttg 120
gtgtttccca cctttagaca tatcagagct atatgtcaac taaaactgtc actgtcacag 180
tgtcagttaa caaacaagtc caatatgtct aaaggtggga aacagcagat agaatgtgga 240
tttataggtt ttatcactgg atttcgcacc tctactagtt taattccttt ttatctcaca 300
acttaatatg ttattagcat gctcatcact gtatactgac taacttttt tgtttttaa 360
cctcaccaaa ccttttttat tcgtatctgt atatttatcg aagttcaaat gtatttttt 420
tattcttcca aatgagccag aaacttgaca aaaaaacaat tttctgaatc ccttcgaata 480
aaattctttt taagtttatc tcatcggaat aaaaaatacc ttttctctct tggtaatttt 540
tcgaaaaatg cttcctttc acgttgtttg ctatttttg ttaaagaaat gccttaatta 600
gcgatttttg ggatttttc ccaaaaacta ctcaatgaat tataattcta caaaaggctt 660
tataatcctt aaaccctcaa gtataagtaa gaatattttg acaaggacac atggtttata 720
tctcgctgaa aacatggagt caaaaattca tctaaaatag gcccttcaga cagtctaccg 780
ctgccatgtn gcctaagtgn tggacagtgg gttgcagaaa aacgggcaca tgtcacataa 840
atatttgtat aaatttnaaa ctatcgtttg agcaagatag aagccactta tccttgtcaa 900
atattaataa taaggtttta agatataaag ttttatata ctacatttca tttagttgtt 960
tcttagaaaa aaatcgcaat aactcaaaat tcgtcccctga aaatttttac taaatgattc 1020
cgaaaaatgt ttttt 1035

<210> 644
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 644
gttgtgagat aaggggaaaa gagactggta g 31

<210> 645
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 645
gacaaggata agtggcttct atcttgctca 30

<210> 646
<211> 853
<212> DNA
<213> Diabrotica virgifera

<400> 646
gttgtgagat aaggggaaaa gagactggta gggatgctaa atttagtgat aaaaacctat 60

aaacttgcat tctacttaat gtttcccacc tttagacata tcagagctat atgtcaacta 120
aaactgtcac tgtcacagtg tcagttaaca aacaagtcca atatgtctaa aggtgggaaa 180
caacagatag aatgtgaatt tataggtttt atcactaaat ttcgcacctc tactagttta 240
attccttttt atctcacaac ttaatatgtt attagcatgc tcatcactgt atactgacta 300
attttttttg ttttttagcc tcaccaaact ttttttattc gtatctgtat atttatcgaa 360
gttcaaatgt attttttta ttcttccaag tgagccagaa acttgacaaa aaaacaattt 420
tctgaatccc ttcgaataaa attcttttta agtttatctc atcggaataa ataatacctt 480
ttctctcttg gtaatttttc gaaaaatgct tcctttcac gttgtttgct attttttgtt 540
aaagaaatgc cttaattagc gatttttggg attttttccc aaaaactact caatgaattg 600
taattctaca aaaagcttta taatccttaa accctcaagt ataagtaaga atattttgac 660
agggacacat ggtttatatc tcgctgaaaa catggagtca aaaattcatc taaaataggc 720
ccttcagaca gtctaccgct gccatgtgcc taagtgtgga cagtggttgc agaaaaacgg 780
gcacatgtca cataaatatt tgtataaatt taaaactatc gtttgagcaa gatagaagcc 840
acttatcctt gtc 853

<210> 647
<211> 1017
<212> DNA
<213> Diabrotica virgifera

<400> 647
cgaactattt ttggtcccag aatgtgtgat ttagtttgtg acctgtattt ttgttacacc 60
ctgtatatga gatacaaatg aatcgcgatg attttttcta actagcgatt tcggtatatg 120
aatctgaatc ctgacagatg taaacataga ctaaataaac tacactcaga gaaaaaaatg 180
atgtgaaata aaattattcg gaggtagata agtgaaaaaa tacgaacgaa cagtaggaaa 240
ttaaaggcct tggggaaatg tggataaggt ctgaaatgac aggctgcgtt ctgttgatag 300
gtttgctctt atttaaaaaa tgtgaaaaat tcattattac atcagcaatt tatccctttc 360
ttgagtttat ggaacttatc agtttttcta aattaagcgt ttcaaatcaa attttttagg 420
aagtgttttt aaagggacga ttattctttа gtttttaaaa tgcgttttat ccaatgttgc 480
ctacttctta aatgtatata acaataaaag caataccatt ttggatgtta cataggttgt 540
taataaacag atgaaaaggt gtgtttgtct aagaacaggt atatatttgc aatgatatag 600
agattactgt agttaaagaa actatgcaaa agattagagg tgatagtgga tacagttgat 660
agctaataaa tcaataattc tatacattta tcttcgatta aataattatg ttattgtggt 720
tttcatggaa actattaaac tattttaatt aatgacgaag gtagaatacc ttaaaacttc 780
tccatggctc tgtcagaaga tatgaagtgt tcatttatta ataagtttcc tagttggaag 840
ggatttctaa ctttgtaatt ataaaaaatt ttttaaaaaa tttcttctta tttatctgga 900
gggttttttg aatccaccgc tggtaccatt atttttaac aaataaatgg taaaaacaaa 960
aattttatgg gaaaattttc ttacgggggg ggctttcaca ccaggaaatt tgttttt 1017

<210> 648
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 648
ggtcccagaa tgtgtgattt agtttgtg 28

<210> 649
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 649
gaacacttca tatcttctga cagagccatg 30

<210> 650
<211> 806
<212> DNA
<213> Diabrotica virgifera

<400> 650
gtcccagaat gtgtgattta gtttgtgacc tgtatttttg ttacaccctg tatatgagat 60
acaaatgaat cgcgatgatt ttttctaact agcgatttcg gtatatgaat ctgaatcctg 120
acatatgtaa acatagacta aataaactac actcagagaa aaaaatgatg tgaaataaaa 180

ttattcggag gtagataagt gaaaaaatac gaacgaacag taggaaatta aaggccttgg 240
ggaaatgtgg ataaggtctg aaatgacagg ctgcgctctg ttgataggtt tgctcttatt 300
taaaaaatgt gaaaaattca ttattacatc agcaatttat ctctgggccc tttcttgagt 360
ttatggaact tatcagtttt tctaaattaa gcgtttcaaa tcaaattttt taggaagtgt 420
ttttaaaggg acgattattc tttagttttt aaaatgcgtt ttatccaatg ttgcctactt 480
cttaaatgta tataacaata aaagcaatac cattttggat gttacatagg ttgttaataa 540
acagatgaaa aggcgtgttt gtctaagaac aggtatatat ttgcaatgat atagagatta 600
ctgtagttaa agaaactatg caaaagatta gaggtgatag tggatacagt tgatagctaa 660
taaatcaata attctataca tttatcttcg attaaataat tatgttattg tggtttcaat 720
ggaaactatt aaactatttt aattaatgac gaaggtagaa taccttaaaa cttctccatg 780
gctctgtcag aagatatgaa gtgttc 806

<210> 651
<211> 1013
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (657)
<223> n = a, c, g or t/u

<400> 651
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gaacaatttc agttcctaac atttttgtca caaagttaaa aatggcggag atattgaaca 120
aaaacaactg ctagacgacc aaaaaaatga aatagataaa aattatataa aatttaattg 180
tctccatttt tgtataggta cattttttgtc gtaaaactaa taataaacgc gataactcaa 240
taattctgct gttacttttt tcccccatta ctcggaaaat atcgaccgca caaaaaattt 300
gtaataaaag acattataga aaatcatatt ttcaacaatt tcagtcgtcg cacttttttgt 360
cgaaaagttg aaaatgacgg agatattgag caaaaacggc tctcctttaa attcaacatg 420
gcggctaacg taacggcgga attcactcgc gatattaaat ttacactact attgacaccc 480
gtaaagatta gaaaaattaa attttggaca tctcggcatg caaggtcaaa gctaaagtcc 540
tgtattttgg ctatctgtag gaaaacatca aaataactta ttataatgct gtttaatgac 600
atttttgagc cccttatgtt gaaacattat ttttttaat tgatacttttc tgataanata 660
tacaaattta ttaaaataaa caccaaatca ctgtgaaatt gctacaaatg atatttaaaa 720
catttttat gttgcgcaga agctatgcac caagtttttt ggatccaaat tgagtggttt 780
gaaatgaatc gcccataaat atttgagttt attgtcattg gaaactataa gcaagtatta 840
caatacgctt aatttttaat tttaaatagg gatttggact gactatgaat ctgatcaata 900
ttttttaaat aattgtaaaa tttgatgagt cattatccct gtgtgggtct gattgttttt 960
aatagaaact ttttttaaac agtgtaatat ttctagtaaa ataattttca acc 1013

<210> 652
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 652
gatattgaac aaaaacaact gctagacgac c 31

<210> 653
<211> 29
<212> DNA
<213> Diabrotica virgifera

<400> 653
gatcagattc atagtcagtc caaatccct 29

<210> 654
<211> 789
<212> DNA
<213> Diabrotica virgifera

<400> 654
gatattgaac aaaaacaact gctagacgac caaaaaaatg aaatagataa aaattatata 60

aaatttaatt gtctccattt ttgtataggt acatttttgt cgtaaaacta ataataaacg 120
cgataactca ataattctgc tgttactttt ttcccccatt actcggaaaa tatcgaccgc 180
acaaaaaatt tgtaataaaa gacattatag aaaatcatat tttcaacaat ttcagtcgtc 240
gcacttttg tcgaaaagtt gaaaatgacg gagatattga gcaaaaacgg ctctccttta 300
aattcaacat ggcggctaac gtaacggcgg aattcactcg cgatattaaa tttacactac 360
tattgacacc cgtaaagatt agaaaaatta aattttggac atctcggcat gcaaggtcaa 420
agctaaagtc ctgtattttg gctatctgta ggaaaacatc aaaataactt attataatgc 480
tgtttaatga catttttgag ccccttatgt tgaaacatta ttttttttaa ttgatacttt 540
ctgataaaat atacaaattt attaaaataa acaccaaatc actgtgaaat tgctacaaat 600
gatatttaaa acatttttta tgttgcgcag aagctatgca ccaagttttt tggatccaaa 660
attgagtggt ttgaaatgaa atcgcccata aatatttgag tttattgtca ttggaaacta 720
taagcaagta ttacaatacg cttaattttt aattttaaat agggatttgg actgactatg 780
aatctgatc 789

<210> 655
<211> 1012
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (929) (949)
<223> n = a, c, g or t/u

<400> 655
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tttcaacagt gcaatgtaac acacaagtcg cctgctgaat cgcaaaataa attatgttat 120
ctaatgtatt gtttgaaaga ccactaagta ccgattcggc attccagatt gtaaggaaaa 180
atgcaataag tgcaataatg agttttacca tgaaaccgaa attcacaatc ttggaaggaa 240
aaattcacta agtgcaataa tacgttttaa tgagttttgc cctgaaacca aaattcacaa 300
taatgcactt agtgaattgt accataaatt atctcagcaa ttagaagggt tagagtccca 360
ggtgacttct ccagagctgg gcagtaccgt atcgagttca aattaataaa aatgtcaata 420
tctcaaaaaa gtgcacttag ttagttttac ctctaatagg acgatttgtc ttgttttatc 480
cattatgata cattcacttc attatgtaca agcttatcga tatttgggta agtgtcgact 540
aggcagagtc agttcaatta ctatttcttc cttgagtgtt atgcttccat catcagccaa 600
gttaatgttg tataagtatc atactccata tcatagacaa atattcttca gtcacaaaat 660
atggcttagt aatagaagaa gagaagatag aaggactgga tggcagagaa cttgagaaag 720
tgaaatacac actacaaaaa ctttcaatgc cagtcttttg agatacatat ttggtcatta 780
ggtgatattc agattttgcg atattacata ttgtaggact ggtatgggag gagattctac 840
aggcaaaaga ccactcggac gtcccagaat gtgatggaga gatacatcca agcagatctc 900
cgaaaaatga acatcccatt tgaccctang ntgatggaag accaacaant tggaagaaag 960
tgtacagtca gccaggaccc accccagggt gtagcgctac gtgatgatga tg 1012

<210> 656
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 656
tcaacagtgc aatgtaacac acaagtcg 28

<210> 657
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 657
tgtatctctc catcacattc tgggacg 27

<210> 658
<211> 825
<212> DNA
<213> Diabrotica virgifera

<400> 658
tcaacagtgc aatgtaacac acaagtcgcc ttctgaatcg caaaataaat tatgttatcc 60
aatgtattgt ttgaaagacc actaagtacc gattcggcat tccagattgt aaggaaaaat 120
gcaataagtg caataatgag ttttaccatg aaaccgaaat tcacaatctt ggaaggaaaa 180
attcactaag tgcaataata cgttttaatg agttttgccc tgaaaccaaa attcacaata 240
atgcacttag tgaattgtac cataaattat ctcagcaatt agaagggtta gagtcccagg 300
tgacttctcc agagctgggc agtaccgtat cgagttcaaa ttaataaaaa tgtcaatatc 360
tcaaaaaagt gcacttagtt agttttacct ctaataggac gatttgtctt gttttatcca 420
ttatgataca ttcacttcat tatgtacaag cttatcgata tttgggtaag tgtcgactag 480
gcagagtcag ttcaattact atttcttcct tgagtgttat gcttccatca tcagccaagt 540
taatgttgta taagtatcat actccatatc atagacaaat attcttcagt cacaaaatat 600
ggctcagtaa tagaagaaga gaagatagaa ggactggatg gcagagaact tgagaaagtg 660
aaatacacac tacaaaaact ttcaatgcca gtcttttgag atacatattt ggtcattagg 720
tgatattcag attttgcgat attacatatt gtaggactgg tatgggagga gattcctaca 780
ggcaaaagac cactcggacg tcccagaatg tgatggagag ataca 825

<210> 659
<211> 990
<212> DNA
<213> Diabrotica virgifera

<400> 659
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tgatctgtta aaatctagac gtcacacgaa gaactggaat tttccaagag tatcgaacaa 120
caaaatatcc aaatgtaacc tcaaaatagt atcattcgct tatacaaaac aatgctataa 180
tatgatcctt gctacataaa ctcactaatc acagttaagg ggggaggggt atggtttgac 240
atcagcattt cgagcacatt tttgtgaatt ttttgaatct atattagaat tatttttaaa 300
ttaaataaat agattcagta gagataggcg ttacctcacg aaatatctaa agaaagtctg 360
caaaatttca ggtggatcgg taaaatagtt ttggagttac aatatccacc acctttgaaa 420
aaagcagttt tgagaaaaat gcgttcaaag ttttgaaaac tttattttca attttatttt 480
tgtttgtcaa atcgtaaagt aatgcacacc gaaatatgtt tttgcatcgc ggagtaattt 540
acaaaagggg aacagctgtt gaacgtttct aactacgctc aagcacgctg tagcgaagct 600
gccgcaaagc gagtcgaagg tagggatatt tacttgctgt atctctggta attttactcc 660
aatcaatctg aaattttcgg agagtagtct tgaagttaat tttaaaattt caaaccgttt 720
caacctcccc ccttaatcac aaaaccttca actgtgttat tcacttcact tcaaatcgag 780
ttatacctat aacactctac tggaaagatt catactctat gtgttgtcac gttctagtat 840
ttcataaata ttattaaaag cgcttaaaat ttcagctaga tggacgaaat ttacttttt 900
agatccctag tttttcaaat tttacgtgct atatttttc tgcgtacgat atacctcctc 960
gcacattata ggtactggag ggaaaggtta 990

<210> 660
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 660
agagcattcc acagtgatct gttaaaatct ag 32

<210> 661
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 661
cgatttgaag tgaagtgaat aacacagttg a 31

<210> 662
<211> 688
<212> DNA
<213> Diabrotica virgifera

<400> 662
agagcattcc acagtgatct gttaaaatct agatgtcaca cgaagaactg gaattttcca 60
agagtatcga acaacaaaat atccaaatgt aacctcaaaa tagtatcatt cgcttataca 120

gaacaatgct ataatatgat ccttgctaca taaactcact aattacagtt aaggggggaa 180
gggtatggtt tgaaatcaac atttcgagcc cattttgtg aattatttag agttagtgtt 240
acctcacgaa atatctaaag aaagtctgtg caaaatttca ggtgratcgg taaaatagtt 300
ttggagttac aatatcyacc acctttgaaa aaagcagttt tgagaaaaat gckttcaaag 360
ttttgaaaac tttattttca attttatttt tgtytgtyaa atcgtaaagt ratgcacacc 420
gaaatatgtt tttgmatcgc ggagtaattt acaaaagggg aacagctgtt gaacgtttct 480
aactacgctc aagcacgctg tagcgaagct gccgcaawgc gagtcgaagg tagggatatt 540
yacttrctkt atctctggta attttactcc aatcaatctg aaattttcrg agagtagtct 600
traagttaat tttaaaattt caaaccgttt caacctcccc ccttaatcac aaaascttca 660
actgtgttat tcacttcact tcaaatcg 688

<210> 663
<211> 997
<212> DNA
<213> Diabrotica virgifera

<400> 663
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tacctttgtt caatcgcagt tagagtgtaa tccgaacaag tgtgctttat aaaaacgctt 120
tatattccac ttatacagat taaacgaaac aagttagggt atatttcttt atatttaaat 180
taatagaaat ctttcaatat tatttctacg cgtatataat aaaatatgtc tagtggctgt 240
aattccagtg taccctgcta aacgattcta aaaaggaaca cacctacgac ttaaataatc 300
gtgtgacgtc acgtgctata acgcggatga cgtgcaacgg tgtctatatt gtacggactg 360
tattgaatgt gttaagtgtg tttaatattt aatattccga taactaatcg aataaaggat 420
tacagattac ggtaaatatt tattaaacat atatgattac aaacttttgt acatgtttta 480
ttttagaccg tgacaagtgc tctgatctga ttgacgttga caatgtgaca aatacactga 540
cacctaaagg tgtgttcaca ctatacacta aacaaagtgt tcaccaggtt tcgcgtggta 600
aattgaaaac aaaacgtgac tttctgttat gcaagccata tttttgttga attcaacatt 660
ttattggtca ccatttatga ttagttaact agtaatttgt tatgttgaat ttggttatgc 720
gatatccgat aagaacttag cctctccgcc ctagtgcgtc actattgcaa gggatatata 780
ccatcgtata atacattctt gtagaccgcc tatgtcaaaa tctgagccaa atcgggactt 840
gtaatttttt taatttatta agaaaaacat acaatcccca tccacccccg cagggttatt 900
aaaaggagta gtaacgtacc caaaaattcc gttttaataa taataaaaaa gagggaatat 960
aaaaagtaaa atatttttaa aaaaatttaa acccctt 997

<210> 664
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 664
caatcgcagt tagagtgtaa tccgaaca 28

<210> 665
<211> 31
<212> DNA
<213> Diabrotica virgifera

<400> 665
gtacgttact actcctttta ataaccctgc g 31

<210> 666
<211> 848
<212> DNA
<213> Diabrotica virgifera

<400> 666
caatcgcagt tagagtgtaa tccgaacaag tgtgctttat aaaaacgctt tatattccac 60
ttatacaaat taaacgaaac aagttagggt atatttcttt atatttaaat taatagaaat 120
ctttcaatat tatttctacg cgtatataat aaaatatgtc tagtggctgt aattccagtg 180
taccctgcta aacgattcta aaaaggaaca cacctacgac ttaaataatc gtgtgacgtc 240
acgtgctata acgcggatga cgtgcaacgg tgtctatatt gtacggactg tattgaatgt 300
gttaagtgtg tttaatattt aatattccga taactaatcg aataaaggat tacagattac 360
ggtaaatatt tattaaacat atatgattac aaacttttgt acatgtttta ttttagaccg 420

tgacaagtgc tctgatctga ttgacgttga caatgtgaca aatacactga cacctaaagg 480
tgtgttcaca ctatacacta aacaaagtgt tcaccaggtt tcgcgtggta aattgaaaac 540
aaaacgtgac tttctgttat gcaagccata tttttgttga attcaacatt ttattggtca 600
acatttatga ttagttaact agtaatttgt tatgttgaat ttggttatgc gatatccgat 660
aagaacttag cctctccgcc ctagtgcgtc actattgcaa gggaaatata ccatcgtata 720
atacattctt gtagaccgcc tatgtcaaaa tctgagccaa atcggacttg taatttttt 780
aatttattta gaaaaacata caatccacat caaccacgca gggttattaa aaggagtagt 840
aaccgtac 848

<210> 667
<211> 996
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (744)
<223> n = a, c, g or t/u

<400> 667
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agctgatttc aatagccatt agactaatag tatttatgaa tgactgttta attgacttca 120
aacgatttcc ataaacttaa ttacaattta cgccgttatt aatcaaaact catagttggc 180
gcaacgattt gaaattgttc taatttcgag gcgaatcatg taaattttat tgcgtttgag 240
tgacattgta ttttccataa tatgcgtgcg gtgtccttta cattgcaaac tatttgtatt 300
tgagtagtat cgttaaattt cgaggaggtaa aatattgaat agctggtata ataattaaaa 360
gtacaataga ttaacaatac tttctacctg taccggaaac ttaccacacc attcaaatac 420
aaatgactgt aagcttaaaa tttttctgga atattttaat ggcaactata agtagtttcc 480
gcggtgaaac accttgtatg catttaaatg gtttcggctc acgtcagcaa tgaaagatgc 540
tcattctttt cagtataaaa tccaaaacta atttgagact gaatcgagtt gggtgataaa 600
gttgtaatac ggtgcgatat ggagtctggc gtaagatttt ttgtacacgc tgtatcgaca 660
caaattgtgc agtatttaat gtaagatcat ccattcttcc gtatcttcca aaacttttta 720
aatatactac gtttaaaact ctanagttga ttttagtttc cccaaaacag caatactcgc 780
ggtttagttg agttgaaagt gtgatagaca ggttttagtt actatataaa tatttttttt 840
acgatttgta ttagttgtaa tatacaatga aagacggaat tgtttttcgt tgtgtataaa 900
actttgtgtg acttttgaa atgtacatag ttctagtata agtttgttgt gctgagccac 960
gagaagtatc tcggttggaa ttgttccttt ttttt 996

<210> 668
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 668
acagttcctc taattggctt agctcacg 28

<210> 669
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 669
cttctcgtgg ctcagcacaa caaac 25

<210> 670
<211> 949
<212> DNA
<213> Diabrotica virgifera

<400> 670
acagttcctc taattggctt agctcacgct gggttaagct gatttcaata gccattagac 60
taatagtatt tatgaatgac tgtttaattg acttcaaacg atttccataa actttaatta 120
caatttacgc cgttattaat caaaactcat agttggcgca acgatttgaa attgttctaa 180
tttcgaggcg aatcatgtaa attttgttgc atttgggtga cattatattt tccataatat 240

gcgtgcagtg tcctttacat tgcaaactat ttgtatttga gtagtatcgt taaatttcga 300
gaggtaaaaa tattgaatag ctggtataat aattaaaagt acaatagatt aacaatactt 360
tctacctgta ccggaaactt accacaccat tcaaatacaa atgactgtaa taagcttaaa 420
atttttttct ggaatatttt aatggcaact ataagtagtt tccgcggtga aacaccttgt 480
atgcatttaa atggtttcgg ctcacgtcag caatgaaaga tgctcattct tttcagtata 540
aaatccaaaa ctaatttgag actgaatcga gttgggtgat aaagttgtaa tacggtgcga 600
tatggagtct ggcgtaagat tttttgtaca cgctgtatcg acacaaattg tgcagtattt 660
aatgtaagat catccattct tccgtatctt ccaaaacttt ttaaatatac tacgtttaaa 720
actctaaagt tgattttagt ttccccaaaa cagcaatact cgcggtttag ttgagttgaa 780
gttgtgatag acaggtttta gttactatat aaatatttct tttacgattt gtattagttg 840
taatatacaa tgaaagacgg aattgttttc cgttgtgtat aaaacttgtg ttgacttttt 900
gaaatgtaca tagttctagt ataagtttgt tgtgctgagc cacgagaag 949

<210> 671
<211> 991
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (906) (921)
<223> n = a, c, g or t/u

<400> 671
attcgaactt cccagaagat tgaatggata aatgcaggta ctcaaatgtt tgcaacatgt 60
tctatcgatg cttcttgaag acgtagcttt attgtaataa aaaaatttta tgtaagttga 120
aacactatac aaaccttatt tattagatat ttaataaaca caaacattat gctgtttttc 180
tattactgtt atcagtattt tatcaatgta tattatgcct atgatcgatg attcatgata 240
gttgagttac agtaaaatta ttttagcaca gaaggaacgc agcgctgccg gctgtatttg 300
cttttctgtg gacattaatc aaatgcatta aaattaataa attatttttt tgaaaacggt 360
tgacttaaca aaaaaaattt attagacttt tttgctctaa atggtgcact tagcccatac 420
cttggaggaa cgcactattt tccgggacac cctgtatagt ttaaaaatta ttttctgttg 480
ctcaatcggt cattcgttcg tggaagtaga tacatcatgc attaattgaa agatctatcc 540
actggtggtt gtaacttaac gtccgcatca ttctgcgttt aattcaggtt ccaaaactga 600
catttaagtc caatattttt tgttcacgtt tggtacaaat atttttaga agggtatgcg 660
tccaagttct tacgagcttt gctgttgctg cctgctccta cgtcaaatgc tgaatttgca 720
tgaacactga accttacttt ccaaggaata tattaaataa tatcatttat ttaatacttt 780
tcgtagcaag ctaagtaatg ttaacgaaga gaattatgac tttgcttagc aaatacagag 840
tttttatttt atagccttga atttttgtta attttgatat ctatacgtat atattgtttt 900
atattngtac atgtactttg ngtaatagct gccgatattg ccatttttta taaaaataac 960
gagagcagag gtgtataaat aaatttttgg t 991

<210> 672
<211> 28
<212> DNA
<213> Diabrotica virgifera

<400> 672
cttcccagaa gattgaatgg ataaatgc 28

<210> 673
<211> 30
<212> DNA
<213> Diabrotica virgifera

<400> 673
gaaagtaagg ttcagtgttc atgcaaattc 30

<210> 674
<211> 733
<212> DNA
<213> Diabrotica virgifera

<400> 674

cttcccagaa gattgaatgg ataaatgcag gtactcaaat gtttgcaaca tgttctatcg 60
atgcttcttg aagacgtagc tttattgtaa taaaaaaatt ttatgtaagt tgaaacacta 120
tacaaacctt atttattaga tatttaataa acacaaacat tatgctgttt ttctattact 180
gttatcagta ttttatcaat gtatattatg cctatgatcg atgattcatg atagttgagt 240
tacagtaaaa ttattttagc acagaaggaa cgcagcgctg ccggctgtat ttgcttttct 300
gtggacatta atcaaatgca ttaaaattaa taaattattt ttttgaaaac ggttgactta 360
acaaaaaagt ttattagact tttttgctct aaatggtgca cttagcccat accttggagg 420
ggcgcactgt tttcagggac accctgtata gtttaaaaat tattttctgt tgctcaatcg 480
gtcattcgtt cgtggaagta gatacatcat gcattaattg aaagatctat ccactggtgg 540
ttgtaactta acgtccgcat cattctgcgt ttaattcagg ttccaaaact gacatttaag 600
tccaatattt tttgttcacg tttggtacaa atatttttta gaagggtatg cgtccaagtt 660
cttacgagct ttgctgttgc tgcctgctcc tacgtcaaat gctgaatttg catgaacact 720
gaaccttact ttc 733

<210> 675
<211> 990
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (825) (935)
<223> n = a, c, g or t/u

<400> 675
aacgaatgcc aaacctatga gggaacttac acatttttct attacgtaat attattcagt 60
ttcctttaaa aataatattt ccaaactttc acgcggtaaa acctcataat aacttagaag 120
ataatttaaa atctatatat ttttttctgt tttctggcct tggtttagaa gaacccttag 180
ccaatgtaaa atagttcaaa ctatcaaaaa cgcttgtgac gttacattac tgtattttct 240
actgacgttt atagtgtcta atttaaaatt atatacaatt ttgtttactt tgttggtgca 300
gaatgtacat gcacaactat atgacgtcaa tatgcgtttt ggaccacctg ttttaatttg 360
aatttttaat cgtctttagg ggccaaacga aagacaaaca aaacttttct tatctttgat 420
acatgtttta aattatgttc tgttgtgatt tataacattt ttttcgaatt taaaaattta 480
tgcaagttcc ctatttacac aaacaattta atatttccaa caagagcatt atttaaaatt 540
ccttgttccc gctaagggat agggacttca catcctagca gggggcgtta agacgctaga 600
aaaccggaag ataagtatag ctatcacaga agatatcggg gaagaacagg tatgtacatc 660
ggttatgact ataaatatct gaaaaataca tacatacttg taaagtaaac accactctta 720
ccatttttcta atattatcta agtattgact ggacttttct atctgcctca tgaataatga 780
ggtaaattag aatttcattt attttgcata aaaaatacat gtaanttccg ttatcataaa 840
ataattatag gaatatctac cgatattatt actctggggt ccgtatatct atccttttct 900
tctacttttc tactatggnn atgagaaata aattnaaatt ttaaaaacaa tttggtggta 960
ttccctagag gaaatataaa attttatcta 990

<210> 676
<211> 32
<212> DNA
<213> Diabrotica virgifera

<400> 676
agaagaaccc ttagccaatg taaaatagtt ca 32

<210> 677
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 677
gatagatata cggaccccag agtaataata tcg 33

<210> 678
<211> 729
<212> DNA
<213> Diabrotica virgifera

<400> 678
agaagaaccc ttagccaatg taaaatagtt caaactatca aaaacgcttg tgacgttaca 60
ttactgtatt ttctactgac gtttatagtg tctaatttaa aattatatac aattttgttt 120
actttgttgg tgcagaatgt acatgcacaa ctatatgacg tcaatatgcg ttttggacca 180
cctgttttaa tttgaatttt taatcgtctt taggggccaa acgaaagaca aacaaaactt 240
tttttatctt tgatacatgt tttaaattat gttctgttgt gatttataac attttttttcg 300
aatttaaaaa tttatgcaag ttccctattt acacaaacaa tttaatattt ccaacaagag 360
cattatttaa aattccttgt tcccgctaag ggatagggac ttcacatcct agcagggggc 420
gttaagacgc tagaaaaccg gaagataagt atagctatca cagaagatat cggggaagaa 480
caggtatgta catcggttat gactataaat atctgaaaaa tacataatac atacttgtaa 540
agtaaacacc actcttacca ttttctaata ttatctaagt attgactgga cttttctatc 600
tgcctcatga ataatgaggt aaattagaat ttcatttatt ttgcataaaa aatacatgta 660
attccgttat cataaaataa ttataggaat atctaccgat attattactc tggggtccgt 720
atatctatc 729

<210> 679
<211> 988
<212> DNA
<213> Diabrotica virgifera

<400> 679
cggacgcgtg ggtgttccgg accattttga gtgggaggat agctcaagtg ttgttgtttg 60
ggttattttc gggcaatttc tgcaggggggg tttgagtcac ctctcaacgt ccatctcaaa 120
acagatgcgc cctggactaa aacaatttta agtactctca ttgttaaaaa gttgattcac 180
cacattttca taacgatttt tagggcggct gtacacggac tgctgaggtc gtttatcact 240
gagcgacata cacggactgc tcgagcgatc gttgtagact tctggagcgg tccattgttg 300
actacctgag ttgtcccttg tcgcattgca accgctctcg atctgtcgat agcacgatgg 360
aatttcatta tgctattgac agcttgaagc ggtcttgact gctcgagctg tcgtgtgtat 420
ggcaacgaat atacaattat aattcaccgc gcaaacgctg cttcaaaaag tcgacctcaa 480
ctgcttgaag atgtccgtgt acggccgatc ttggggtatc ttttttactc ttatcgggaa 540
tatttaagaa ccgaaatccc taatgttttc cctatttgtt ccagaatgat atacgtgtta 600
atttccaact gagacttgac ggccagcacg accgtacgac aagacatttt cgaacagtaa 660
aatcattagt tttagtaaca aatacaaaga cagatgggaa ttcggttctc gatattatgc 720
agagtattta cctgatgatg aacacttatt ggaggataga aacgcataat ttgcagaact 780
gacttaccca tgtaatggac aggtatgatg gaaacgtatg tactttaatg ttttgttagt 840
atttttacga gagaagctaa gtaggtttgt gaagaattag ttatttgttg tactcgatac 900
tttttattaa ctcattaatt aattaaatcc tacaaataca caacgtaaga agctacatga 960
gcgcgcagca aaaatttttt tttttttt 988

<210> 680
<211> 25
<212> DNA
<213> Diabrotica virgifera

<400> 680
ggaccatttt gagtgggagg atagc 25

<210> 681
<211> 33
<212> DNA
<213> Diabrotica virgifera

<400> 681
ctaattcttc acaaacctac ttagcttctc tcg 33

<210> 682
<211> 862
<212> DNA
<213> Diabrotica virgifera

<400> 682
ggaccatttt gagtgggagg atagctcaag tgttgttgtt tgagttattt tcgggcaatt 60
tctgcaggga agtttgggtc acctctcaac gtccacctca aaacagatgc gccctggact 120
aaaacaattt taagtactct cattgttaaa aagttgattc accacatttt cataacgatt 180

tttagggcgg ctgtacacgg actgctgagg tcgtttatca ctgagcgaca tacacggact 240
gctcgagcga tcgttgtaga cttctggagc ggtccattgt tgactacctg agttgtccct 300
tgtcgcattg caaccgctct cgatctgtcg atagcacgat ggaatttcat tatgctattg 360
acagcttgaa gcggtcttga ctgctcgagc tgtcgtgtgt atggcaacga atatacaatt 420
ataattcacc gcgcaaacgc tgcttcaaaa agtcgacctc aactgcttga agatgtccgt 480
gtacggccga tcttggggta tctttttac tcttatcggg aatatttaag aaccgaaatc 540
cctaatgttt tccctatttg ttccagaatg atatacgtgt taatttccaa ctgagacttg 600
acggccagca cgaccgtacg acaagacatt ttcgaacagt aaaatcatta gttttagtaa 660
caaatacaaa gacagatggg aattcggttc tcgatattat gcagagtatt tacctgatga 720
tgaacactta ttggaggata gaaacgcata atttgcagaa ctgacttacc catgtaatgg 780
acaggtatga tggaaacgta tgtactttaa tgttttgtta gtatttttac gagagaagct 840
aagtaagttt gtgaagaatt ag 862

<210> 683
<211> 978
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (876)
<223> n = a, c, g or t/u

<400> 683
aaaagaaata gaacgtaata atgaaacaac aacaaaaaca acctctggaa cataagcatc 60
tactattaat ttgatgcagc taaggaaata atatgggcaa caagtaaaaa agcctcctca 120
aacaaacaga cagagtggtg gtgacaaaaa aagaggtggc atagataggt gtcttttagg 180
aaatatttgg aaaagaacga ccatacttat aataatacaa ctgtaaatgt gtaaaaaatc 240
gtattgattt tgctacttgt gtctattgtg tcattttatt agatcacaat atatataaac 300
tgttgaactc gaccgtaagc tgctttaaaa acaataaaat gttttgaaat gtagtaaata 360
tgtcatcgaa taagtgacgt catagctaag tgtagacagt attgccaaaa taatttgtat 420
acataatggt tcttctattt atacaaaact ttaatctttt taatttcttc tctttgtatt 480
tgactattaa caaagtgaaa cgaattttgc aattatttta gtatattaac gtagaaaaag 540
atcaataatt gactctagag acttttaatt cttaacaaaa ttaaacaatt atattaaaca 600
ccaaaactac tctgatcaag tcatggtctc tgcatattat ttatacctta gagctacact 660
atttagaaca aaatgttaat ataaacattt tttaataggt attttgagat agaaagtgta 720
tgtgaaaatt ctgtgtttat aatgcaaaac cccatacacg gcttaggaat aagtttatgt 780
aggctaaaca cagacgaaat tagttatatt tatggaaact gagactacga cgtagttcga 840
cgaaatataa acagtctacg ggatgtccta tcgtgntata gccgaatcaa atttaatata 900
agggtagtta tgactaaaaa attgaaaacc gtacatgatc atatcacagt ttatggcata 960
cattatggtc aacacatg 978

<210> 684
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 684
agcctcctca aacaaacaga cagagtg 27

<210> 685
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 685
gaccataatg tatgccataa actgtgatat gatc 34

<210> 686
<211> 857
<212> DNA
<213> Diabrotica virgifera

<400> 686

agcctcctca aacaaacaga cagagtggtt gtgacaaaaa aagaggtggc atagataggt 60
gtcttttacg aaatttggaa aaggacgacc atacttataa tacagctgta aatgtgtaaa 120
aaatcgtatt cattttgcta tttgtgtcaa atgtgtcatt ttattggatc acaatatata 180
taaactgttg aactcaaccg taagctgctt taaaaacaat caaatgtttt gaaatgtagt 240
aaatatgtca tcgaataagt gacgtcatag ctaagcgtat acagtgttgc caaataattt 300
gtatacataa tggttcttct atttatacta aactttaatc tttttaattt cttctctttt 360
cgtatttgag tattaaccaa gtgaaacgaa ttttgcaatt attttagtgt attaacgtag 420
aaaaagacca ataattgact ctagagactt tcaattctta acaaaattag acaattatat 480
taaacaccaa aactaatctg atcaagtcat gatctcgctg catattattt ataccttaga 540
gctatactat ttagaacaaa atgttaatat aaacattttt aataggtatt ttgagataga 600
aagtgtatgt gaaattctgt gtttataatg caaaacccat tatacggctt aggaataagg 660
taaggtaggc taaacacaga cgaaattagt tatatttatg ggaactgaga ctacgacgta 720
gttcgacgaa atataaacag tctacgggat gtcatatcgt ggtatagccg aatcaaaatt 780
taatataagg gtagttatga ctaaaaaatt gaaaacgtta catgatcata tcacagttta 840
tggcatacat tatggtc 857

<210> 687
<211> 977
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (730) (938)
<223> n = a, c, g or t/u

<400> 687
tatgaataaa aatagcattt ttatatacaa taacctggag acgggtcaca ggcttcatgt 60
gcaacactta acaccttcag ctccaggcca atatctgata tttgccacat gtgtcacttt 120
tatacagtca ttggaaaatt gttgaattgt aaacacggta gccgtgtccg tgtcggtggc 180
acctgattga taagaggatg aacacgggag ccgtgtcggc agacttaaag tgttttgaga 240
aaaagtttgt tttaataatt aatatttcgt cctattagag gtaaaactca ctaactacac 300
ttttcagaaa gtggagaaaa atcgatttaa aggtacaaat tgtttttga attcacctga 360
cttgaatatt ggaatttttt aaatgcaact ttaaagaata aataaaaaca gatattttgt 420
gccatatttc gtcacaggaa ctatgataca atcaatatta gatcaatttt tgtacttaat 480
gagtttttcc atgaacaaaa ttattggata ttgatatcct atcagaggta aaactcacta 540
actacacttt gtacttgatg agtttttcct tgaacacaat tattggatat tgatatccta 600
tcagaggtaa aactctttaa ctacactttg tacttgatga gtttttcctt gaacaccatt 660
attggatatt gagaacttaa tgaatttgtc tccataaaat ttcgctgact tacaacaaac 720
gaactatcan aattaacagg caattatgtc acaggaacta tgatataatc atgatacaat 780
caatgttaga tcaatttttg tacttaatga gtttttccat gaacacaant attggatatt 840
gatatcctat cagaggtaaa actcgctaac tacactttgt atttgatga gtttttcctt 900
gaaacacatt attgaatatt gatatcccta tcagaggnta aaactcacta actacacttt 960
gtactttgat gagtttt 977

<210> 688
<211> 23
<212> DNA
<213> Diabrotica virgifera

<400> 688
ggagacgggt cacaggcttc atg 23

<210> 689
<211> 34
<212> DNA
<213> Diabrotica virgifera

<400> 689
caaagtgtag ttagcgagtt ttacctctga tagg 34

<210> 690
<211> 509
<212> DNA

<213> Diabrotica virgifera

<400> 690
ggagacgggt cacaggcttc atgtgcaaca cttaacacct tcagctccag gccaatatct 60
gatatttgcc acatgtgtca cttttataca gtcattggaa aattgttgaa ttgtaaacac 120
ggtagccgtg tcggtggcac ctgattgata agagaatgaa cacgggagcc gtgtcggcag 180
acttgaaagt gttttgagga aaagtttgtt ttaataatca atatttcgtc ctattagagg 240
taacactcac taactacact tttcagaaag gggagaaaaa tcgatttaaa ggtacaaatt 300
gttctttaaa ttcacctgac ttgaatattg gaatttttt aatgcaactt aaaagaataa 360
ataaaaacag atatttgagc catagttcgt cacaggaact atgatacaat caatattaga 420
taaatttttg tacttaatga gtttttccat gaacacagtt attggatatt gatatcctat 480
cagaggtaaa actcgctaac tacactttg 509

<210> 691
<211> 962
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (836) (933)
<223> n = a, c, g or t/u

<400> 691
tgtctttttа gtttacttct cttggtttaa aaacaaagct tagctattta tgactgcaat 60
tttgatatcg tgtgtattag aaactttagt ttttaaccac gatatttaaa tattgtggac 120
tttgaacaat taaaaaaaaa tgtacttggt cactttctgt tggcgaaaaa aattagaaat 180
ttgacttggt caatataagc gacaccgtat taggaaatta tatttattaa ctacggtctg 240
tacatagaaa aaaattaaaa tctaatcagt ttctgtgtcg tcgctttcag aagaagctgg 300
ttacggtatg aaaacttttt ttgactactg gaatcgattt ataccactca tggaactctt 360
gcggaataat tttatttcta cgcaaggagg ctgtttttat tttgctctgg tatagacaaa 420
agtttttgt ataacattgg aatgttctta ggaataacag ctggtctgac cttgccacat 480
actcaagagt aacgcattta attttaacca cgatattttg tttccatttt aatcttagtc 540
tctgtttttt aagaacatct gtgcttaaga tcgaaaaagt ctgaccgtaa ttcttcaact 600
ctgtaggcac cgctcttttc gttgcgtctt gtagaacgga ctagcttgaa aatattaaca 660
gatcgttcat tgtaaaaaat ggcaacattt tcattaacag actatatggc actgtgcatt 720
gagtttaccg tttacctcca tgtacgaatg tcctttctcc ataaaattat gctgcaaaat 780
cttagtgtgt gcgttacaac aacatacaaa ttaatgcggc aatgaacgaa tataanaatc 840
tctgataagt cagaatataa actgatctct gtgatgcctt ttgatcatgt gattgcagan 900
gttttatccg ctttgatcat gctattccna ttncagagct tcccacgtga ccattaatct 960
ct 962

<210> 692
<211> 27
<212> DNA
<213> Diabrotica virgifera

<400> 692
tgacttggtc aatataagcg acaccgt 27

<210> 693
<211> 35
<212> DNA
<213> Diabrotica virgifera

<400> 693
gcatcacaga gatcagttta tattctgact tatca 35

<210> 694
<211> 697
<212> DNA
<213> Diabrotica virgifera

<400> 694

tgacttggtc aatataagcg acaccgtatt aggaaattat atttattaac tacggtctgt 60
acatagaaaa aaattaaaat ctaatcagtt tctgtgtcgt cgctttcaga agaagctggt 120
tacggtatga aaacttttct tgactactgg aatcgattta taccactcat ggaactcttg 180
cggaataatt ttatttctac gcaaggaggc tgtttttatt ttgctctggt atagacaaaa 240
gtttttgta taacattgga atgttcttag gaataacagc tggtctgacc ttgccacata 300
ctcaagagta acgcatttaa ttttaaccac gatattttgt ttccatttta atcttagtct 360
ctgtttttta agaacatctg tgcttaagat cgaaaaagtc tgaccgtaat tcttcaactc 420
tgtaggcacc gctcttttcg ttgcgtcttg tagaacggac tagcttgaaa atattcaaca 480
gatcgttcat tgtaaaaaat ggcaacattt tcattaacag actatatggc actgtgcatt 540
gagtttaccg tttacctcca tgtacgaatg tcctttctcc ataaaattat gctgcaaaat 600
cttaatgtgt gtgttacaac aacatacaaa ttaatgcggc aatgaacgaa tataaaaatc 660
tctgataagt cagaatataa actgatctct gtgatgc 697

<210> 695
<211> 765
<212> DNA
<213> Diabrotica virgifera

<400> 695
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gatactcgtt tatcttaatc tgtacaatta actttaattg ggtaatgtaa tatacaagat 120
taaaagggta aaagaaaaat ttaaaacaat ttacatgaag aaaaccaagt aatactgaaa 180
atataaacga tattaagcac ctgtatattt aaaaaagtat taaaacgaaa aaacttaata 240
gtaattggaa tggcgggaaa aatgtttaaa aagtatttaa taagcactgt accctcaccc 300
aaaaaaacta tacacatatt caacaattta cataatttat tttgtacagg ataatatcaa 360
aaaagagaaa acctatcttt agttactatc tttagtacgg ccatattaat attcacagaa 420
gtgagggata gaggccttat tattcttttt gataaatatc gctatatttt taaacttaca 480
ctgatgaaca aaataggaaa atttccttaa aaagatttaa tcttctaagt ttctgaaggc 540
ctgctgaata tcttcatata attgatcaaa atctgccttg attttagctt caccatcttt 600
tacgggatcc ttaaatttca tactgctaag ttgatataaa attccactca ttgaatctct 660
tattacgttc caagtgatct tattttctga ttgtgcggtt gattctacag cgtgtctcgc 720
catgtcgtac aaaccgatca tgtttctcaa catactgaca gtttt 765

<210> 696
<211> 594
<212> DNA
<213> Diabrotica virgifera

<400> 696
cttatttcga tttgactatg tgatggattg agaccttagg cagagcctta acgttgattg 60
ccgagtcaag acctgtaggc atctataaag gcgactatat acaagaatta tatgcaagat 120
atgatgatgt cagtgatgct ccacctccac catctcttcc tgattggtgt acagaaagtg 180
acgatggaca agggaatggc cttgacgatt tcgatgattt tactgaagat gcaagaaaac 240
gagtagcttc aacttcttca aataatgatg atacttcacc aaaagctaaa aagggtcgct 300
tctaggaagt cgcatttatg gagggagtac ctaacgttac ccactttgta gaggaacaag 360
cgacccgaga ttgcaaacga atggtgccta ggatgtgtag gtgtacacca aaatggtgtt 420
ccaggaagtc atgtccgtgt ccaatggata tgacaaacat tactcttcta aaagaccacc 480
cctacagagt ttcctgcaaa gcagacggcc atgaggcatt atgaagctta tcaacggaga 540
acacaatgtt tatctttttg acagagatga tgaagcttat taaggcggaa ggca 594

<210> 697
<211> 884
<212> DNA
<213> Diabrotica virgifera

<400> 697
gcttgagtaa aaactgaaat catataaaag agataatttc tattgtgaac taatttttca 60
aaagtttcta cattaagtac atattcatta ctaaataatg gccgaaaaca aaaatccaga 120
ggatttggcc accgcaattc tccgtaagaa agatcgtcca aatagacttt tggtagaaga 180
agcagttaac gatgataact ccgtggttgc tttgtcacaa gcaaaaatgg atgaactaca 240
acttttcaga ggagacacag tcctactgaa gggcaagcga aggaaagaaa ctgtttgtat 300
agtattatct gatgatacat gtagcgatga aaaaattcgt atgaatagaa ataatttaag 360
agttaggctt tcagatgtag tttctatcca agcttgccct gatgtaaagt atggcaagag 420
aatacatgta cttcccatag atgatacagt ggaaggactc acaggaaatc tcttcgaagt 480
atacctgaaa ccctacttcc tggaggccta tcgaccaata cacaaagatg acgtattcgt 540

tgtacgtgga ggaatgagag ctgttgaatt caaagtcgtc gagaccgatc ccgctccgta 600
ctgtatcgtg gctccagaca ccgtcattca ttgtgatgga gatccaatca agcgcgaaga 660
ggaagaggaa gctcttaacg cagttggata cgacgaacat ccggaaggtt gtaaaaaaac 720
aggttgctca aatcaaagaa atgggtagag ttacccactg agacatccct agtctttttc 780
aggggtattg gaagtaaacc caccaaaagg tattttactt taccgggtcc accggggaac 840
tggtaaaacc cctccttgcc cccgcaagga acctaaacaa aact 884

<210> 698
<211> 642
<212> DNA
<213> Diabrotica virgifera

<400> 698
gccctttttt tctgtccatt ttatgtcaca agtagggcta aaatgaagca aattgtaaca 60
aaccaaacgg taaaaattcc tgagggaatt acagtaacca ctaagtcaag ggtagtaact 120
gtaaaaggac cccgaggtaa tctgaagaga tccttcaaac atcttaccct ggacattcga 180
atgatcaacc ccaggttact gaaagtagag aaatggttcg gtaccaagaa ggaattagct 240
gctgtcagaa cagtatgctc tcatgttgaa aacatgttaa agggtgttac aaaaggatac 300
caatacaaga tgagagcagc atatgctcac tttcccatta actgtgtcac cactgaagga 360
aacacagtta tcgaaattag aaatttcttg ggagaaaaat acatcagaag agtaaagatg 420
gccccaggtg ttacagtagt aaactccacc aaacaaaagg atgaacttat cattgaagga 480
aactcattgg aggatgtttc aaagtcagct gcccttattc aacaatctac aacagttaaa 540
aataaggata tccgtaaatt cttagatggg ctttatgtat ctgaaaaaac aactgttgta 600
caagaagaat aacttgtatt tttgaaataa atttaagttt at 642

<210> 699
<211> 652
<212> DNA
<213> Diabrotica virgifera

<400> 699
cacgttgaga ggtgcatttg cacgatgagt tccttaaaac ttcagaagag gctagcagcc 60
tctgttatgc gatgtggtaa aaagaaagta tggttggacc ctaatgaaat caacgaaatt 120
gccaacacta actcaagaca gaacatccgt aagttgataa aggatggtct tattattaag 180
aagcccgtag ctgtacattc ccgtgcccgt gttcgcaaaa acactgaagc ccgcaggaaa 240
ggaaggcact gcggttttgg taaaaggaag ggtactgcta atgcccgtac cccgcaaaag 300
gaattatgga ttcaacgcat gagagttttg cgtcgtctcc ttaaaaaata cagggaagct 360
aaaaaaattg acagacatct ataccactca ctctacatga aggccaaggg taacgtattc 420
aagaacaagc gtgtccttat ggaatacatc cacaagaaga aggcagagaa agcccgtgcc 480
aagatgttgg cagaccaggc caatgccaga aggatgaagg taaaacaggc tagagaaaga 540
cgtgaggaac gtatcgccac aaagaaacaa gaagttttgc agaactacat gagggaggat 600
gaagctgcgg ccactaagaa ataagttaat tgttttataa gatgactata tt 652

<210> 700
<211> 890
<212> DNA
<213> Diabrotica virgifera

<400> 700
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acgacaacaa gtttgatatg ttggtaagga actgtatggc tcacgatgga aaaagagctc 120
ccatacagtt agtcgaccaa agaggttgtg tcacaagacc aaaattgatg tccagattta 180
ctaagattaa aaactttggc gcaagcgctt cagtgttatc atatgcccac ttccaggcat 240
ttaaattccc tgactccatg gaagttcact tccagtgcac catccaaatc tgcagatatc 300
aatgtccaga tcagtgttca gattcttcag gacaacatct ccacggcttg cttgatttgg 360
tgcatggtcc acctgatact ggttatggtg ctcctccacc gctacctatc gaagcatatt 420
tacatcctgg gcgaccaagg gatgaaagga gatcaaagag agctctcgct gtcgacccgg 480
aaaaggaagt gggggtgaat aggattatta gggttgtatc tacaggagat ttgacattta 540
cacttgacga aaacagcaat agcacaactc cacccactat ggtctttccc gccaaggagg 600
aaattaacaa cggaggatta atatgtatga ctactccagg ttttgcagca accttagtag 660
ttttattagc tatattaata gtatcttgtc ttatgtcagc tttcctttgt gtcaaactaa 720
gaccatttgc tgaaaacaac tcgcaggtgt cataggatat gccaattcac agaaaacaaa 780
gtcaaggagc tgcttttact cgtaatatta gagcagactg aaaggggtta gatcgaaaag 840
aaaacggcta catgcttggt catataaatt aaaaatcttt cgacatatgg 890

<210> 701
<211> 888
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (775)
<223> n = a, c, g or t/u

<400> 701
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attgatggat tcagagggtt tgctacggac tacaatataa cagctttaac accatgtgta 120
aaagtattag gccaatataa aggagtatgc aaggatgaaa tggtaggagg acaggatagc 180
aaccaaatga atacggcagc gagggaaaat ggtattagca taataactta cagaagatcc 240
ttaatttcac ctgatcctgg agataaagag tttccagcag agggttccat atacgccgta 300
tgggggggtag gaaaactaga cgaaatgaaa gaacctgctt ttcatgatct ctactcaaag 360
actgatataa aaatggagat gacaccgaaa gaacctcaga ataactgtgt ctcttttacg 420
agatcgaaac ctgaacccaa agaaccttgg aagaaaggtc aaatattcga taaaactata 480
aggatattta agtcttatat tggtccatca ggggccaaaa ggggatacca agccattacc 540
ggccactcat ccacagcttt agcatggtac ataaacggtt tcctcagccc tgagatatgg 600
ctacgacgag gtctttcata tgcatttaaa gtatatggag gaaacaatcc acacagtgct 660
gaatattatc atccattgat aataacagat gaaccccacg gaggttttga tagacttact 720
gacgatgctc agtctaaaat aagagtcttg gctggtgttg aatattctag aaggngaaga 780
cctagaccaa ctacatctgg tgtcctttgt ctatcagaac acaaagaagg aaaagacaga 840
agactcgatg atgacttcga aacgttcaaa aatttcacaa atcttgat 888

<210> 702
<211> 953
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (840) (878)
<223> n = a, c, g or t/u

<400> 702
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ttattgaagt tgttccagaa gataccggta aatatgaatg tgtcgctatc aacaactccg 120
gagaagctag atgtgaagct gaatgtgtag ttacttcacc atctgctgcc cagaaacccg 180
ccaaacccac aactcccggt gcggaaaagg ctccagccct tctagaacct cttaaagatc 240
agactattaa agaaggacaa gctgtcgtgt tcagatgtaa gatttcagct aaaccaactc 300
cagttattaa gtggcaaaag gctgataagg tcatcaagcc atctaaatac ttccaaatga 360
ccaaagaagg ggacttctgc acgttaaaga tctcagaagc tttccctgaa gatgaaggag 420
tctacaaatg cgtcgctgaa aatcctgcag gcgctgttag tactcaagct aagttgaagg 480
ttattgcacc agaaacgcaa gaagttgcac catcactaac cccaatgaaa gacgttactg 540
tacctgaagg tagccctgct caattcaaga ctactatttc tggaaaacct aagcccacca 600
tccaatggtt gagggaggga ttccttattc cagaatcgcc agatttccag atgatccaag 660
aagggaacaa cgttattcta ttgatttcct caacctacga agaagacact ggcttattca 720
cctgcagagc aacttcatca gccggtcaag ttgaacaatc tgcgaaacta accgtaaaaa 780
gtaagaaatg attgctataa aaatattctt ttctaattct caaattgtta atgtccatcn 840
catgtagtta ttgttangta tgacagcttn cagctggnta tttaacacag tataaataag 900
tgatcagtta gcagaactct tttgagatag tcatgatatt ggactaatgg gtt 953

<210> 703
<211> 905
<212> DNA
<213> Diabrotica virgifera

<220>
<221> modified_base
<222> (849)
<223> n = a, c, g or t/u

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aagaaaatca agaagactca ggaaggcaag tttaagatag tcgccaggaa cagggaagga 120
gaagcctcag taacatttac tctgaaagta attacttcag agaaagaagc acctgaggtc 180
ttatcacctc tagaatctat taccgtaagg aaaggagaac cagttacact ttccactact 240
atatttggaa acccggaacc tactatcgaa tggttgaagg atggtaaacc tttaaccaga 300
ccaaaattca aaaaagacgg aaacacatac actttaacta ttcccaagac atctacagat 360
gacactgcta catatacagt tcgagctacc aattctatgg gtacaataga aacaagtgca 420
aacctaactg ttgaagaatt cccagaaaac caggaaccac cattgttcgt caaacgattt 480
gaagagcaaa ctgtaccaca aaagtctcct ctcaccctca aagccaaagt ggttggcaat 540
cctactcctg aagtatactg gcttagaaat aatgagcctt tggaaccatc cgatagggta 600
aagatcacct tcgatggaga aaacattgaa ctaactatta aagaaaccaa ttctgaactt 660
gactctggag actacaaatg tattgctgtg aatccagcag gcaaagcctc gcatggtgcc 720
aaggtatcta ttgaggtaga tactgtcaaa tttactaaag aactgaaaga agtttacgaa 780
acaatagaaa gaaagaccat cgaattagaa tgtgaaacat cccactcagt tagaacaaaa 840
tggtggtanc acacacggaa attagtggta tggaccatcg cgttgtagta caagatggac 900
gtacc 905

<210> 704
<211> 426
<212> DNA
<213> Diabrotica virgifera

<400> 704
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atttttaga aaagaagata gaagaattta ccatggtagc aaagaaaaat gcgtcgaaaa 120
ataaaagagt tgcactccaa gccctcaaaa agaagaaacg attggaaaag acccaactac 180
aaatagatgg aacccttaca actattgaaa tgcagaggga agccctcgaa ggagctagca 240
caaatactgc tgtattagat tctatgaaaa atgctgcaga tgcccttaag aaagctcata 300
agaatttgaa tgtagatgat gttcacgata tcatggatga catagccgaa caacacgaca 360
tagccaacga aatcacaaac gctattagca atcctgtcgg attcaccgac gatctggatg 420
acgatg 426

<210> 705
<211> 473
<212> DNA
<213> Diabrotica virgifera

<400> 705
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tagtgctgaa ggtattacgc cagacattat cattaatcct cacgctatcc cctcccgtat 120
gacgattggt cacttgatcg agtgcatcca aggtaaggta tcatccaata aaggagaaat 180
cggtgatgct acacctttca acgatgccgt caacgtacag aaaatctcca ctttgttaca 240
agaatatggt tatcaactca gaggcaacga agtaatgtac aacggccata ctggacgtaa 300
gataaatgct cagattttct taggacctac ctattatcaa agattgaagc acacggtgga 360
cgataagatt cattcaagag ctagaggacc gttgcagatt ctcgtcagac agcctatgga 420
gggtcgtgca agagacggcg gtctacgttt cggtgagatg gaacgagatt gtc 473

<210> 706
<211> 677
<212> DNA
<213> Diabrotica virgifera.

<400> 706
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tagtgctgaa ggtattactc cagacattat catcaatcct cacgctatcc cctcccgtat 120
gacgattggt cacttgatcg agtgcatcca aggtaaggta tcatccaata aaggagaaat 180
cggtgatgct acacctttca acgatgccgt caacgtacag aaaatctcca ctttgttaca 240
agaatatggt tatcaactca gaggcaacga agtaatgtac aacggccaca ctggacgtaa 300
gataaatgct cagattttct taggacctac ttactatcaa agattgaagc acatggtgga 360
cgataagatc cattcaagag ctagaggacc gttgcagatt ctcgtcagac agcctatgga 420
gggccgtgca agagacggtg gtctacgttt cggtgagatg gaacgagatt gtcaaatttc 480
acacggtgct gcacaattct taagagagag gctgtttgaa gtttccgatc cttatagaat 540
ccatatttgc aacttctgtg gtttgatagc tatcgccaat ttgcgtaaca acacctttga 600
atgtaagggt tgcaaaaata agacacagat atcgcaagtt agactgcctt atgctgcgaa 660

attactgttt caagagc 677

<210> 707
<211> 250
<212> DNA
<213> Diabrotica virgifera

<400> 707
atggcctgta cgtcaagcaa ggccagtcag tgaaaaatta cctgccaacc gaaattgacg 60
ggcacactga atctattatg aaacgtaccg cattggtcgc gtttggcttc cttctacgaa 120
cgtgctggtc gcgttaaatg tttaggtaat attgtgcagc tggtaggtaa agcatctctg 180
gcagaaacgg acaaaatcac gatggtgaag ctaaaatcaa ggcagatttt gatcaattat 240
atgaagatat 250

<210> 708
<211> 250
<212> DNA
<213> Diabrotica virgifera

<400> 708
attgtgcagc tggtaggtaa agcatctctg gcagaaacgg acaaaatcac gaaattgacg 60
ggcacactga atctattatg aaacgtaccg cattggtcgc atggcctgta cgtcaagcaa 120
ggccagtcag tgaaaaatta cctgccaacc gatggtgaag ctaaaatcaa ggcagatttt 180
gatcaattat atgaagatat gtttggcttc cttctacgaa cgtgctggtc gcgttaaatg 240
tttaggtaat 250

<210> 709
<211> 250
<212> DNA
<213> Diabrotica virgifera

<400> 709
gaatacttcc gtgatatggg ttacaacgta tctatgatgg ctgactcgac gaatacttcc 60
gtgatatggg ttacaacgta tctatgatgg ctgactcgac gaatacttcc gtgatatggg 120
ttacaacgta tctatgatgg ctgactcgac gaatacttcc gtgatatggg ttacaacgta 180
tctatgatgg ctgactcgac gaatacttcc gtgatatggg ttacaacgta tctatgatgg 240
ctgactcgac 250

<210> 710
<211> 273
<212> DNA
<213> Diabrotica virgifera

<400> 710
gaagaaagta cgttaatatg gttccagggc tccaacaaga cgagctattc ttactgggtc 60
gagaacattt taaaattttt ggataagtac tacgttccca gcaaaatagc taaaggaaat 120
ggccaaatta aaacatgctc tcatcacgac tatcctacta gtggagaagt atgcgaagtc 180
gatgtcagag attgggaaga atgcaacagg gatcaattct ttaattatca caagaattct 240
ccatgtattt ttattaaatt gaacaaaata tat 273

<210> 711
<211> 278
<212> DNA
<213> Diabrotica virgifera

<400> 711
acatttttcc cgccattcca attactatta agtttttttcg ttttaatact tttttaaata 60
tacaggtgct taatatcgtt tatattttca gtattacttg gttttcttca tgtaaattgt 120
tttaaatttt tctttttaccc ttttaatctt gtatattaca ttacccaatt aaagttaatt 180
gtacagatta agataaacga gtatcttata acatctatta gattgttaga atcaataaat 240
gtagtgtaat tgttctgttt tgaacaaata aatgcatc 278

<210> 712
<211> 287
<212> DNA
<213> Diabrotica virgifera

<400> 712
aacggttatt tggaaggcct gtgtcgtggc tttaaatgtg ggatcctgaa acaatccgat 60
tatttgaatt tggtccagtg tgaaactctt gaagatttaa aactgcactt gcaaggcact 120
gactatggaa ctttttggc caatgaacct tcacctttgt cagtatccgt catcgattca 180
agacttcgag aaaaactcgt gattgagttc cagcacatgc gtaaccaagc agtagagcct 240
ctctcgacat ttatggactt cattacctac agttacatga tcgacaa 287

<210> 713
<211> 250
<212> DNA
<213> Diabrotica virgifera

<400> 713
atggcctgta cgtcaagcaa ggccagtcag tgaaaaatta cctgccaacc gaaattgacg 60
ggcacactga atctattatg aaacgtaccg cattggtcgc gtttggcttc cttctacgaa 120
cgtgctggtc gcgttaaatg tttaggtaat attgtgcagc tggtaggtaa agcatctctg 180
gcagaaacgg acaaaatcac gatggtgaag ctaaaatcaa ggcagatttt gatcaattat 240
atgaagatat 250

<210> 714
<211> 250
<212> DNA
<213> Diabrotica virgifera

<400> 714
attgtgcagc tggtaggtaa agcatctctg gcagaaacgg acaaaatcac gaaattgacg 60
ggcacactga atctattatg aaacgtaccg cattggtcgc atggcctgta cgtcaagcaa 120
ggccagtcag tgaaaaatta cctgccaacc gatggtgaag ctaaaatcaa ggcagatttt 180
gatcaattat atgaagatat gtttggcttc cttctacgaa cgtgctggtc gcgttaaatg 240
tttaggtaat 250

<210> 715
<211> 250
<212> DNA
<213> Diabrotica virgifera

<400> 715
gaatacttcc gtgatatggg ttacaacgta tctatgatgg ctgactcgac gaatacttcc 60
gtgatatggg ttacaacgta tctatgatgg ctgactcgac gaatacttcc gtgatatggg 120
ttacaacgta tctatgatgg ctgactcgac gaatacttcc gtgatatggg ttacaacgta 180
tctatgatgg ctgactcgac gaatacttcc gtgatatggg ttacaacgta tctatgatgg 240
ctgactcgac 250

<210> 716
<211> 372
<212> DNA
<213> Diabrotica virgifera

<400> 716
cccgggttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 60
gcccttttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 120
gcccttttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 180
gcccttttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 240
gcccttttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 300
gcccttttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 360
gcccttctta ga 372

<210> 717

<211> 372
<212> DNA
<213> Diabrotica virgifera

<400> 717
cccgggcaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 60
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 120
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 180
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 240
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 300
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 360
gctagctcta ga 372

<210> 718
<211> 490
<212> DNA
<213> Diabrotica virgifera

<400> 718
catcacgact atcctactag tggagaagta tgcgaagtcg atgtcagaga ttgggaagaa 60
tgcaacaggg ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt 120
tgctactaaa ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa 180
ctacagaggt acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca 240
cacggtgctg cacaattctt aagagagagg ctgtttgaag tctcttcagc aatagacaat 300
ttgactccct ttcctcttgg gagggaaacg aaggccttag ctcccttacc tcatcgtccg 360
tttggattca caaaaacaca tcgacttctc tctgaaatca cctttgggag gcggtcgtcc 420
gatccttttc gatttgttgc tgccattggg gatccatctg gacttctgga ggaagcaagg 480
caggtgcagc 490

<210> 719
<211> 560
<212> DNA
<213> Diabrotica virgifera

<400> 719
ggcgcaagcg cttcagtgtt atcatatgcc cacttccagg catttaaatt ccctgactcc 60
atggaagttc tccatcaggg gccaaaaggg gataccaagc cattaccggc cactcatcca 120
cagctttagc atggtacata tagtgatccc aaccgtgcac ctgactgtga cccaactcaa 180
tgtgtaattc cggactgttt ctgctcagcg cccgccacca gttagcgccg aagtacaaaa 240
gggattggac cttatttttg ctggtatcag agctcaacag gcaccacgtg ctcaacgata 300
aaagactggt caggaaggca cattcctttt tgccttactt attcaaggca gggtgcatac 360
agagtagcca cgtaacaaat agcacatagc gaagtgttgt accagcataa tgtataagct 420
cctgtactta ccaaaggctc gttggcagat ctagaccagt tggacgaatt ggttattgag 480
tactgtggtg cagcgccccc tttatggcag atgaatgtct gatggccata ccagacatcg 540
aaggtattga ttacaccacc 560

<210> 720
<211> 372
<212> DNA
<213> Diabrotica virgifera

<400> 720
cccggggcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 60
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 120
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 180
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 240
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 300
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 360
ggagaatcta ga 372

<210> 721
<211> 372
<212> DNA
<213> Diabrotica virgifera

<400> 721
cccgggctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 60
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 120
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 180
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 240
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 300
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 360
acgatgtcta ga 372

<210> 722
<211> 1000
<212> DNA
<213> Diabrotica virgifera

<400> 722
caagcccgcc aaaatgcgcg aacatctgga actcttctgg tctcgagtga atatccccaa 60
agttcttagg aatgcaatgc ttcctagacg tcgtcgagct ggctctgaaa ctgagcccca 120
agttatagta ggtaacgata attattggac gtggcattag gttataggga aagtgtcaat 180
ctgtctcaaa ttcgcacatt tgtggaaatg gactcgcacg cgcggcccaa cgacggcttc 240
aacaaacaca ggcgcaagtc gacgaagtcg tggatatcat gaaaacgaat gtagaaaaag 300
gtatggcagg aaagaaatgc tgaatccgcc attgaagctc ttaaagaata tgaaccagaa 360
atgggcaaag ttgtccgaca agacaaatcc ggtattcaga aaatccgggc atagcaaaca 420
tgccaaacac acacacgcag aaaggaaata tcagtcagac tcagaatcag atagtgatct 480
ggaatggatt ggacacagag gtgaatcaga ccagaggacg ttcgggggta tattaaaaat 540
aacgttgtgt gcgcacttgg aaccgaaaca agcagaccat catccgcagc tcagtgcgta 600
gccgaatgtg gccgtgcaca ctgtgcattt gtaggacagg tgtgcgggtt tcaacgtcat 660
gttatgatcc cttgcatata ttgatggaaa aacacgccaa agaagagagc agagtattaa 720
aaggagtatt gccaggtaca tagaccagca aggaactgta atcaaaatgg gcgatgaaaa 780
gaaggccagc gatagcgaac acattaatct caaagtactt ggtcaggata atgcagtggt 840
gcagaaggtc agacctctcc tcaacgtcac ccgtatcgag gatgagattg ccaaacttga 900
agagaaagcc caaaaagccc aacgaacacg gcgtagacga aacatcttgt gtagttattg 960
tagaaggaca aaccagcaca ccagaacaac aagaactagc 1000

<210> 723
<211> 478
<212> DNA
<213> Diabrotica virgifera

<400> 723
cctcaagctg tcattggcat ggatattctg tgccaagcta aatccggtat gggaaaaacg 60
gctgtttttg caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc 120
aaatttcttc ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct 180
gaagcaacat ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca 240
cattgtcctt ggatgtagta tccatcacgc agaccgccga acaacacgac atagccaacg 300
aaatcacaaa cgctattagc aatcctgtcg gattcaccgt aatgcactcc tacgtcgttt 360
ggttcgtatt ggagtactag acgagaacag aatgaagctc gattacgtat tgggtctccg 420
aagtaatgta caacggccac actggacgta agataaatgc tcagattttc ttaggacc 478

<210> 724
<211> 584
<212> DNA
<213> Diabrotica virgifera

<400> 724
cacttgacga aaacagcaat agcacaactc cacccactat ggtctttccc gccaaggagg 60
aaattaacat aaagaacaag gagaagccgg taattacaaa gctgcatatg aaaccggaaa 120
caacattatc gctgaagaag gaggttactt gaaggcaagg atgaaatggt aggaggacag 180
gatagcaacc aaatgaatac ggcagcgagg gaaaatggta ttgttgccac atggtagact 240
cctgttctaa tgttcaaact ggagatcaat ttgcaagact actcagacac aatttcaaca 300
gacatttgaa ttcaaaccga gctccgttgg gtccagccac ataggactaa gtgtggaggg 360
ttcattcatc aaaattcgct ttatgtgcac acatagcaca taagcataca tggcaaatat 420
gcctatccat ccagttgtca gctaacagaa gtgcccttat ggagggtgtt ttgaagaaca 480
cgctggcgaa tgtgagttgc agatgggctc aagaatacac cgctattgac caggatctcg 540
cttcagaata attccataga aaagctacca gcccatgcat ttaa 584

<210> 725
<211> 869
<212> DNA
<213> Diabrotica virgifera

<400> 725
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agaagtggat ggcttcagca atgctcggcc aggctgattg ctctttattt tgacactgga 120
atgtacagcg aagcgctaca actggaatcg accttactga ctactcgtct acgatatcgc 180
caaacatctg acatacgaaa acgttgaacg ttggttgcgc gaattgcgcc attcttttct 240
caggtaccaa tgttgctgct ggtaaagcac gtggtattgt tattggaact ggtcttaaca 300
ccgccattgg taaaatcaga actgaaatgt ccaacgaaat tgccaacact aactcaagac 360
agaacatccg taagttgata aaggatggtc ttattattaa gaagcccgta gctgtacatt 420
cccgtgccga tacctacaca gaaagctata ttagtaccat tggcgtagat tttaaaatca 480
ggacaatcga tttagatggg ttacaaaagg ataccaatac aagatgagag cagcatatgc 540
tcactttccc attaactgtg tcaccactga aggaaacaca gttatccagt ttgcaagctc 600
tctggcagat ttcagtcaaa tcggcaccag aaaatccatg agttacttta gcaatgtata 660
caagatctac gtctttagct acaggcgatt tccgatgaaa tagtggcatt aggttatagg 720
gaaagtgtca atctgtctca aattcgcaca tttgtggaaa tggactcgca cgaagaaaaa 780
gtttatcagg ccgtgagaga attaaaagtt caaggaggta tcggttcgtg tgtatcactt 840
aacgtgaaga gccccttggt ttccgacac 869

<210> 726
<211> 737
<212> DNA
<213> Diabrotica virgifera

<400> 726
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aacaaaagaa attcaaaatg tacaagtgga caaaaaatat taaacaaatg tatatagtgt 120
atctatttct aatcgaatca acaaaatatg atcttactga acagaatatg atgcaagcta 180
atattaaatg caactcgtat gttttattat atcctaaacc aaagacttat tcatcttgaa 240
ggtgactgtg tgccgtcatc tcttttattg agacaattag gacgtttttc gttctcagcg 300
gcttctcgga aatccctggc ttacagaaac ggatggtgac tatagtcacg gaactgtcaa 360
aattaatttt gtatcttata tgaagcctca aacgttttgg aaatatttct tctctttatc 420
aggaactgga aagaagtata tgccctcagt ttgttatctt tctctagatg atgggaggaa 480
aaatttttaa aatacctgtt tgtcagagtt ttattactat taagaagaat tcttcatctt 540
aaaggtaacc gggtgtcgtc atcactttta ttgacacaat taggacgttt tttgatctca 600
atggcttttg gtgtggacaa tagttataga actttcaaaa ccaattttgt gtcctgtcta 660
gatcatcaaa cggttttgag aagatttctt cccttcatat ggagctggaa agaagtattt 720
gacacctgtt agttatc 737

<210> 727
<211> 867
<212> DNA
<213> Diabrotica virgifera

<220>
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<222> (771)
<223> n = a, c, g or t/u

<400> 727
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cgtttataga gcaaactgtc attatttaac accctgtata ggcccacaca aaagattatt 120
acctccttca tgagacttct ttttttattg agttattcat gtcgagttgg acgtttctga 180
tatgaaaaat tttcaggagg gagacggttc gtaaatatgg gggtttataa actttggtgc 240
atctatggtg gttcctgttt atctgaacca tctcagatag ttaaggggtg gttacccccc 300
actatagggg ttgatgaagt aacactactc acagtatatt catttattta taagttgaag 360
taactacggt aaagagttgg tggctaaata tttatccgct gtgatgttta cccgctggga 420
tctcaaatac ccatgattaa tctttacgca atgaatttag aacgtcgaat gtggaatccc 480
ctgtttatgt tttggtatat ataaaaagtg aaagtgtttg tattataaat gctgaatcaa 540
cttgattata aataaagaat aatatttgct actacagctg accttgcatt atcgataact 600
gatacacttg tatagtaata taggtcaatc atgtttatga taaacaacgc gtattcgttt 660

accaaggaca tttaaatatt aaaagaatta gtcttgccct taataagatg gttactaaga 720
gatgctgtga atcccaatac acatccgaca actggagtaa gtatccttga naatttgtcg 780
gaaaatatta ccagtgaatt gtatttttat caaaatatac tgcaaaaaaa cccatcattt 840
atgactctat agtggacgca catatcc 867

<210> 728
<211> 802
<212> DNA
<213> Diabrotica virgifera

<400> 728
cgtccgtgat aacaaaatca atcaaagagt tgtttattaa atagtattga tagtgtattt 60
gaaaaataat aatttattta aggcgtacaa ttaataaaaa gttatttatt gtttatatat 120
tatttatgga aaatccaagt atttcaagtc attaaaattc aaataaaagt attattttat 180
aagagtttgt tccgataacc gtaaataggt atgagtttag ttataaagta aagtgcccat 240
ggtgtcataa aatgtagtaa atgctaatgc ttcaagtacg tactacattt ttgaagattt 300
cactgcactt aaaaagcatt tgcctttctc cgcagtattt gctactattt accagcctac 360
atagaagaat gtactacgct tttgaagtat atgcttgttt agtagtattt tgcttcagtt 420
taagtgaagt tggtgggtgg tcgtcttcgg cgtaggtatt tttttgttac aatatggcag 480
catttatgaa tgtgtgtcat agaaaaattt acaaactaag aagaagattc ttaatttttg 540
gggtcattct tttatcaaat aaaatttaat aattgttaag aagattaaca aataacaata 600
attgttcatt tttatcctcg cgtaactctt tgtcgcttcg gatctgagtc actcattttt 660
actcatgtac aattctaata atttggtacg taaaaatgtg aatttacaaa tcacaagcac 720
atggaaaact aattccatca cgattggtgt aatgcagaca cggctggcac tacgctttgt 780
agtagatact tctggtcagt ag 802

<210> 729
<211> 862
<212> DNA
<213> Diabrotica virgifera

<400> 729
ggaccatttt gagtgggagg atagctcaag tgttgttgtt tgagttattt tcgggcaatt 60
tctgcaggga agtttgggtc acctctcaac gtccacctca aaacagatgc gccctggact 120
aaaacaattt taagtactct cattgttaaa aagttgattc accacatttt cataacgatt 180
tttagggcgg ctgtacacgg actgctgagg tcgtttatca ctgagcgaca tacacggact 240
gctcgagcga tcgttgtaga cttctggagc ggtccattgt tgactacctg agttgtccct 300
tgtcgcattg caaccgctct cgatctgtcg atagcacgat ggaatttcat tatgctattg 360
acagcttgaa gcggtcttga ctgctcgagc tgtcgtgtgt atggcaacga atatacaatt 420
ataattcacc gcgcaaacgc tgcttcaaaa agtcgacctc aactgcttga agatgtccgt 480
gtacggccga tcttggggta tctttttttac tcttatcggg aatatttaag aaccgaaatc 540
cctaatgttt tccctatttg ttccagaatg atatacgtgt taatttccaa ctgagacttg 600
acggccagca cgaccgtacg acaagacatt ttcgaacagt aaaatcatta gttttagtaa 660
caaatacaaa gacagatggg aattcggttc tcgatattat gcagagtatt tacctgatga 720
tgaacactta ttggaggata gaaacgcata atttgcagaa ctgacttacc catgtaatgg 780
acaggtatga tggaaacgta tgtactttaa tgttttgtta gtatttttac gagagaagct 840
aagtaagttt gtgaagaatt ag 862

<210> 730
<211> 603
<212> DNA
<213> Diabrotica virgifera

<400> 730
gctgctcctg tggcataacg gccccgtacc tggagaattt tacaattttc ccggcaaaca 60
gaccagctat tccaacccta taacacatac acagtctccc gttacaacat caacttctgt 120
attagctatt acttacgata aaggagtatt gataaccgga gatctggttg cttcatacgg 180
atctttagct aggtacagaa attgcccgag ggttattaaa gtcaatcaga atatcatctt 240
gggagccgga ggagactatg ctgatttcca atacgtcaag agtttcattg agcaaaaaat 300
aattgatgaa gaatgcattg atgatggact aaaaatgaaa ccaaaatcat tgtactgctg 360
gcttactaga gtaatgtacc aacgcaggag taaattagac ccttttgga ataatctggt 420
tataggagga atccaggatg gagtcccctt tcttggaacc gtagataaat tgggaactgc 480
atatacagac aaagttatat gtacaggtta tggagcccac atagccttgc ctcttctgag 540
agactcttta gataaaaatg gagctcttaa cttggccgat gccaagactc tgattcacaa 600
atg 603

<210> 731
<211> 545
<212> DNA
<213> Diabrotica virgifera

<400> 731
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taaattaaaa aagaaatggc tgccatcaga tctatgtctc gccttcttat taatagatca 120
cttcaaacca ctgcaaagag gacctatgcc gaccaaatga acttcacatt tgcagctgga 180
aatcaggttt actatactgc aacttcagtt aaacaagtag atgtgccatc tttctctggt 240
agctttggta tcctccccgc ccatgtaccc acactggctg tgctaaaacc tggagtagtc 300
actgtttacg aagatggtgg taatgttaag aaaatctttg tttccagtgg tactgtcacc 360
atcaatgatg attcatcagt tcagattctt gctgaagaag cccacccagt agaaaacatt 420
gatgtcaatg cagcaagaga catccttacc aaagcccaga gccagttatc atctgcaagt 480
acagatgagg cgaaagctga agcctccatt gccgttgaag tgggagaagc gtatcaaagc 540
ggctg 545

<210> 732
<211> 496
<212> DNA
<213> Diabrotica virgifera

<400> 732
gactaaactc cacagaactc ccagacccag tcggcctgac aaggctcgca gaatgggtta 60
cagggccaag caaggttttg ttatttaccg tattagagta cgacgtggag gacgcaagcg 120
tccagtacca aaaggtgcca cctacggtaa acccaaaagc catggagtta atgaattgaa 180
acctgtccgt aacttacaag ctattgctga ggaacgtgta ggaagaaggt gtggtggatt 240
aagagttcta aactcctact gggtagccca agattcaaca tacaaatatt ttgaaatcat 300
tttggtcgac ccctcacata acgctattcg caaggacccc aaaattaact ggattgtcaa 360
ctcagtacac aaacacagag aactccgtgg caaaacttcc tctggcaaat catctcgtgg 420
tttgggcaag ggtcacagat actctcaaac caagggagga tccaggcgtg ccgcttggct 480
cagaaggaat cactgc 496

<210> 733
<211> 512
<212> DNA
<213> Diabrotica virgifera

<400> 733
gctgattcgt tattctctgt gacaaagtac caacagttgt gtctttaata tctctcaata 60
agtgttcaac accaacttct tcagcttcct cagctccgat ttcactagga acatgctcaa 120
atgttttaga tgtaggtgaa ccgtcatcgt gtacttcttc tacagcttga taagcttcag 180
ttggtaaacc taaatctttt ggtttagcgt ctatgataac tagaacggaa tttggacaat 240
accttctgat taactcatta atggcaatat cattttgatg aagtttgggg ccggtgtggt 300
accaacctac tactcgttcc ctggcattaa ctttttgaa cattccatac atgttttcta 360
agtaatcatg gtccaagaac cacacagact tatccttgtc atcttcgtca aaaggaactg 420
caaaactgtt agaaacatct aagactcctt tagcacgcca acagccaaga agaacaccaa 480
caacacgctt ttgattgccg attttgccca tg 512

<210> 734
<211> 669
<212> DNA
<213> Diabrotica virgifera

<400> 734
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ctcaagacgg gcttccagag tattgttgat tttgatcttg tttctcaagg ccaacagttc 120
gattcctccg gtggtttctt gagaaaggtg gctctcgtcg tcgattttta gatttacgtc 180
tttaccggtt atgtccttgt acttttggga gacgttaggc atgatagatt ttaccaattc 240
tctgtcctga gggcgtactc taatggtgat gtccttttcg aagagctgat agagcccttg 300
gaggatgaga ctttccagga tttgtgtata tttgcctgaa tctctggtta cctcaccaag 360
acgtttgcga gcatcttcca aaacggcacg tacatggtct tcccttactt tcaatacctt 420
caatcttgcc tggttcaaca tgtttgatga ttggattttt ttctggagtt ctacttgctt 480

ctctttttc tcgtagtact ccataatctt gagcctctgt tgttggacca gacggccctt 540
ttcgatgttg aattcttctt cagcctttgc atcaatttcc tcggcctttt cattggcttc 600
ttgctcaatg aaagccatca tgtgcttgat ctgcttttgt acatctgcgt cgctgagagc 660
attttgaga 669

<210> 735
<211> 802
<212> DNA
<213> Diabrotica virgifera

<400> 735
gagccaagag caagtctgaa gatggttgac ggaaaaccaa acgagagtac cactagcaaa 60
gcagccttga aaaaggaagc aaaaaaggca gagaaggcag caaagaaagc agaacacaaa 120
caagctgctg gtgaaactca acagaacgtt gtagaagaag ttgacatatc agttggaaaa 180
tatggaaatc ttccccttat aaaatcagaa actaagcaca acgagaggac tttcacctca 240
gtaagtgacc taaataaatc cgtgtctgga aaaactgtat ggataagagc aaggttacat 300
acttcaagat caagaggaaa acaatgcttt attgttctga gacaaaaaga atttactgtg 360
caagccattt taaatgtctc agacgtcgtt tcaaaatcta tggttaaatt ttcaagtggg 420
gtacctaaag aaagtatcct cgatgtcgaa gccaaagtat cagtagtgcc caataacata 480
gcaagttgta gtcaacagga cgtggaacta gttgtttcac agttatgggt agtgtccttg 540
tctgctccac agcttccttt gcaaatagag gatgcatcca gacctgaaaa accagaggaa 600
gaagaaggtt taaatatccg ggtaaatcaa gacacaaggc tggacaatag aattttagac 660
ttgagaacac caactaacca agcaatttac cgattggaag gaggcgtctg tcggctgttt 720
agggaagcgc ttactaagaa agggttcgta gaaatacata cgccaaagat catatctgct 780
gcttcggaag gaggtgctaa cg 802

<210> 736
<211> 579
<212> DNA
<213> Diabrotica virgifera

<400> 736
gcagtcccag aatcagtctt aaaacaccgt aaaagacgtg aagcatcccg tgctaaacaa 60
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agagctgaac agtatgttaa ggaataccgt ttaaaagaaa gagacgaagt taggctagtt 180
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ttaatctaca aaagaggatt tgccaaagtt aatggacagc gtgtagcaat taccagcaat 480
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<210> 737
<211> 640
<212> DNA
<213> Diabrotica virgifera

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caagttttac aaatttttca ggatggagta aaggtgtttc aacaacttct ctcaacttct 180
caatttgttc cttgcagcca ccaacatcac tgtatgtaac atcaggcttc tcctcaactt 240
gcatcatagt cacagtggga tcaatttttg gaggtagagg aatatgaatt tgatacttat 300
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aatctactac gaatttggca aactgtttaa cgtttataat gtatttggga tcatctgtat 420
cagcgttgat aatttttcgta caacgggcca cttgtaaggg ttgctcattt tgtaaggttt 480
gtttgtcagc tgccaaatcc cataaagctg gtggagctaa accagtatca gattctttta 540
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<210> 738
<211> 669
<212> DNA

<213> Diabrotica virgifera

<400> 738
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ctttagtttt ccacacaaat agaggacaaa ttcgttttaa cgtatgggac acagcaggcc 180
aagaaaagtt tggtggtctg cgtgatggat actacatcca aggacaatgt gccataatta 240
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tccaaagcg 669

<210> 739
<211> 302
<212> DNA
<213> Diabrotica virgifera

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tatcaagtag agtatgcttt taaagccatt aaccaagccg gccccacttt ggtagcagtc 180
cgaggagtag atgctgcggc gtgtgtgacc cagagaaaga tcccggataa gctgattgat 240
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at 302

<210> 740
<211> 838
<212> DNA
<213> Diabrotica virgifera

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ttatgtttga acagaatggt acaggacact tgttttctgg gcagtgtttg gcatgatagc 360
aacatagagc gatgagttgt ttgcaaatag ggcaaccacc atttgttttc ctcttgcaca 420
atttggtgtg atttgtgact cgtttcatct tctgacagct tggtaaccga caattggcat 480
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atacaaattt atcttgacct tgattatgca attcatataa catagacaaa gcactatatt 780
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<210> 741
<211> 1301
<212> DNA
<213> Diabrotica virgifera

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caagtttctg aatttgccga ggagggtagc gcgttctctg ctctcttcat cggccaatct 540

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<210> 742
<211> 824
<212> DNA
<213> Diabrotica virgifera

<400> 742

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ctgttttgtc catgccataa gctaaagctg cagctgtggg ttcatttatg actctcaaaa 180
cattaagccc agaaatttgt ccagcatctt tggtagcctg acgttgtgag tcattgaaat 240
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ccttcatctt aaccaaaaca aatgctccta tctgactagg ggaatacatt tttccatcgc 360
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caataacagc ccccttgatt ccttctgatt tgtgtcgtaa ttgaatgtca tattttgggt 720
ttagagcgta cagggaagat ctattatttg acaaatggtt aaaatttctg tttccagctt 780
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<210> 743
<211> 704
<212> DNA
<213> Diabrotica virgifera

<400> 743

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atggttctac tatgatgcca tagaatgcct accacaagat aaatcagaaa tcactgaaga 180
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ccaaaagaag ttagcatcac tgaaatattt tattgttggt gctggagcta ttggttgtga 300
attgttgaag aactttgcta tgatgggtgt aggaacacaa ggagaagtta cagtaactga 360
tatggattta attgaaaaat ctaatttgaa caggcagttc cttttcagac cacataacgt 420
ccaacaacca aaatctgcca cagctgcaaa ggtcattaaa aagatgaatc ctgatatcaa 480
tgttgttgca catgaaaatc gtgttggacc tgaaactgaa agtgtctaca atgacgattt 540
ctttgaaaag cttgatggag ttgctaatgc actggataac gtagatgcta gaatttatat 600
ggatagaaga tgtgtctact accgcaagcc tcttctagag tctggaaccc taggaactaa 660
gggaaatact caagtggtgg caccttactg atacaacagg gggg                  704
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<210> 744
<211> 971
<212> DNA
<213> Diabrotica virgifera

<400> 744

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gttaaaaatg cttatggatc caatgggagg tattgtgatg actaatgatg gcaatgctat 180
tttacgtgaa attacagtac agcatccagc tgcaaaaagt atgattgaaa ttgcaagaac 240
acaagacgaa gaagttggag atggtaccac ctcagtaatt gtcttagcag gagaaatgtt 300
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agtggcagct gaacagtttt tggaacaaca tattcatccg acaatcataa ttcgccagta 360
cagacaagca ctcgaagata tgattcagtt attggaaggt ccattaagta taccagtcga 420
tagaaacgat aaaaatgctc ttgcccaagt cgtgaaaggc tgcattggca caaaattcat 480
aagtaaatgg tcagatttgg cagtaaatat tgctttagat gcagtaaata cagtattatt 540
agaagaaaat ggcagaactg aagttgatat caagaggtat gccaaagtcg agaagattcc 600
tggaggatcc attgaagaat ctaaaatttt aagaggtgtt atgcttaata aagatgtaac 660
ccatcccaaa atgaaaagat atatacagaa tccgagaata atacttttgg attgtgcatt 720
agaatataaa aaaggggaat ctcaaacaaa cgtagaaatt tcagcagaaa cagacttcac 780
caaactatta gaactggaag aggagcatgt caagcgtcaa tgtgatgaga ttattgcact 840
caaacctgac gtcgtcttca cagaaaaagg agtatcagat ttggcccaac actttttact 900
gaaagctggt attaccgcta tcaggcgtgt tcgaaaatct gataataaca gaattgccag 960
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<210> 745
<211> 1049
<212> DNA
<213> Diabrotica virgifera

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agaagttaca tctcgtagaa agaaaaaacg aggagtagac tacaatgctg aagtaccgtt 120
cgaaaagagg ccagcgattg gattttatga cacgtctaat gaagtattag atcctatggc 180
tcccgatttt tcaaaaatga ggcagcaaca cttggatggg gagctgagaa gtgaacaaga 240
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accacaaatt tcagaccagg aaatgcacca agtggtgaag ttgggcaaag cgagtgaagc 420
agctagggaa atagttacag aaagcggtgt tgaaaccact gacactttgt tgaatgatta 480
tactttcaat cctcaagcgg ctgctacacc aaggactccg gcgccccaga ctgataggat 540
tttgcaagaa gctcagaaca tgatggcgct cacacacgta gatacgcccc tcaaaggcgg 600
cattaacact ccgttacaca attcagattt cagcggggtc ctgccccaag ctcagaccgt 660
cagcaccccg aataccgtgc ttgctacgcc cttcagatcc agtaggagtg acggagctgg 720
cactcctggc agtagcgttg gatttatgac gcctagaagt ggcgctttgg tgcctgtggg 780
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tcaattaaaa atggggttga gcagtctacc acaaccgaaa aacgactatg aaatcgtggt 960
gcccgaaaat gaagaccagg aagaacccga gcaagctcag tcacaaatga tcgaagatca 1020
agctgatgta gatgcacgga aacaagaag 1049

<210> 746
<211> 547
<212> DNA
<213> Diabrotica virgifera

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gcttctgttt cctagataca tcttgtaatt gggctatttg ttgattcaag ttgctaagat 120
caccttttat gatatatgtg agttcttgga tttctgatgt tttgtcgtca aataaagatt 180
ttcgttttgc caacaatgtc aacttttcca atttagcata agtgctagct atatgccgtc 240
ccacattctt cgcaattagc ataaactcgc tatgactttg tataaccctc gatttcttcg 300
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caaattcact agttctgtct ctggcagtca tgactaattc tggttcagtg tagtcttcga 420
tataatcttc ctctaaatag tagtcagatg taacattgtt tggatacacc gtgtgtgact 480
gattcgtttt aggctgaggg ttagtccaat aattatcgtt acctactata acttggggct 540
cagtttc 547

<210> 747
<211> 508
<212> DNA
<213> Diabrotica virgifera

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ccgtagtccc actacctcga gcgcctttta ccattaccat accaatcacg atttctacgt 180
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aatttgaagc atcatgtact taatactttt ggaagaggtt ttccaccaga tgcactttgc 300
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ataataggcg agggattttt atgggcagtt cctaaacata ggcggtcagt agaaaaacga 420
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ttaaggacct gtaatgtttg tggtgatg 508

<210> 748
<211> 788
<212> DNA
<213> Diabrotica virgifera

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ccacgtacct taggccagca gttacgttta actttgtatt tgtggtaagc acgacctgct 240
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tttgatggaa taactttctt ggctccagaa ggtaacttaa ctctggtttt ctttgtgtcg 360
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ccagtttttt cttctaagtt gcatacaatg gtaccttcag gcatagttcc tacaggcaat 480
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atgtaaccat gtctttctga gaaatctaaa taacgtagtt tgggtgctcc tttcctcttt 720
tttgtgtggg atttgaatac agatcccgca cctttacgtt gtgcacgaat tacacgaccc 780
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<210> 749
<211> 752
<212> DNA
<213> Diabrotica virgifera

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ttgtcagatt gcttactccc gtattgaggg agacaagatt gtatgtgctg cttactccca 180
tgaattgccc agatatggaa tcaaaactgg tcttaccaac tatgctgctg cctatgccac 240
tggtttactt ttggccagaa ggctcctcaa aaaattggga cttgacaatt tatacagtgg 300
caccactgat gttactgggg acgaatacaa tgttgaagct gctgaacaag gaccaggagc 360
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gcaattcagt caatacatta agctgggaat taatgctgac cagattgaaa atatgtacaa 660
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agcacctgca aagagatgga accgtaggaa gc 752

<210> 750
<211> 436
<212> DNA
<213> Diabrotica virgifera

<400> 750
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aagttccgca ttaggtatcc attttcagct ccaactcgtg ttgtaagaaa agcatggact 180
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gcgaagaaag aaaagc 436

<210> 751
<211> 1072

<212> DNA
<213> Diabrotica virgifera

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ggaaggaaca tagaggtatg ttaagggaag atgccatgat ggagtacttg aagatagctc 360
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ctaaaatcgg tttcccgtgg tcggaaatcc gcaacatctc tttcaatgat aggaagttca 540
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tggaagagag caagaacatg gaagccgccg agaggcaaaa attggaagag gagatcaggg 1020
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<210> 752
<211> 864
<212> DNA
<213> Diabrotica virgifera

<400> 752
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ctctacttgt accctagaat atggttcgat aattctgcaa aggttctgct ccaacatatt 180
gtcatacaac gttcctaaat gtgctctaac aataacatca tcttctaatt catgtttaaa 240
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ttgtacttcg ataccaatac cagc 864

<210> 753
<211> 383
<212> DNA
<213> Diabrotica virgifera

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<210> 754
<211> 923
<212> DNA
<213> Diabrotica virgifera

<400> 754

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<211> 1312
<212> DNA
<213> Diabrotica virgifera

<400> 755
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<210> 756
<211> 442
<212> DNA
<213> Diabrotica virgifera

<400> 756
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ctttgtagac tctcaaatat gtggaaagtg gaattacacc acgtttttta aacttgcggg 360
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atcctaagaa acacagtaaa cc 442

<210> 757
<211> 404
<212> DNA
<213> Diabrotica virgifera

<400> 757
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ttccttgaat gccaaggatc tgagactgtt ggagaaatta aggaccgtat tgcatctttg 120
gaatcgctta aagcatccga aatcagtctt tatgctgctg gagttccagt ttctgaggaa 180
aggttggtag ccgattttga gaacacagac attgaattga ctgttggctt gcctggtggt 240
aaagttcacg gatctttagc tcgtgcaggt aaagtaaagg gacaaactcc aaaagtagaa 300
aagcaagaaa agaaaaagaa gaagactggt agagctaaga ggcgtattca atataacaga 360
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<210> 758
<211> 747
<212> DNA
<213> Diabrotica virgifera

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tgagtactgc aaatctttgg atgaaaatga aattgcagag aatgcatttt cacttatatt 420
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agagcgcgag gccaagaata tgatgagaga aaaggcaaaa gaacttcaga gacagaagat 600
cgaagcggcc aaaaaaggag ggaagacctc gtttggtagt agcggtggct ttggcagctc 660
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<210> 759
<211> 1285
<212> DNA
<213> Diabrotica virgifera

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caatacatct cacataatcc gaatg 1285

<210> 760
<211> 442
<212> DNA
<213> Diabrotica virgifera

<400> 760

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acttgtctgg tagagaaact atctccagag tcactggagg tatgaaagtc aaagctgaca 180
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gccgtggtcg tagattgtag ac 442

<210> 761
<211> 959
<212> DNA
<213> Diabrotica virgifera

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tggcatataa gtatccaaag agtacttata attcaagcat tcgtttcgca tatatctact 720
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gataatttte ttctggtagg cagacagttc tgaagaagcc ctcttcaaag cgataagtac 840
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<210> 762
<211> 429
<212> DNA
<213> Diabrotica virgifera

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tgatatcatt taaagaagca cctacaatag ccctttggaa tttctgtgtc cttctggtac 180
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gatgacaac 429

<210> 763
<211> 828
<212> DNA
<213> Diabrotica virgifera

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gtacccattc tttttgatct tcctttccac gaccacgtcc tctgccacga cctctacctc 720

ggcctctggg accacctcta ccgcctccac ggccaccacc tccaaaacct cctcggaatc 780
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<210> 764
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<212> DNA
<213> Diabrotica virgifera

<400> 764
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agtc 664

<210> 765
<211> 434
<212> DNA
<213> Diabrotica virgifera

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acaaggtatt ggtggacgac ttaaccgtct gccagctgca ggatctggtg acatgattgt 180
agccacagtc aaaaagggta aaccagaact caggaaaaaa gtcatgcctg cagtagttat 240
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aaaagaatgt gcagatttat ggcccagaat tgcatcaaat gcaagcagta ttgcttgatg 420
tgtatatgtt taag 434

<210> 766
<211> 1283
<212> DNA
<213> Diabrotica virgifera

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<210> 767
<211> 685
<212> DNA
<213> Diabrotica virgifera

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acgctaccca cagagatgct tactc 685

<210> 768
<211> 859
<212> DNA
<213> Diabrotica virgifera

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<210> 769
<211> 586
<212> DNA
<213> Diabrotica virgifera

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<210> 770
<211> 563
<212> DNA
<213> Diabrotica virgifera

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cagactggta ggccagaaat ggttgtgggg tggtatcatt cccatccagg tttcggatgt 360
tggttgtctg gagtggatat caacacccag caaagttttg aggctctctc ggaaagagct 420
gtagcagtag tagttgatcc aatccagtca gtgaaaggca aagtcgttat tgatgccttt 480
aggttaataa atccgaatat gatggtattg ggccaagaac ctcgccaaac tacatccaac 540
ttaggacatc tacagaaacc atc 563

<210> 771
<211> 1216
<212> DNA
<213> Diabrotica virgifera

<400> 771
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aaaaacgtcc actccaaaat aacagaagct ataaagaaag atgatatggc cccatggtat 120
gaacttattt gtaaagatgc tggttggaaa cttgatgcta atctactgag tgcattaaaa 180
gctaagaacg ctgagaagat caagcttttg gatgaagcca tagaagatgc cgagaaaaat 240
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ggtgataaag acaacgcagt tagtactttc agacaaacat atgataaaac tgtatcactt 360
ggtcatcgtt tagatattat ttttcacttg ataagaattg gtttgttctt catggaccat 420
gatctcatca caagaaatat tgaaaaagct aaaaccctta ttgaagaagg aggtgattgg 480
gatagaagaa atcgtttaaa agtgtatcaa ggtgcatatt gtatgtcagt acgagacttc 540
aaatcagctg ctaacttgtt tttggacaca gtaagcactt ttacatcata cgaactaatg 600
gactataaag catttgtcag gtatactgta tacacctcta ttattagttt gccaaggaac 660
caattaagag ataaagtggt caaaggttcc gaaatattgg aagtactgca ttcagaacca 720
tttgtaaaag attacctttt ttctttatat aattgtcagt atgctgaatt tttcacaaat 780
cttgcagaag ttgaaacagt tctcagaaaa gattatttct tgaatcctca ctatcgtttc 840
tatgtaagag agatgaagat acttgcttat acacaattat tggagtcata taggtctctt 900
actttacaat acatggcaga agcctttgga gttactgttg aatacattga taaagaactg 960
tccacattta tagcagcagg aagattgcat tgtaaaattg atcgagttgg gggaattgtt 1020
gaaactaata gaccagattt aaagaatgcc caatttaatt ctgtggtaaa acaaggagat 1080
ttactgctga atagagtcca aaaattatct agggtgatca atatctaaaa aatgtattct 1140
taagtttata agtaaattat aaaacatact gataatttga cttgattgta ctaattttct 1200
atgtttatct agtgct 1216

<210> 772
<211> 617
<212> DNA
<213> Diabrotica virgifera

<400> 772
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cagtaggaat taaagcatca aatggtgtgg ttattgcaac agagaacaag cacaaatcaa 120
ttctgtatga tgaacacagt gtccataaag tagaaatgat cacaaaacac attggtatgg 180
tttattctgg tatgggtcct gactatcgcc ttcttgtgag acaagcacgc aagatggctc 240
agcagtatta cctagtatac catgaaccca ttcctacagt acagttggtg caaagagtag 300
cgactgtaat gcaagaatac acccaatcag gaggagttag accatttgga gtgtcgctac 360
tgatttgtgg ttgggataac aacagacctt acttgttcca atgcgatcct tctggagctt 420
actttgcttg gaaagctact gcaatgggaa agaattatgt caatggaaaa acgttcttag 480
aaaaaaggta cagtgaagag ctagaactcg acgatgctgt gcacactgct atccttaccc 540
tgaaagaaag ttttgaaggc cagatgacag ctgacaacat agaagttggt atttgcgatg 600
ctaatggatt cagaagg 617

<210> 773
<211> 736
<212> DNA
<213> Diabrotica virgifera

<400> 773
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accaggagta gtaactgctc cctcgtctaa ccttaataca gcctttcgtc taattaaaga 120
agttcaaagg aaatttaaga cacgagaagc tgaagaaaaa gaaaaagagg atttggttaa 180
acagggcaca ttagtacttt cacagaataa aggaaatcct aaattaaaag atctgtatat 240
taggccaaat attgtttcaa aacgtatgac aggatcatta gaagctcaca ctaatggttt 300
taggtatact tctgtgaggg gtgataaagt agacattctt tacaacaaca tcaagaatgc 360
cttctttcaa ccgtgtgatg gagaaatgat aattctgtta cattttcacc taaaacatgc 420
tatcatgttc ggaaaaaaga aacatgttga cgttcaattc tgtacggaag tcggagaaat 480
taccacagat ttgggcaaac atcaacacat gcacgatcga gatgatctgg ctgctgagca 540
gtcggaaaga gagctcagac aaaaattgaa aactgcattc aaaagttttt gtgaaaaggt 600
tgaatctatg acaaaacaag aaattgaatt tgatacacca ttccgggagt tgggatttcc 660
aggagccccc ttccgctcta cagtccttct ccagcctaca tctggttgtt tggttaacct 720
gactgaatgg gcctcc 736

<210> 774
<211> 718
<212> DNA
<213> Diabrotica virgifera

<400> 774
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gttaaccgta cccaaggaac caaaattgcc tctgaaggtt tgaaattcag agtttttgaa 120
gtgtctttag ccgatttaca aaatgataat gacgccgaaa ggtctttcag aaagttccgt 180
ttgatagctg aagatgttca aggtagaaat gttttaacaa atttccacgg tatggattta 240
accactgaca agctgaggtc catggttaag aaatggcaaa ccttaattga agcatctgct 300
gatgtcaaga catcagatgg atatttactt agggtgttct gcataggctt taccaacaaa 360
gaccaacttt ctcaaaggaa aacatgctat gcacaacata cacaagttag agctatccgt 420
aaaaagatgg tagacattat taccagagac atccagggct cagacatcaa agaagtagtg 480
aataaactcc ttcctgacag catagccaag gatattgaaa aggcctgcca gggtatctac 540
cccctacatg atgtgtacat ccgtaaagtt aaagtattga aaaagcctcg ttttgaactc 600
tccaaattgt tggaattgca tggtgatgga ggcaaaggtg gtgctggtga ctccactggt 660
gaagctggtt ctaaagtcga caggcctgag ggatacgaac caccagtaca agaatccg 718

<210> 775
<211> 598
<212> DNA
<213> Diabrotica virgifera

<400> 775
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gttatgcgat gtggtaaaaa gaaagtatgg ttggacccta atgaaatcaa cgaaattgcc 120
aacactaact caagacagaa catccgtaag ttgataaagg atggtcttat tattaagaag 180
cccgtagctg tacattcccg tgcccgtgtt cgcaaaaaca ctgaagcccg caggaaagga 240
aggcactgcg gttttggtaa aaggaagggt actgctaatg cccgtacccc acaaaaggaa 300
ttatggattc aacgcatgag agttttgcgt cgtctcctta aaaaatacag ggaagctaaa 360
aaaattgaca gacatctata ccactcactc tacatgaagg ccaagggtaa cgtattcaag 420
aacaagcgtg tccttatgga atacatccac aagaagaagg cagagaaagc ccgtgccaag 480
atgttggcag accaggccaa tgccagaagg atgaaggtaa aacaggctag agaaagacgt 540
gaggaacgta tcgccacaaa gaaacaagaa gttttgcaga actacatgag ggaggatg 598

<210> 776
<211> 683
<212> DNA
<213> Diabrotica virgifera

<400> 776
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gttatcctga taatcctatt aattgtgtta ctactagatt tgtaaaaact gctacaaata 120
aaatgaggtg cccaattttc tgtatggcct ggacacccga gggcagaaga ctggtaactg 180
gtgctagttc aggagaattc acattatgga atggattaac atttaatttc gaaactatct 240
tacaggcaca tgacagtcca gtcaggacga tggtatggag tcacaatgac agctggatga 300
taacaggtga ccattctggt tatgtcaaat attggcagtc gaacatgaac aatgtgaaga 360
tgttccaagc gcacaaagaa gcacttcgag gcataaggta tctacaactt ctctccgtaa 420
ttataaaact tgtacactta cttatatttt actttatcaa taaaagatcc ctccttctcc 480
ctacattagt gcaaaataaa gaaatcaatt ttaaataacg ccatcaatat tttccaaaca 540
atacattgca tttcaaattg tctagttgga aacattgtac ttaactgact ctattagagt 600

ttctgaatag accatacaaa actaattccc ttaaagtaag atggtgaatg gacattgatt 660
ccgaaggcaa cagtccccaa aca 683

<210> 777
<211> 321
<212> DNA
<213> Diabrotica virgifera

<400> 777
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tccaaagggg tcacaaaacc accaaaatct cagacaaatc caaactgaat aaagttcgtc 120
ccgctaggtt gaaggggatc caaaccaaac acaccaaatt tgtcagagac atcatccgtg 180
aagtcgtagg acatgctcca tatgaaaaga gagccatgga attgttaaag gtgtcaaagg 240
ataagagggc cctgaaattc ctgaagcgtc gtcttggcac acacatcaga gccaagagga 300
agcgtgaaga actatccaac a 321

<210> 778
<211> 311
<212> DNA
<213> Diabrotica virgifera

<400> 778
ccagccccac aagtacaatc tggtgggccc atggacgtaa atcaagcact ccaagaggtc 60
ttgaaaacag cccttattca cgatggagtc gttcatggtt tgcatgaggc tgctaaagct 120
ttggataaaa gacaagccgt actttgtgtg ctcgctgaaa actgtgacga gcctatgtat 180
aagaaactag tctcagcttt atgctcagaa catcaaattc ctcttattaa ggtagacaat 240
aacaaaaaat taggcgagtg gtcagggtta tgcaaaattg ataacactgg taaagcacga 300
aaggtcgttg g 311

<210> 779
<211> 501
<212> DNA
<213> Diabrotica virgifera

<400> 779
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tgtaactggc aaggaggata ctgaacttat ggcatatcaa attgctttg atctctatga 120
gtcagctact caacagtttt tggaaagagt attagttgca ttaagagcca cagcaccagt 180
tccatctttg ctggaagaaa aagcaaagcc aaagccttct ggtgaaggag agggtgctat 240
gtcaaccgag actggagaac catctacaga aacaaaagaa gaaaaattaa aagaagaaaa 300
atctctggat agtttgtctg atcaggataa ggaacatcag aaaagaattg agaaacttca 360
tactatactc tcaggggagg tctctataga actgcacctt caattcctca tcaggtcaaa 420
tcatgctgat ctactgattc ttaaacaaac aaaagagact gtcagagtta gtatttgcca 480
cactgctact gtaatcgcaa a 501

<210> 780
<211> 370
<212> DNA
<213> Diabrotica virgifera

<400> 780
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gaccaaggcg tacaggaaaa cagtaggcaa agagttaaca atagatccat catttgaatt 120
tgaaaaacgt agaaacatac cacttaaata taacagagaa acctggtcaa aggctgtaga 180
agcaatgaaa acggtagaga aaataaaaca gaaaaggcaa ggagcctaca tcatgcaaag 240
attacgtaaa ggtagagaaa tcgaacaaga acgagacatc aaagaggtac aaagggatct 300
gtctcttatc agatccccag ctgttggact taaagaaaga aaacaagaag aatctatggc 360
gcaagatcac 370

<210> 781
<211> 673
<212> DNA
<213> Diabrotica virgifera

<400> 781
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aagaggatat gatttttagt gctgaaggta ttacgccaga cattatcatt aatcctcacg 120
ctatcccctc ccgtatgacg attggtcact tgatcgagtg catccaaggt aaggtatcat 180
ccaataaagg agaaatcggt gatgctacac ctttcaacga tgccgtcaac gtacagaaaa 240
tctccacttt gttacaagaa tatggttatc aactcagagg caacgaagta atgtacaacg 300
gccatactgg acgtaagata aatgctcaga ttttcttagg acctacctat tatcaaagat 360
tgaagcacat ggtggacgat aagattcatt caagagctag aggaccgttg cagattctcg 420
tcagacagcc tatggagggt cgtgcaagag acggcggtct acgtttcggt gagatggaac 480
gagattgtca aatttcacac ggtgcggcac aattcttaag agagaggctg tttgaagttt 540
ccgatcctta tagaatccat atttgcaact tctgtggttt gatagctatc gccaatttgc 600
gtaacaacac ctttgaatgt aagggttgca aaaataagac gcagatatcg caagttagac 660
tgccttatgc tgc 673

<210> 782
<211> 411
<212> DNA
<213> Diabrotica virgifera

<400> 782
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acattcgaat gatcaacccc aggttactga aagtagagaa atggttcggt accaagaagg 120
aattagctgc tgtcagaaca gtatgctctc atgttgaaaa catgttaaag ggtgttacaa 180
aaggatacca atacaagatg agagcagcat atgctcactt tcccattaac tgtgtcacca 240
ctgaaggaaa cacagttatc gaaattagaa atttcttggg agaaaaatac atcagaagag 300
taaagatggc cccaggtgtt acagtagtaa actccaccaa acaaaaggat gaacttatca 360
ttgaaggaaa ctcattggag gatgtttcaa agtcagctgc ccttattcaa c 411

<210> 783
<211> 553
<212> DNA
<213> Diabrotica virgifera

<400> 783
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aggaagttcg aattaggacg tccagccgca aataccaaac ttggagcacg tagaattcac 120
tatgtccgta cacgaggagg taacttgaag taccgtgcat tgaggattga aaaaggaaat 180
ttcgcatggg gcagcgaagg tactgctcgt aaaacacgta ttattgatgt cgtttacaat 240
gccagtaata acgaattggt acgtaccaaa acattggtaa agaatgccat cgttgttatt 300
gacgcaaccc ctttcagaca atggtacgaa agccactata ttttaccttt aggacgcaag 360
aaggggggcaa aattgacagc ggaagatgaa gaaatgttca ataagaaacg tagcaaaaaa 420
gtacagaaaa aatatgaaac taggcaaaaa acagctaaag tagaacctgc attagaagaa 480
caattctcaa ctggaaggtt attagcttgc ttagcgtcaa ggccaggaca atgtggtaga 540
gctgatggtt acg 553

<210> 784
<211> 902
<212> DNA
<213> Diabrotica virgifera

<400> 784
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aggtatcaat gaatttaaga ttgatcttct ccaaagcaat acgtttagtg tggactaaca 120
atgacttcct caatgtaata acacgtttct ttggtcccat aacacgtcct ttaatcataa 180
caaagtcatt gttaacttca ccataatgag gaaaaccacc cattggggta atagtttttt 240
cactaagatc gtaggcagtg gctgcattat ttttgacaac cttgccatct ttagtgtgga 300
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gaccagcacg agcaactgtg aatgatactc ttgaaggatg ccatgctcca atacaggcaa 420
ctttacgaag acctttgtgt gtcttacggg gcaatttctt tgtgtgccaa cgagaagtaa 480
caccttttgta tccatgaccc ttagtaacac caatgcaatc aatcatttca tcttgagcaa 540
aaacgttggc aataggaata ggcttttcaa ggtgttcttt agcccaagct actttgtcag 600
ctacactacc accattcaat tgaatttcca taatgtgggc tttcttttga cgttgtttca 660
acaatttcat ctgagtatga gcaataactc tgacaacttt acagtattta acaatcttct 720
ttaagtcctt ttcgatggac ttctttccta aatcatcact ccatttcttg gaagctttgg 780

taaatgcctt cttcttgctc ttgtaccagt tcttgtagaa gcgcctgcgg caatcttcag 840
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cg 902

<210> 785
<211> 1026
<212> DNA
<213> Diabrotica virgifera

<400> 785
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gttgtaaaga gttcattggg accagttggt ctagataaaa tgttggttga tgacattgga 120
gatgtgacag taactaatga cggagctacc attttacgtc ttttagaagt tgaacatcct 180
gccgccagag tattagtaga attggctcag ttacaggatg aagaagtagg agatggtaca 240
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aagatacatc caacttcaat tataagtgga tacagattag catgcaaaga ggcttgtagg 360
tacattcagg atcatttgac tattccagtc gaagaattgg gaaaggagtg catcataaat 420
gttgccaaaa cctcgatgag ctcaaaaatt attggagctg atgctgatct tttttcacaa 480
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cccataaagg ctgtcaatgt cttgaaagca catggtaaaa gcgccagaga gagcttcctt 600
gtaccaggtt atgcattaaa ctgcaccgtt gccagccaag cgatgcccaa aaaaattgtt 660
aacgccaaaa tcgcatgttt agatttttca ttgcagaagg ctaaaatgaa gatgggtgtt 720
caggttttga ttactgatcc aaatcaactg gaagcaatcc gcacaagaga gctcgacatc 780
accaaagaac gcatccagaa aatcctctct accggtgtta atgttattct tgcgagtggt 840
ggtatcgatg atctttgcct aaaatacttc gttgaaaatg gagcgatggg tgtaagaaga 900
gtaaagaaag ctgacttaaa acgcattgcc aaagcaactg gtgccacttt cctaacttct 960
cttagtaaca tggagggaga tgaaagtttt gattctagca tggtaggaga ggcagcggaa 1020
gttgtt 1026

<210> 786
<211> 469
<212> DNA
<213> Diabrotica virgifera

<400> 786
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actgtcaggt cttttggtat ccgtcgtaat gaaaaaattg ctgtacactg tacagtaagg 180
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ggtatcaaat atgatccaag tataggtatt tacggtcttg acttttacgt agtattagga 360
agacccggat tcaacgtagc ccacaggagg tcaaagactg gtaaagttgg attctcacac 420
agattgacaa aagaggatgc catgaagtgg ttccaacaga aatacgacg 469

<210> 787
<211> 1159
<212> DNA
<213> Diabrotica virgifera

<400> 787
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ttttgtaatg gtacattgtt ttctgagcgt ataggtcgtg gtctggaatt atctattgtc 120
atcttcaact gtagtagaca ttatcaaatt tggaatttcg tgtgaatttg tttgttgccg 180
taccaaacaa tccggaaatt tctatacttt cagttggtgt aaagggttat cctaactatc 240
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ataatactta ttaatttaat gatataatta aaacttttca tggaataaac tttcaagttt 360
gtgaaagcat aaatttggaa ataatattac aaaaaagcac atcatattat actcctttag 420
gataaattag tatattgcca tcatttactt tttacacgtg tttattacat aacgggccca 480
cattgtttta aatgaaaatt tctacaaatt tgtctctaca tttaataatc atctagatca 540
aattcttcgc cgttatccat atcgtctagt tgtaaacttt ggaagtctac tttgtaccgg 600
agcaaacctc caattccacc aaaccctcga acaaattggg agccctcttg agatttgtct 660
gtaataattt ctaaagtggc accgaagttc ttgtaattat tcgccaacca ttcaagaaga 720
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tctttttctt gttcaggagt taaatgcagt atagtttccg aacctgtagc atggtttttc 840
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tccaagcccc taagagtatc ttcaactcca aaacagtatt tccccgtatc ttggctaatt 960
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tcagctgcta attcgatggc ttgattaaat ccattctcac caccatacga gacatctact 1080
agtttgatta ctttagcttg taaccctgga tcaaacatat cagattgact aagttcagtc 1140
ttaaaatcgg cactacccg 1159

<210> 788
<211> 1261
<212> DNA
<213> Diabrotica virgifera

<400> 788
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atctcaaact cctcagatgc cttggataag atccgttacc aatcactcac aaatccatcc 180
tgtctcgact ctggaaaaga tttgcacatt aaaattgttc caaacaagag tgaaggaacc 240
ttaaccatca ttgatactgg tattggtatg acgaaagcag atttagttaa caaccttggt 300
acaatcgcaa aatcaggaac aaaggcattc atggaggccc tccaagctgg agctgatatt 360
agtatgattg gtcaatttgg tgtaggtttc tactcagcct acttagttgc tgatcgagta 420
gtggttgtat caaaaataa cgatgatgaa cagtacattt gggaatcatc tgcaggaggt 480
agcttcacaa taagaccaga tgttggagaa ccattgggac gtggtacaaa aattgttctg 540
tacatcaaag aggatcaaac tgaattttta gaagagaata aaattaagga gattgtaaag 600
aaacactccc agttcattgg ttaccccatt aaattgcttg tagaaaaaga aagggaaaag 660
gaactaagtg atgatgaagc agaagaagaa aagaaggaag aagaggaaga caaagataaa 720
cctaaaattg aagatgtagg agaggatgaa gatgaagata aaaaagatga gaaaaagaaa 780
aagaaaaaaa ctattaaaga aaagtacact gaagatgagg aactaaacaa aaccaaacca 840
atctggacaa gaaatgctga tgatataacc caagaagaat atggtgaatt ttacaaatca 900
ttgacaaatg attgggaaga ccatttagca gtaaaacatt ttagtgttga gggtcaactt 960
gagtttagag ctttattgtt tgttcctcgt cgtgtacctt ttgatttgtt tgaaaacaag 1020
aagaagaaga acaacatcaa attatatgta cgcagagttt tcattatgga caactgtgaa 1080
gaccttatcc cagaatatct taactttatt aagggagtag tagactctga agatttacct 1140
ctaaacattt caagagaaat gttgcaacaa aataagattc ttaaggtcat ccgcaaaaat 1200
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<210> 789
<211> 905
<212> DNA
<213> Diabrotica virgifera

<400> 789
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tcagggtgtg atggtaggaa tgggacaaaa agattcctat gtaggtgatg aagctcaaag 180
taaaagaggt atccttacct taaaatacca catcgagcac ggaatagtca caaactggga 240
tgatatggag aaaatttggc atcatacatt ctacaatgaa ctcagagtag ccccagaaga 300
acaccctgtt ctgttgacag aagctcctct caaccccaag gccaacaggg aaaagatgac 360
acaaataatg tttgaaactt tcaacacccc agccatgtat gttgccatcc aggctgtact 420
ctccttgtat gcatctggtc gtacaactgg tattgtgttg gattctggtg atggtgtatc 480
ccacactgtc ccaatctatg aaggttatgc tcttcctcat gcaatccttc gtttggactt 540
agctggtaga gacttgactg attacctcat gaaaattttg actgaacgtg gctactcttt 600
caccaccaca gcagaagagg aaattgttag agatattaaa gaaaaactct gctatgtagc 660
tttggacttc gaacaagaaa tggcaacagc tgctagttcc agttcccttg aaaagagtta 720
tgaacttcct gatggacaag tcatcaccat tggtaatgaa agattccgtt gcccagaagc 780
tctcttccaa ccatccttct tgggtatgga agctgctggt attcatgaaa caacctacaa 840
ttccatcatg aagtgtgatg ttgatatccg taaggaccta tatgccaaca ctgtactctc 900
tggag 905

<210> 790
<211> 873
<212> DNA
<213> Diabrotica virgifera

<400> 790
cacagacaca aggaaagatg aacaggaacg ttgtattacc atcaaatcaa ctgccatatc 60

tatgttcttc gagttagatg ataaagatct tgtgttcatc accaacgctg accaacgtga 120
gaaagatgtg aaaggtttct tgattaacct tattgactct cctggacacg ttgatttctc 180
atcagaagta acagctgccc ttcgtgtcac tgatggtgcc cttgtagtag tagattgtgt 240
atctggtgta tgtgtacaga ctgaaactgt actccgtcaa gctattgcag aacgtattaa 300
gccaatttta ttcatgaaca agatggaccg tgccctctta gaattacagt tggaatctga 360
agaactttac cagactttcc aacgtattgt tgaaaacgtc aacgtcatta ttgccaccta 420
caacgatgat tcaggtccaa tgggtgaagt cagagttgac cccagcaaag gttcagttgg 480
ttttggatca ggtctccacg gatgggcttt cactctcaaa caattctctg aaatgtatgc 540
cgagaaattc aagattgatg tagttaaact aatgaaccgt ttgtggggtg agaacttctt 600
caaccccaaa accaagaaat ggtccaaaca aaaggatgat gataacaaac gttcattctg 660
tatgtacatc ttagatccaa tctacaagat ttttgactcc atcatgaact acaagaaaga 720
agaatatgaa gcactccttc caaaattggg tattgcctta aaacatgaag ataaagacaa 780
agatggtaaa caattattga aagtagttat gcgtacctgg ttgccagctg gagaagcttt 840
acttcagatg atagccattc acttaccatc acc 873

<210> 791
<211> 877
<212> DNA
<213> Diabrotica virgifera

<400> 791
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tcactttgtt ggagaattca agaggaaata caagaaggac cttaccacaa acaaacgtgc 120
cctccgtcgt ttgagaacaa gctgtgaaag agctaagcgt acccctttcct catcaaccca 180
agccagcatt gaaatcgatt ctctatttga gggtattgac ttctacacct caatcaccag 240
ggctagattt gaagaactga acgctgattt gttcagatct accatggaac ctgtagaaaa 300
ggccatcagg gatgccaaga tggacaaatc tcaagttcac gatattgtgt tggttggtgg 360
atctacccgt attccaaagg tacaaaaact gttgcaagat ttcttcaatg gtaaagaatt 420
gaacaagtcg atcaaccccg atgaagctgt tgcttatggt gcagccgtcc aagccgccat 480
cttgcacgga gataagtctg aggaagtaca ggacttgctc ttgctcgatg tcactccact 540
ttcattgggt attgaaactg ccggaggtgt tatgactgcc ctcatcaaac gtaacactac 600
cattcccacc aagcaaaccc agaccttcac tacttactct gacaaccaac ccggagtact 660
tattcaggta tatgaaggtg aacgtgccat gaccaaggac aacaacctct tgggaaaatt 720
cgaacttacc ggcattcctc ctgcgccccg tgttgtccct cagattgaag taaccttcga 780
cattgatgcc aacggtatct tgaacgtcac agctattgaa aaatccacca acaaagaaaa 840
caagatcacc atcaccaatg ataaaggtcg tctcagc 877

<210> 792
<211> 375
<212> DNA
<213> Diabrotica virgifera

<400> 792
cgtggattga gaaccgctag gaaacatgtg aatcaccgtc gtgaacaaag atgggctgat 60
aaagattaca aaaaggcaca tttaggaact agatggaagg ctaatccttt tggaggtgct 120
tctcatgcta aaggaattgt attggaaaaa gtgggagttg aagcaaaaca acctaactct 180
gctattcgca agtgcgttag ggtacagtta attaaaaatg gtaaaaaaat cacagccttc 240
gtacctagag atggttgctt aaaccatata gaagaaaacg atgaagttct agttgcaggt 300
tttggacgta aaggtcatgc tgtaggagat attcccggag ttagatttaa ggttgttaag 360
gtcgctaatg tgtcc 375

<210> 793
<211> 547
<212> DNA
<213> Diabrotica virgifera

<400> 793
cgcaactggg tcaccagctt ggattctcat caacatattt tcctttaatt tatatcttgc 60
taacaattct tgtttttctt ctggtgtcat taccacatgt tctggtacca attcatgttc 120
agtaatattg atcaacaact cggattccaa aaattgttct aatatgtatt ttggagccat 180
atcaactagt gactgtttgg cagatggtgt catacctgct tgaacaacaa taatagctct 240
atgaatattt tcttcctgca tacgggaaca ataggtttta atggttttta ttccaatttt 300
tggttcgtct gggaaaaata caaacaactg gtctgtagga tcatcattgt gagctaccaa 360
cacgatcaaa tcacttcttg acggtctttt ctcgctaggt ttgtctccaa actgttcctt 420
aaattgttct aatgtttgat ccaattcatc ttgagttact aggtagcctc tatcgtgaca 480

taactgcatg acagttttc tgattctcca tagtttgtac gtttcagctt cgtcatccat 540
tatttag 547

<210> 794
<211> 334
<212> DNA
<213> Diabrotica virgifera

<400> 794
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acaaatggga ggcttatttg ggtcttctac aagctgaata tacggaaggt gacgctttag 120
atgcccttgg cttgaaacgt tactgctgca gaaggatgct tttgggacat gtggacctca 180
tcgaaaagtt gttgaattat gctcctttag aaaagtgaaa ctgtagcttt aaggtttatg 240
tatataattt aaaaataatg accttatcca tagttaattt gtatatttta gttctacaaa 300
ataatgcatt gactttcata ggcttataat ttgg 334

<210> 795
<211> 630
<212> DNA
<213> Diabrotica virgifera

<400> 795
aagtggtgca ttttgtaacc atcgtttttg tgtattgttt aaagttttca gttgcaaagt 60
gtagatctca taaatataac actctatttt gaaaatggca aacacaaaca cagacttaac 120
ggaagaagac gcagcagacc tacagtttcc aaaagaattt gaaaatgcag aaactttatt 180
aatatcggag gttcacatgt tattagaaca tagaaaggat caaaatgaat ctgcgaagga 240
cgagcaagaa ttttcggatg tatttatgaa aacattaacg tatacagatc gatttaggaa 300
atttaaaaac aaagaaacca tatcagctgt aagaaattta ctaatgcaga ccaaaaagct 360
tcataaattt gagttggctg ctatcgcaaa cttgtgtcca gaaaccacag aggaggcgaa 420
atctctaatc ccttccctgg aagggcgatt tgaagacgag gaacttcagg caatcctgga 480
tgatattcaa actaaaagaa gtatccagta ctagagaaaa aagtcaatag tcatatttaa 540
tttcagattt tttcttttta tattttggaa caatttaatt atttatatta tttgaaaatg 600
caacaacttt ttcacgatgt aatgttagtg 630

<210> 796
<211> 1152
<212> DNA
<213> Diabrotica virgifera

<400> 796
acgccaaacc tcctaagcct aataaaatct ttcctaagac aactacctac aatacgatca 60
tcattgatac ccaagttgac gagaacacaa caataaggcg tratatcaag gaatctcaag 120
catctctctc aaatgagcaa gcattttgat gattctccct ccaggcgtcc aatttaaatg 180
caacatataa aaacaattgt gccgtcaaaa acacgctata aattgccaaa actatataag 240
agaatcaaca aaatcctcga agttgtatgt ttatccctat ttactgtaaa aaagatataa 300
aaaatccaaa attaattatc ttctgtgttt gttagttgat gagacccttg gccttgaaga 360
gatcacgcat gagccccttа aggtacttaa tttcgcgatt tagatcagct atttgacttc 420
ccaaatcaac gttcttgtcc agaagaccct tttcttcact aagaattacc tcaatctcgg 480
ccttcttctt ttggcgatac ctggtagcag cgttcttgtt ttgctccttc ttgcgaacct 540
tcttgtcctc ggtaccgctt ttagagtaag gtctggtcct tttgcgggat gacttaacag 600
gaagttcgtc gttgtactgt tcaattggct ctggcatcca ttccggatca gaagagcagt 660
cgccaaagtt gctgctactg ctactactgc tcggggatcc aggactgctg cttccgctac 720
tgctccattg catgtcttcc acacgagttc tgactagctc gtccacgacg gccagctcca 780
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cattggagtt gacaaactca ttcttcaagt tttgaacagg tactggaatg gcacgcggag 1080
gttccacttc gtccaggatt ggtagtattt tttcatcgag aaggaagggt tcgtaacaga 1140
tagacatcat tc 1152

<210> 797
<211> 988
<212> DNA

<213> Diabrotica virgifera

<400> 797
ctcttggatt gatgcgtgag tttagatctt cgattctaac atgtcgacgt tcagcttgta 60
gtaaacgtat gggtaatact ctgattggcc gaatccgagg cctggaatgt caacgctatc 120
aacgttaggt cctgaaaggg cagcactact atcgaggtgg ccgtaaagtt ggttcaagac 180
atctcttaaa cgttttaatt gtttcttatt ggggtggatt aaaatagctt ggaaattgac 240
ggggaggcca tatcttaaaa cagattcaac aaataccctc aacgctttaa cgtgaatcca 300
ggcgcagaaa cactcgctga agttgacttt aagccatcta actaatggac caaattgctt 360
ctttttatcg gtgacgagtt tggttatctc gttctttcca gctgccagtt cctcttcgtt 420
atatatgaaa tcacgaacga tgaacttctt ttctctagcg tgtaacttga attcttcgac 480
gacctttttg aatagggata cagtatatag accgtgttcg ttatcctgtt taatcagttg 540
tgaagaacga gggactatca tgtcggtaat cttttcgtat gtcgcattcc attcgttgaa 600
ttgggctttt ggaactataa ccaacaatgt ctgcaaatat tcagaatcca aaataaaatg 660
ttccttttte accaaatctg ccaagtttct tgttagtaaa cttcctgtct gtttcttctc 720
caaattctga agacttcctt tcaagttatt gtacgcagac gatttggtct tcagatcagc 780
gtcaatttgg ccaacttgtt tgctgattat atcggcgatg ttacggagcg attgcttgat 840
gggatatttg gcgatgtccc aagtaaatcg ggttaaataa gtgggcaaat cgctgttatt 900
ggcctgcagg ttttctgacc acttgtctct ctgttcttca agtacttctc caaggtactg 960
agctaccttt ctggtgacct gctccacg 988

<210> 798
<211> 208
<212> DNA
<213> Diabrotica virgifera

<400> 798
gagtgcctgg agagctgctg gattaaacta cattaactat tccaacattg ctgccaaact 60
tctgaggcag gcacttaaac ctgaacttag aacagaagca atgagaagaa atgaaaccca 120
tattaaagta accaaatggc aagatggaaa gccaataagg gagtccacat tttaaatcca 180
taatttaagt ccaagtctat gtagtgtt 208

<210> 799
<211> 1326
<212> DNA
<213> Diabrotica virgifera

<400> 799
ctgtatctgg tgtcaacggt ccactagtaa tcctcgaaga tgtcaaattt cctaagttca 60
acgaaattgt ccaactcaga ttatctgacg gaagtttaag atcaggtcaa gtacttgaag 120
tcagcggttc caaggctgta gtacaagtat tcgaaggtac atcaggtatc gatgccaaac 180
acactgtctg tgagttcaca ggagatattc tcagaactcc agtctctgag gatatgttgg 240
gaagagtatt caacggctct ggaaaaccta ttgacaaagg tccccaatt ctggctgaag 300
actacctaga tattcaagga caacccatca acccatggtc ccgtatctac ccagaggaaa 360
tgatccaaac tggtatcact gccatcgatg tgatgaactc gattgcccgt ggtcagaaga 420
ttcccatttt ctcagctgct ggtctgccac ataacgatat tgctgcccaa atttgtaggc 480
aagccggtct tgtcaaaatc ccaggcaaat cagttttgga tgaccacgaa gacaactttg 540
ccatcgtgtt cgctgctatg ggtgttaaca tggagactgc tagattcttc aaacaagatt 600
tcgaagaaaa tggttctatg gaaaacgtat gtttgttctt gaacttggct aacgatccaa 660
ccatcgaaag aatcatcacc ccacgtcttg ctctaacagc cgctgaattc ttggcttacc 720
agtgcgaaaa acacgtgtta gtcattttaa ctgacatgtc ttcatacgct gaagctttgc 780
gtgaggtatc tgccgccaga gaggaagtac ccggtcgtcg tggtttcccc ggttacatgt 840
acaccgattt ggccaccatc tacgaacgtg ccggtcgtgt cgaaggccgt aacggttcca 900
tcactcaaat ccccatcttg actatgccta acgacgatat tactcaccct attcccgatt 960
tgacaggtta tattaccgaa ggacagatct acgtcgaccg tcaattgcac aacaggcaga 1020
tctacccacc aattaacgta ctgccatctc tctcacgttt gatgaagtct gctatcggcg 1080
aaggtatgac caggaaggac cactctgacg tttctaacca attgtatgct tgttatgcta 1140
tcggtaagga cgtccaggcc atgaaagccg tagtaggtga agaagctcta acacccgacg 1200
atcttctcta cctcgagttc ctaacgaaat tcgaaaagaa cttcatcacc caaggaaact 1260
acgaaaaccg caccgtcttc gagtctttgg acatcggctg gcaactactc cgtatcttcc 1320
ctaagg 1326

<210> 800
<211> 1034
<212> DNA

<213> Diabrotica virgifera

<400> 800
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tgcattcctt ttcgactatc tttcgacctt agatcgttgg gacagaacag ccgcacggac 120
gataaatgag ttatcagcgt cgaatctaca gtcactacct cgatttcgcc tttctggtct 180
tccaaacacg gtttcggtat catcgtttca tcgctatttt ctggtaatac gtgtaacaaa 240
atatccactt tgactttagt ttgggttttg ctttgtcctt gtttattttt gcgccccgga 300
ataatctctt ggacctttтt gaagttaacc acagcgcccc aatcgtattc atcttcagtc 360
gattttatct ttaaaagtct accaggttga agaaacggca acaaatattg cgagcttgtg 420
agatatgtcc taaacttgac acccaacagg tctaactctg ttctaattac gtgataagac 480
tgtattcgct cttcatcttt gatttcaagc gaattgaaaa gttctaattt ttcgttataa 540
tcatcataat atccgggtat tgcagcttga ttctgaaact ggaagaacga tcgctccaac 600
atatactcag gattgatttc ttcgaccctt agcaagttca gtaccatatt gtaagtcaaa 660
tggaaggcgg agttgatggg gtccggcaaa cctttaacta tgttcctacc ggctgccgga 720
ggcacttttct cgtccaccat caatattacg atacctttat cgtccaggcc tcttcttcct 780
gcccttccag acatttggat gtattctcca gaagtaatcc atctgtactc actgccatca 840
aatttcctca ttccagtaaa caacacagtt cttgcaggca tatttaaacc catagcgaac 900
gtttctgtgg caaatagcgc ttttatgagc ccctcgccga ataaaatctc gatggtttcc 960
ttcaaaatcg gcaacaaacc accgtgatgg atgcctattc ctcttcttaa caacggcaga 1020
aggttctcga cttg 1034

<210> 801
<211> 721
<212> DNA
<213> Diabrotica virgifera

<400> 801
ggagaaacca tcccctatac aggaagcctc tatccctata gcactgtctg gaaaagatgt 60
acttgctaga gcaaaaaatg gaacaggtaa gactggtgct tacagtattc ctgtgttaga 120
gcaaatcgac cctaaaaaag actgtattca agcactaatt atagtaccaa cgagagaatt 180
agcattacaa acttcacaaa tatgcataga actagccaaa tacctagagg tacgtgttat 240
ggtgacaaca ggtggaacaa acttacgaga tgacattatg cgtatatacc aaaaagtgca 300
agttatcata gcaactccag ggcgtatact tgacttaatg gaaaaaggag tagcagttat 360
ggaccaatgt aaaattcttg tattagatga agctgacaaa ttactgtctc aagattttaa 420
gggaatgctt gacactgtga ttaaaaattt accacaagag aggcaaattt tactattttc 480
tgcaactttc cctttgacag ttgaacaatt tatgagaaag catttacgag atccgtacga 540
gataaatctc atggaagaac ttacattaaa aggtgttaca cagtattatg catttgtcca 600
ggaaagacag aaagtgcact gtttaaatac tctattttcc aagttacaaa ttaatcaaag 660
tattattttt tgcaattcta cacaacgagt agaattgctg gcgaagaaat aacagaactg 720
g 721

<210> 802
<211> 361
<212> DNA
<213> Diabrotica virgifera

<400> 802
gctttagggc agtgtgtaga aactcctcgt ctttacgatc tttcagtaca aggcctttgg 60
cagtcacatt agtaaatага tgcagtgata ttttacaaaa tagctcacaa agtaaacctg 120
gttctttgat cgatatacag acaagattct attcaccaga ggtaataaaa cctaaacctt 180
ctgaagaaga aatcaaacaa agggtgctga aagtgtgttc ttcatatgat aaagtaactg 240
cagaaaagct gactttgaac tcccacttca tcaatgatct tggattagat tccctagacc 300
atgtcgaagt catcatggcg atggaagatg aattcggctt tgaaatccca gatgctgatg 360
c 361

<210> 803
<211> 183
<212> DNA
<213> Diabrotica virgifera

<400> 803
ggtctttcta gcacaattta caattccatt tttaaaagaa cctcaacaat ggctttagct 60
gttgttgttt ctgcattttt cttcgagaga actttcgatt tagcaacaga caccttttтt 120
gaaagatata atgaagggaa attatggaaa cacatcaagg acaaatatga gcaggaataa 180

gtg 183

<210> 804
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
C4_Dv49_CG8055 concatemer; putative binding,
carrier activity: CG8055 ortholog

<400> 804
cccgggtttа ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 60
gccctcttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 120
gccctcttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 180
gccctcttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 240
gccctcttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 300
gccctcttta ccatggtagc aaagaaaaat gcgtcgaaaa ataaaagagt tgcactccaa 360
gccctctcta ga 372

<210> 805
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 805
cccgggcaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 60
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 120
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 180
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 240
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 300
gctagccaaa tagatggaac ccttacaact attgaaatgc agagggaagc cctcgaagga 360
gctagctcta ga 372

<210> 806
<211> 490
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C6 concatemer
of highly effective WCR targets, ~50% GC
criterion, consisting of segments in order 5'-3'
from Dv26, Dv49, Dv23, Dv20, Dv13, Dv22, Dv18

<400> 806
catcacgact atcctactag tggagaagta tgcgaagtcg atgtcagaga ttgggaagaa 60
tgcaacaggg ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt 120
tgctactaaa ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa 180
ctacagaggt acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca 240
cacggtgctg cacaattctt aagagagagg ctgtttgaag tctcttcagc aatagacaat 300
ttgactccct ttcctcttgg gagggaaacg aaggccttag ctcccttacc tcatcgtccg 360
tttggattca caaaaacaca tcgacttctc tctgaaatca cctttgggag gcggtcgtcc 420
gatccttttc gatttgttgc tgccattggg gatccatctg gacttctgga ggaagcaagg 480
caggtgcagc 490

<210> 807
<211> 560
<212> DNA

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 807
ggcgcaagcg cttcagtgtt atcatatgcc cacttccagg catttaaatt ccctgactcc 60
atggaagttc tccatcaggg gccaaaaggg gataccaagc cattaccggc cactcatcca 120
cagctttagc atggtacata tagtgatccc aaccgtgcac ctgactgtga cccaactcaa 180
tgtgtaattc cggactgttt ctgctcagcg cccgccacca gttagcgccg aagtacaaaa 240
gggattggac cttatttttg ctggtatcag agctcaacag gcaccacgtg ctcaacgata 300
aaagactggt caggaaggca cattcctttt tgccttactt attcaaggca gggtgcatac 360
agagtagcca cgtaacaaat agcacatagc gaagtgttgt accagcataa tgtataagct 420
cctgtactta ccaaaggctc gttggcagat ctagaccagt tggacgaatt ggttattgag 480
tactgtggtg cagcgccccc tttatggcag atgaatgtct gatggccata ccagacatcg 540
aaggtattga ttacaccacc 560

<210> 808
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C8 concatemer; putative sodium/potassium-exchanging ATPase: CG9261 ortholog

<400> 808
cccggggcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 60
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 120
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 180
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 240
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 300
ggagaagcta aaggaaatgg ccaaattaaa acatgctctc atcacgacta tcctactagt 360
ggagaatcta ga 372

<210> 809
<211> 372
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C9 concatemer; putative sodium/potassium-exchanging ATPase: CG9261 ortholog

<400> 809
cccgggctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 60
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 120
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 180
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 240
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 300
acgatgctcc atgtattttt attaaattga acaaaatata taactgggag ccaatgtatt 360
acgatgtcta ga 372

<210> 810
<211> 1000
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C10 concatemer of genes with putative same/different mode of action, ~50% GC criterion

<400> 810
caagcccgcc aaaatgcgcg aacatctgga actcttctgg tctcgagtga atatccccaa 60
agttcttagg aatgcaatgc ttcctagacg tcgtcgagct ggctctgaaa ctgagcccca 120
agttatagta ggtaacgata attattggac gtggcattag gttataggga aagtgtcaat 180
ctgtctcaaa ttcgcacatt tgtggaaatg gactcgcacg cgcggcccaa cgacggcttc 240
aacaaacaca ggcgcaagtc gacgaagtcg tggatatcat gaaaacgaat gtagaaaaag 300
gtatggcagg aaagaaatgc tgaatccgcc attgaagctc ttaaagaata tgaaccagaa 360
atgggcaaag ttgtccgaca agacaaatcc ggtattcaga aaatccgggc atagcaaaca 420
tgccaaacac acacacgcag aaaggaaata tcagtcagac tcagaatcag atagtgatct 480
ggaatggatt ggacacagag gtgaatcaga ccagaggacg ttcgggggta tattaaaaat 540
aacgttgtgt gcgcacttgg aaccgaaaca agcagaccat catccgcagc tcagtgcgta 600
gccgaatgtg gccgtgcaca ctgtgcattt gtaggacagg tgtgcgggtt tcaacgtcat 660
gttatgatcc cttgcatata ttgatggaaa aacacgccaa agaagagagc agagtattaa 720
aaggagtatt gccaggtaca tagaccagca aggaactgta atcaaaatgg gcgatgaaaa 780
gaaggccagc gatagcgaac acattaatct caaagtactt ggtcaggata atgcagtggt 840
gcagaaggtc agacctctcc tcaacgtcac ccgtatcgag gatgagattg ccaaacttga 900
agagaaagcc caaaaagccc aacgaacacg gcgtagacga aacatcttgt gtagttattg 960
tagaaggaca aaccagcaca ccagaacaac aagaactagc 1000

<210> 811
<211> 478
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12
concatemer of highly effective WCR targets, ~50%
GC criterion, consisting of segments in order
5'-3' from Dv23-Dv13-Dv26-Dv18-Dv49-Dv22-Dv20.

<400> 811
cctcaagctg tcattggcat ggatattctg tgccaagcta aatccggtat gggaaaaacg 60
gctgtttttg caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc 120
aaatttcttc ctccagtgat cataccccata cgatttacct gaggaaatgc cggataatct 180
gaagcaacat ataagggtta tcaacaatac tagagagttg agtcaaacat aattatggca 240
cattgtcctt ggatgtagta tccatcacgc agaccgccga acaacacgac atagccaacg 300
aaatcacaaa cgctattagc aatcctgtcg gattcaccgt aatgcactcc tacgtcgttt 360
ggttcgtatt ggagtactag acgagaacag aatgaagctc gattacgtat tgggtctccg 420
aagtaatgta caacggccac actggacgta agataaatgc tcagattttc ttaggacc 478

<210> 812
<211> 869
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C14
concatemer of gene targets active in several
different organisms, ~50% GC criterion

<400> 812
ccgaagtgag atcggagcca aaaagcattg gttgcttgac ggtccaatgg aaaacgaacg 60
agaagtggat ggcttcagca atgctcggcc aggctgattg ctctttattt tgacactgga 120
atgtacagcg aagcgctaca actggaatcg accttactga ctactcgtct acgatatcgc 180
caaacatctg acatacgaaa acgttgaacg ttggttgcgc gaattgcgcc attcttttct 240
caggtaccaa tgttgctgct ggtaaagcac gtggtattgt tattggaact ggtcttaaca 300
ccgccattgg taaaatcaga actgaaatgt ccaacgaaat tgccaacact aactcaagac 360
agaacatccg taagttgata aaggatggtc ttattattaa gaagcccgta gctgtacatt 420
cccgtgccga tacctacaca gaaagctata ttagtaccat tggcgtagat tttaaaatca 480
ggacaatcga tttagatggg ttacaaaagg ataccaatac aagatgagag cagcatatgc 540
tcactttccc attaactgtg tcaccactga aggaaacaca gttatccagt ttgcaagctc 600
tctggcagat ttcagtcaaa tcggcaccag aaaatccatg agttacttta gcaatgtata 660
caagatctac gtctttagct acaggcgatt tccgatgaaa tagtggcatt aggttatagg 720
gaaagtgtca atctgtctca aattcgcaca tttgtggaaa tggactcgca cgaagaaaaa 780
gtttatcagg ccgtgagaga attaaaagtt caaggaggta tcggttcgtg tgtatcactt 840

aacgtgaaga gcccctggt ttccgacac 869

<210> 813
<211> 2694
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: xx

<400> 813
ggtcgaccca cgcgtccggc ttgagtaaaa actgaaatca tataaaagag ataatttcta 60
ttgtgaacta atttttcaaa agtttctaca ttaagtacat attcattact aaataatggc 120
cgaaaacaaa aatccagagg atttggccac cgcaattctc cgtaagaaag atcgtccaaa 180
tagacttttg gtagaagaag cagttaacga tgataactcc gtggttgctt tgtcacaagc 240
aaaaatggat gaactacaac ttttcagagg agacacagtc ctactgaagg gcaagcgaag 300
gaaagaaact gtttgtatag tattatctga tgatacatgt agcgatgaaa aaattcgtat 360
gaatagaaat aatttaagag ttaggctttc agatgtagtt tctatccaag cttgccctga 420
tgtaaagtat ggcaagagaa tacatgtact tcccatagat gatacagtgg aaggactcac 480
aggaaatctc ttcgaagtat acctgaaacc ctacttcctg gaggcctatc gaccaataca 540
caaagatgac gtattcgttg tacgtggagg aatgagagct gttgaattca aagtcgtcga 600
gaccgatccc gctccgtact gtatcgtggc tccagacacc gtcattcatt gtgatggaga 660
tccaatcaag cgcgaagagg aagaggaagc tcttaacgca gttggatacg acgacatcgg 720
aggttgtaga aaacagcttg ctcaaatcaa agaaatggta gagttaccac tgagacatcc 780
tagtcttttc aaggctattg gagttaaacc accaagaggt attttacttt acggtccacc 840
gggtactggt aaaacactca ttgcacgtgc agtagctaac gaaactggag cgttcttctt 900
cttgattaac ggtcctgaga ttatgagcaa attggccggt gaatccgaaa gcaatcttcg 960
taaagctttc gaggaagccg acaagaattc cccagctatt attttcattg atgaattgga 1020
tgccatcgct cccaagagag agaaaacaca cggagaggtg gaacgccgta tagtatccca 1080
acttctaact ttgatggacg gtatgaagaa gagttcccac gttatcgtta tggccgctac 1140
taacagacca aactcaatcg atccagcttt acgtagattc ggaagattcg acagggaaat 1200
cgatatcgga atacctgatg caactggcag acttgaagtt ttacgtattc acaccaagaa 1260
catgaaattg gccgatgatg tcgacttgga acagatcgct gcggaaactc atggtcacgt 1320
aggtgccgat ttagcttcac tatgttcgga agcagccctt caacaaatca gagaaaaaat 1380
ggacctcatc gacctcgaag acgaccaaat tgacgcagaa gtcctaaact cactggcagt 1440
taccatggag aacttccgtt acgccatgac gaagagcagc ccaagtgctt tacgtgagac 1500
catagtagaa gtaccaaacg tcacttggga cgatatcggt ggcttggcta atgtcaagaa 1560
agagttgcaa gaattggtgc aatatccagt cgaacatcca gataagttcc ttaagttcgg 1620
tatgcaaccg tccagaggag tgttgttcta tgggccgcct ggttgcggta aaacgttatt 1680
agctaaggct attgcgaatg aatgccaagc caactttatc tcagttaaag gaccagagtt 1740
gcttactatg tggtttggtg aatcagaagc aaatgtccga gatatcttcg acaaggctcg 1800
atctgcggca ccttgtgttc tattctttga cgaattagat tcaattgcca aatcgcgtgg 1860
tggaaatgta ggtgatgccg gtggtgcagc cgacagagtt attaatcaaa ttctaacaga 1920
aatggacggt atgggagcca aaaagaacgt gtttattatc ggtgctacaa acagaccaga 1980
tatcatcgat cctgcaatat tgcgtccagg tcgtctcgat cagttgatct acatccctct 2040
gcccgacgag aaatctaggg aagccatctt caaagccaac ttgaggaaat cgcctgtagc 2100
taaagacgta gatcttgtat acatcgctaa agtaacccat ggattttctg gtgccgattt 2160
gactgaaatc tgccagagag cttgcaaact tgccatcagg caaagcatcg aaacagaaat 2220
taggagagaa agagaaaggg ctttgaaccc caatgttgct atggatttgg acgatgacga 2280
tccagtccca gaaatcacca gggcccmctt cgaagaggcc atgcgtttcg ccagacgttc 2340
cgtttcagac aacgacatca gaaaatacga gatgttcgcc cagaccttac agcaatctcg 2400
cggattcggt accaacttcc gtttcccgac agcagctggt ggacctgctg ctccaggagg 2460
taccggagga gaccaggcca acttccagga cgatcctgaa gacgatctgt atagttaaat 2520
gtttcaggtg ggctcaataa gcaccaactt tcaattttat ttttcatttt tgtatttatt 2580
tacagtaact cctcagtttg ctaacaatat tacattgtta acgcattcat atgttgttta 2640
atataatagt tttggaatat aattacaagt ttgtctaaaa aaaaaaaaaa aggg 2694

<210> 814
<211> 622
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: xx

<400> 814

gtcacaagta gggctaaaat gaagcaaatt gtaacaaacc aaacggtaaa aattcctgag 60
ggaattacag taaccactaa gtcaagggta gtaactgtaa aaggaccccg aggtaatctg 120
aagagatcct tcaaacatct taccctggac attcgaatga tcaaccccag gttactgaaa 180
gtagagaaat ggttcggtac caagaaggaa ttagctgctg tcagaacagt atgctctcat 240
gttgaaaaca tgttaaaggg tgttacaaaa ggataccaat acaagatgag agcagcatat 300
gctcactttc ccattaactg tgtcaccact gaaggaaaca cagttatcga aattagaaat 360
ttcttgggag aaaaatacat cagaagagta aagatggccc caggtgttac agtagtaaac 420
tccaccaaac aaaaggatga acttatcatt gaaggaaact cattggagga tgtttcaaag 480
tcagctgccc ttattcaaca atctacaaca gttaaaaata aggatatccg taaattctta 540
gatgggcttt atgtatctga aaaaacaact gttgtacaag aagaataact tgtatttttg 600
aaataaattt aagtttatat tt 622

<210> 815
<211> 670
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: xx

<400> 815
aaattctttt acggaagaca cgttgagagg tgcatttgca cgatgagttc cttaaaactt 60
cagaagaggc tagcagcctc tgttatgcga tgtggtaaaa agaaagtatg gttggaccct 120
aatgaaatca acgaaattgc caacactaac tcaagacaga acatccgtaa gttgataaag 180
gatggtctta ttattaagaa gcccgtagct gtacattccc gtgcccgtgt tcgcaaaaac 240
actgaagccc gcaggaaagg aaggcactgc ggttttggta aaaggaaggg tactgctaat 300
gcccgtaccc crcaaaagga attatggatt caacgcatga gagttttgcg tcgtctcctt 360
aaaaaataca gggaagctaa aaaaattgac agacatctat accactcact ctacatgaag 420
gccaagggta acgtattcaa gaacaagcgt gtccttatgg aatacatcca caagaagaag 480
gcagagaaag cccgtgccaa gatgttggca gaccaggcca atgccagaag gatgaaggta 540
aaacaggcta gagaaagacg tgaggaacgt atcgccacaa agaaacaaga agttttgcag 600
aactacatga gggaggatga agctgcggcc actaagaaat aagttaattg ttttataaga 660
tgactatatt 670

<210> 816
<211> 871
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: xx

<400> 816
gttcgcctga tctgtctttc atatttttaa agtcaagatg gctcgaggac ctaaaaagca 60
tttgaagcgt ttaaacgcac ccaaagcatg gatgttggac aaattgggag gtgtatttgc 120
cccccgtcca tccaccggtc ctcacaagtt gagagaatct ttaccattag taattttctt 180
aagaaacaga ctaaagtatg ccctcaccaa cagtgaagtc acaaaaattg ttatgcaaag 240
attaattaaa gtcgatggaa aagtcagaac agacagtaac tatcctgcag gatttatgga 300
tgttattact attgagaaga ctggtgaatt cttccgtctt atctatgatg ttaaaggtag 360
atttgccatt caccgtatta cagctgaaga agcaaaatac aaactctgca aagtacgaag 420
agtccaaact ggaccaaaag gaattccatt cttggtgaca catgatggcc gtaccatcag 480
ataccctgac ccaaacatca aagtcaatga caccatccaa ttggaaattg ccacatctaa 540
aattttagac tacattaagt tcgaatctgg aaacttatgt atgatcactg gaggaagaaa 600
tttgggtcgt gtaggtacag ttatcaatag ggaacgtcat cctggatcct ttgatattgt 660
gcatgttaaa gatgctaatg gtcatgtatt tgctactagg ttaaataacg ttttcattat 720
tggtaaggga gctaaggcct tcgtttccct cccaagagga aagggagtca aattgtctat 780
tgctgaagag agagacaaga ggttagcagc caaaacacat taaatgtaat ggttgattac 840
attattttca ataaaactta aaaaatctga a 871

<210> 817
<211> 2410
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: xx

<400> 817

cggacgcgtg ggggagaaac ataacatcca tccacaaata tgtcgaaagt aaggatcgga 60
gatgaagaga aggaagggca gtatggttat gtccatgctg tctcaggtcc agtcgttact 120
gctgagaaaa tgtctggttc tgctatgtac gaactggtac gtgtcggata ctatgagctg 180
gtaggagaaa tcattagatt ggaaggtgac atggctacta ttcaggtata cgaagaaaca 240
tcaggtgtaa ctgttggtga tccagtatta agaactggta aaccactttc agtagaactt 300
ggacctggta ttatgggttc catttttgat ggtatccaac gtccattgaa agacatttgt 360
gacgctactg atagtattta catccccaag ggtattaacg taccttcttt atcgagaaca 420
gcaaaatggg acttcaaccc aatcaacatc aagttgggat ctcacttaac tggaggtgat 480
atatatggtc tagttcatga aaacaccctt gtcaaacaca aaatgattct gcctcctaga 540
gctaagggta ctgtaaccta cattgcagaa ccaggaaact acactgttga tgaagtagta 600
ttggaaactg aatttgatgg tgatcgtacc aaatatacta tgttgcaagt atggcctgta 660
cgtcaagcaa ggccagtcag tgaaaaatta cctgccaacc atcctctgct tacaggacag 720
cgtgtacttg atgctctttt cccatgtgta cagggtggta ctactgccat tcccggagct 780
ttcggttgtg gaaaaactgt aatttcacaa tctctttcca aatattccaa ctctgatgtc 840
attatctacg tcggttgcgg agaaagaggt aacgaaatgt ctgaagtatt gagagatttc 900
cctgaattga ctgttgaaat tgacgggcac actgaatcta ttatgaaacg taccgcattg 960
gtcgccaaca catctaacat gcctgtagct gctcgtgaag cttctatcta tactggtatt 1020
actctttctg aatacttccg tgatatgggt tacaacgtat ctatgatggc tgactcgaca 1080
tcacgttggg ccgaagcttt gagagaaatt tcaggtcgtt tggctgaaat gcctgccgat 1140
tccggttatc cggcttactt aggtgcccgt ttggcttcct tctacgaacg tgctggtcgc 1200
gttaaatgtt taggtaatcc agacagagaa ggatccgttt caattgtagg agccgtatca 1260
cctcctggtg gtgatttctc agatcctgtt accactgcta ctcttggtat tgtacaggtg 1320
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ggatcatatt ccaaatattt aagagcattg gacgactttt atgacaaaaa cttccaagag 1440
tttattcctc ttagaaccaa agttaaggaa attcttcagg aagaagatga tctagccgaa 1500
attgtgcagc tggtaggtaa agcatctctg gcagaaacgg acaaaatcac cttggaaatt 1560
gccaggcttc ttaaagaaga tttcttgcaa caaaactcat actcttctta tgacagattc 1620
tgtccattct ataaaactgt cggtatgttg agaaacatga tcggtttgta cgacatggcg 1680
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gattcaatga gtggaatttt atatcaactt agcagtatga aatttaagga tcccgtaaaa 1800
gatggtgaag ctaaaatcaa ggcagatttt gatcaattat atgaagatat tcagcaggcc 1860
ttcagaaact tagaagatta aatcttttta aggaaatttt cctattttgt tcatcagtgt 1920
aagtttaaaa atatagcgat atttatcaaa aagaataata aggcctctat ccctcacttc 1980
tgtgaatatt aatatggccg tactaaagat agtaactaaa gataggtttt ctctttttg 2040
atattatcct gtacaaaata aattatgtaa attgttgaat atgtgtatag ttttttgggg 2100
tgagggtaca gtgcttatta aatacttttt aaacattttt cccgccattc caattactat 2160
taagttttt cgttttaata cttttttaaa tatacaggtg cttaatatcg tttatatttt 2220
cagtattact tggttttctt catgtaaatt gttttaaatt tttcttttac cctttaatc 2280
ttgtatatta cattacccaa ttaaagttaa ttgtacagat taagataaac gagtatctta 2340
taacatctat tagattgtta gaatcaataa atgtagtgta attgttctgt tttgaacaaa 2400
taaatgcatc 2410

<210> 818
<211> 988
<212> DNA
<213> Artificial Sequence

<220>
<221> modified_base
<222> (884)..(965)
<223> n = a, c, g or t/u

<220>
<223> Description of Artificial Sequence: pMON98501
Dv49 dsRNA Expression Cassette

<400> 818

aggacgcgtg ggttcgtatt tttttcttaa caaaagggca aaatgagctt ttttggaaaa 60
ttgttcgggg ggaaaaagga agagatagcc cctagtcctg gggaggctat tcaaaaactc 120
agagagactg aagaaatgtt aataaaaaaa caggattttt tagaaaagaa gatagaagaa 180
tttaccatgg tagcaaagaa aaatgcgtcg aaaaataaaa gagttgcact ccaagccctc 240
aaaaagaaga aacgattgga aaagacccaa ctacaaatag atggaaccct tacaactatt 300
gaaatgcaga gggaagccct cgaaggagct agcacaaata ctgctgtatt agattctatg 360

aaaaatgctg cagatgccct taagaaagct cataagaatt tgaatgtaga tgatgttcac 420
gatatcatgg atgacatagc cgaacaacac gacatagcca acgaaatcac aaacgctatt 480
agcaatcctg tcggattcac cgacgatctg gatgacgatg aattagaaaa agaattagaa 540
gagctcgaac aagaaggatt ggaagaagac ctgctccaag tgccaggtcc aactcaactg 600
ccggctgtgc ctgctgatgc agttgctact aaaccaatca aaccagcagc taaaaaagtt 660
gaagatgatg acgatatgaa agaattggaa gcctgggcct cgtaaaattc ctgaaatctg 720
gatatttgta aacgaaatca cccatctaag atgaaaacat tataaatata taggtaataa 780
cagctaaaaa cgtttcaatg tagaacaagc ttttgctgaa aaggcgtctt gcaaaaaatg 840
ttgataattt agaattctct atatattata tatttgccct ttangaaaga tttcttttat 900
agtcatagtt caaccanacg tttcataaat agaattacag gggtgtcaga attctacngt 960
gattnattga aaaaaaaaga cttttcct 988

<210> 819
<211> 3001
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pMON98502
Dv49 dsRNA Expression Cassette

<400> 819
aagcagtggt aacaacgcag agtacttttt ttttttttt ttttttttga cagttcgaaa 60
atggtgatgt gtttataatt cgtgtcaatt tagtgaaata gcattcaatt ttttgtataa 120
gatctcttca aaatgccact tcgattagat ataaaaagaa agctaacagc tcgctcagac 180
cgggtaaaat gtgtggatct tcaccctaca gaaccttgga tgctgtgttc tctttacagc 240
ggaaatataa acgtttggaa caccgaaaat cagcaactgg ttaagacttt tgaagtatgt 300
gatgtacctg ttcggacagc taagttttg cccaggaaga actggatagt cagtgggtct 360
gatgatatgc agattcgagt tttcaattac aatacctag atcgggtaca ttcttttgag 420
gctcattcgg attatgtgag atgtattgtc gtacacccta cacaacctta tatattaaca 480
agtagtgatg atatgcttat caagctttgg aattgggaaa aagcatgggc ttgtcagcaa 540
gttttcgaag gacacactca ttatattatg caaatcgcca taaatccaaa agacaacaac 600
acatttgcca gtgcatccct agatagaaca ttgaaagtat ggcaattggg agcgtccaca 660
gcgaatttca cactagaagg tcatgagaaa ggcgttaact gtgtggacta ttatcacggt 720
ggagataaac cttatttaat ctcaggcgct gatgatagat tagtaaaaat ctgggattat 780
caaaacaaaa cttgtgttca aactttggaa ggacatgctc aaaatgtaac cgctgcatgt 840
ttccatccag aacttcctgt agctcttact ggaagtgaag atggtactgt cagagtgtgg 900
catgccaaca cccataggtt agaaagtagc ttaaattatg gctttgaaag agtatggact 960
attttctgcc taaagggatc caataacgtg gcattgggtt atgatgaagg tagcattttg 1020
gttaaagttg gtagagaaga accagctgtt agtatggatg ccagtggagg caaaattatt 1080
tgggccagac actctgaact tcaacaggca aatctcaagg cgttagctga aggtgcggaa 1140
ataagagatg gagaacgcct tccagtttct gtaaaagata tgggtgcttg cgagatatac 1200
cctcagacaa ttcaacacaa tcccaatggc cgttttgttg ttgtctgtgg ggatggagaa 1260
tacataatct acacagcaat ggctttaaga aacaaagcgt ttggtagcgc acaagaattt 1320
gtgtgggctc aagattccag cgaatatgcc atcagagaat ccggatctac tatcagaatt 1380
tttaagaatt tcaaagagaa gaagaatttt aagtccgatt ttggagctga aggtatatac 1440
ggtggatacc ttttgggagt caaatcggtt tctggtttga ctttctatga ttgggaaact 1500
ctcgatttag tcagaagaat cgagatacaa ccaaaagcag tttactggtc agatagtggt 1560
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gagcacagaa cgagagtggc acatttctta gaaaagcaag gcttcaaaca gcaagctttg 2040
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gagaacattg acccgacgga tatcaacatc gatgatgatt tgctgagtga ttgaaaataa 2880
ctttttact ttagtattaa atctgtatat tcattcctat tcttaagaaa atctatatga 2940
attttaatgt tttaatagtt aagaaatcca aaatttaaaa aaaaaaaaaa aaaaaaaaaa 3000
a 3001

<210> 820
<211> 2719
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pMON98503
Dv49 dsRNA Expression Cassette

<400> 820
ggtccgattg agacttttca acaaagggta atatccggaa acctcctcgg attccattgc 60
ccagctatct gtcactttat tgtgaagata gtggaaaagg aaggtggctc ctacaaatgc 120
catcattgcg ataaaggaaa ggccatcgtt gaagatgcct ctgccgacag tggtcccaaa 180
gatggacccc cacccacgag gagcatcgtg gaaaaagaag acgttccaac cacgtcttca 240
aagcaagtgg attgatgtga tggtccgatt gagacttttc aacaaagggt aatatccgga 300
aacctcctcg gattccattg cccagctatc tgtcacttta ttgtgaagat agtggaaaag 360
gaaggtggct cctacaaatg ccatcattgc gataaaggaa aggccatcgt tgaagatgcc 420
tctgccgaca gtggtcccaa agatggaccc ccacccacga ggagcatcgt ggaaaaagaa 480
gacgttccaa ccacgtcttc aaagcaagtg gattgatgtg atatctccac tgacgtaagg 540
gatgacgcac aatcccacta tccttcgcaa gacccttcct ctatataagg aagttcattt 600
catttggaga ggacacgctg agggcccacc gtcttcggta cgcgctcact ccgccctctg 660
cctttgttac tgccacgttt ctctgaatgc tctcttgtgt ggtgattgct gagagtggtt 720
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tactgacagt attttgatgc attgatctgc ttgtttgttg taacaaaatt taaaaataaa 1260
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tgatatcgtg aacatcatct acattcaaat tcttatgagc tttcttaagg gcatctgcag 1620
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atgacgatgt agatcgccag cggtactcgc tgaggcctag gctgcatgcg tttggacgta 2520
tgctcattca ggttggagcc aatttggttg atgtgtgtgc gagttcttgc gagtctgatg 2580
agacatctct gtattgtgtt tctttcccca gtgttttctg tacttgtgta atcggctaat 2640
cgccaacaga ttcggcgatg aataaatgag aaataaattg ttctgatttt gagtgcaaaa 2700
aaaaaggaat taagcttac 2719

<210> 821
<211> 2367

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pMON98504
Dv49 Concatemer dsRNA Expression Cassette

<400> 821
ggtccgattg agacttttca acaaagggta atatccggaa acctcctcgg attccattgc 60
ccagctatct gtcactttat tgtgaagata gtggaaaagg aaggtggctc ctacaaatgc 120
catcattgcg ataaaggaaa ggccatcgtt gaagatgcct ctgccgacag tggtcccaaa 180
gatggacccc cacccacgag gagcatcgtg gaaaaagaag acgttccaac cacgtcttca 240
aagcaagtgg attgatgtga tggtccgatt gagacttttc aacaaagggt aatatccgga 300
aacctcctcg gattccattg cccagctatc tgtcacttta ttgtgaagat agtggaaaag 360
gaaggtggct cctacaaatg ccatcattgc gataaaggaa aggccatcgt tgaagatgcc 420
tctgccgaca gtggtcccaa agatggaccc ccacccacga ggagcatcgt ggaaaaagaa 480
gacgttccaa ccacgtcttc aaagcaagtg gattgatgtg atatctccac tgacgtaagg 540
gatgacgcac aatcccacta tccttcgcaa gacccttcct ctatataagg aagttcattt 600
catttggaga ggacacgctg agggcccacc gtcttcggta cgcgctcact ccgccctctg 660
cctttgttac tgccacgttt ctctgaatgc tctcttgtgt ggtgattgct gagagtggtt 720
tagctggatc tagaattaca ctctgaaatc gtgttctgcc tgtgctgatt acttgccgtc 780
ctttgtagca gcaaaatata gggacatggt agtacgaaac gaagatagaa cctacacagc 840
aatacgagaa atgtgtaatt tggtgcttag cggtatttat ttaagcacat gttggtgtta 900
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gcacaatatt acctaaacat ttaacgcgac cagcacgttc gtagaaggaa gccaaacgcg 1620
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cggctaatcg ccaacagatt cggcgatgaa taaatgagaa ataaattgtt ctgattttga 2340
gtgcaaaaaa aaaggaatta agcttac 2367

<210> 822
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 822
ccaagccctc aaaaagaaga aacgattgga aaagacccaa ctaca 45

<210> 823
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 823
acgacatagc caacgaaatc acaaacgcta ttagcaatcc tgtcggattc 50

<210> 824
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 824
tgtgtctgct gatgcagttg ctactaaacc aatcaaacca gcagct 46

<210> 825
<211> 113
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 825
acaccctaca caaccttata tattaacaag tagtgatgat atgcttatca agctttggaa 60
ttgggaaaaa gcatgggctt gtcagcaagt tttcgaagga cacactcatt ata 113

<210> 826
<211> 153
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 826
tgttagtatg gatgccagtg gaggcaaaat tatttgggcc agacactctg aacttcaaca 60
ggcaaatctc aaggcgttag ctgaaggtgc ggaaataaga gatggagaac gccttccagt 120
ttctgtaaaa gatatgggtg cttgcgagat ata 153

<210> 827
<211> 183
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 827
gttgcttctt gctacgagct ccggtgatga aaatttagtc cgtactctag gagaaacgac 60
acaagctgaa agcaaacata acttagcatt tttgtcacac ttgttagtag gtgatttaaa 120
caaatgtcta gacattctta ttaataccgg tagattgcca gaagctgcat ttttcgccag 180
atc 183

<210> 828
<211> 95

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 828
ccaagccctc aaaaagaaga aacgattgga aaagacccaa ctacaacgac atagccaacg 60
aaatcacaaa cgctattagc aatcctgtcg gattc 95

<210> 829
<211> 96
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 829
acgacatagc caacgaaatc acaaacgcta ttagcaatcc tgtcggattc tgtgtctgct 60
gatgcagttg ctactaaacc aatcaaacca gcagct 96

<210> 830
<211> 266
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 830
acaccctaca caaccttata tattaacaag tagtgatgat atgcttatca agctttggaa 60
ttgggaaaaa gcatgggctt gtcagcaagt tttcgaagga cacactcatt atatgttagt 120
atggatgcca gtggaggcaa aattatttgg gccagacact ctgaacttca acaggcaaat 180
ctcaaggcgt tagctgaagg tgcggaaata agagatggag aacgccttcc agtttctgta 240
aaagatatgg gtgcttgcga gatata 266

<210> 831
<211> 336
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic Primer

<400> 831
tgttagtatg gatgccagtg gaggcaaaat tatttgggcc agacactctg aacttcaaca 60
ggcaaatctc aaggcgttag ctgaaggtgc ggaaataaga gatggagaac gccttccagt 120
ttctgtaaaa gatatgggtg cttgcgagat atagttgctt cttgctacga gctccggtga 180
tgaaaattta gtccgtactc taggagaaac gacacaagct gaaagcaaac ataacttagc 240
atttttgtca cacttgttag taggtgattt aaacaaatgt ctagacattc ttattaatac 300
cggtagattg ccagaagctg catttttcgc cagatc 336

<210> 832
<211> 141
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

Primer

<400> 832
ccaagccctc aaaaagaaga aacgattgga aaagacccaa ctacaacgac atagccaacg 60
aaatcacaaa cgctattagc aatcctgtcg gattctgtgt ctgctgatgc agttgctact 120
aaaccaatca aaccagcagc t 141

<210> 833
<211> 449
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 833
acaccctaca caaccttata tattaacaag tagtgatgat atgcttatca agctttggaa 60
ttgggaaaaa gcatgggctt gtcagcaagt ttcgaagga cacactcatt atatgttagt 120
atggatgcca gtggaggcaa aattatttgg gccagacact ctgaacttca acaggcaaat 180
ctcaaggcgt tagctgaagg tgcggaaata agagatggag aacgccttcc agtttctgta 240
aaagatatgg gtgcttgcga gatatagttg cttcttgcta cgagctccgg tgatgaaaat 300
ttagtccgta ctctaggaga aacgacacaa gctgaaagca aacataactt agcatttttg 360
tcacacttgt tagtaggtga tttaaacaaa tgtctagaca ttcttattaa taccggtaga 420
ttgccagaag ctgcattttt cgccagatc 449

<210> 834
<211> 590
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 834
ccaagccctc aaaaagaaga aacgattgga aaagacccaa ctacaacgac atagccaacg 60
aaatcacaaa cgctattagc aatcctgtcg gattctgtgt ctgctgatgc agttgctact 120
aaaccaatca aaccagcagc tacaccctac acaaccttat atattaacaa gtagtgatga 180
tatgcttatc aagctttgga attgggaaaa agcatgggct tgtcagcaag ttttcgaagg 240
acacactcat tatatgttag tatggatgcc agtggaggca aaattatttg ggccagacac 300
tctgaacttc aacaggcaaa tctcaaggcg ttagctgaag gtgcggaaat aagagatgga 360
gaacgccttc cagtttctgt aaaagatatg ggtgcttgcg agatatagtt gcttcttgct 420
acgagctccg gtgatgaaaa tttagtccgt actctaggag aaacgacaca agctgaaagc 480
aaacataact tagcattttt gtcacacttg ttagtaggtg atttaaacaa atgtctagac 540
attcttatta ataccggtag attgccagaa gctgcatttt tcgccagatc 590

<210> 835
<211> 657
<212> DNA
<213> Diabrotica virgifera

<400> 835
gtaaattcaa attacaaacc atattagtca cccgtaaaat gtataaactc accattatta 60
caaaactttt tctttgactt ctcaaaaaca aacaatgtgg cgcttacaat gtttttcagc 120
ggacccattc aattatttta aacttatcac ttggatccga tgcacttcat caatagctaa 180
aaaaattttg ctccttgtat ctcatcttct agtataagtt cacattttct ttcattttct 240
agaacccgca aaactttaat aagtacctct tgattcattc caaaaaagat tgcatctgaa 300
acatcctctc cttgtgtgag ttcaaataat gtaaccactg tattttgcat acccctttca 360
caaatagaat catatacaat gctagcccat tcctcttggg tatgccaata gatttcccac 420
cggtttttgt ttttatctac aggagatgca tggccacttt tttgcaattc gcttagtata 480
gagattataa cgttttgttc taattttctg tttattgatg aattattaaa taaaggtgac 540
tggtttgtgt ctcttacatc tagggtgtaa gttttggttt gttcgcaaaa gtttaaaatt 600
aatgacttcc atgcatctac ttgctttgct cttgtttcag gatgtggctg caacgtg 657

<210> 836
<211> 1251
<212> DNA
<213> Diabrotica virgifera

<400> 836
catatctctc caaactatgg cgcgttcgga ttcatttttc agacggacaa accggccttt 60
tggcgacatc tttgcattaa agctctgagc atgaactgtt tcctggacaa ggttcgcact 120
tgtctcaaaa acacctctaa atcgatgact ccacatctca atgcctctcc catgtaataa 180
atagtgtctt ctaaggcagc ttcttcagcg aatgcattca ataattgttt atataaagga 240
gctgtcgttg ttaccgcatc atctacatct atagattctt gattacttat tcgttctatg 300
gccttattta gttcttgttc tttgtcttgt agcattgtaa tatttttgtc tagatcattc 360
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tcctgtgtcc tcttgagcgt ctctagttca gcttgattct gctggaattg ttccttcatt 480
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gaagggtagg gtggatatcc ttggaaagaa ttgttgctgg ttggaggata tggagggtac 660
ccgccgaaac ctcctgatgc tggtgggtag ggggtaggat acggaggcat gtaaccacca 720
gatggttgag gcatgaatga atttgacgga tacgattcat tgtctttggc cctagcaaac 780
actggaggtt gttcgccaaa tgtaacaatc ataacttgga ttaatcctag caaatctgat 840
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ggatgtgtgt caattaacca tatacaaatt ggaatattat aaatattgcc tttgtaacgc 1020
acaggaattg taccagttaa gttaatgaga tccattcttg tgccatcgtt gaaggtgtag 1080
acactctgtt ctggatgtaa acctctgtat tgtgtggtga tgttgattat ttctctataa 1140
gctacatcag gattgtgata agcagttagc caagtcctaa gtctctccgt atctaccatt 1200
ttctacgaat taatttcttg ccagctaaaa ctatcgagat ctagagttct c 1251

<210> 837
<211> 669
<212> DNA
<213> Diabrotica virgifera

<400> 837
gtcagcagaa aatcgccctg agctgtatga ggaagtcaag ctatatcaca atgccaggga 60
aagagagaag tacgataatt tagcagattt gtatgctgta ataaacactt tgcaacaatt 120
agagaaggca tatattcgag attgtgtagt ggcaaaggaa tatacaggag cttgtagtaa 180
attattagtt cagtataagg ctgcgtttcg acaagtcaag agtgatgaat ttcctacacc 240
agacgccttt gttaagaagt acaggcttga ctgtcctgca gctttagaac gtatcaagga 300
agataggcca atcactatca aagacgacaa aggcaacact agtcgatgca ttgctgatat 360
cgtatcgcta ttcatcacta taatggacaa actgcggttg gacattcgtt cgatggataa 420
cttacatcct gacgtgaggg acttagtaga tactatgaac agacttagca ttctgccatc 480
ggatttcgat ggaaaggtaa aagtggctga atggttaaat actttaaatg aaatgcaggc 540
ctctgatgaa ttatccgaag ctcaagtgag gcaactgttg tttgatcttg aaagtgcgta 600
tgcgtccttt aataaagtcc ttcataattc tgcctaaatg tacgagatag ttgttatgat 660
tgttacacg 669

<210> 838
<211> 793
<212> DNA
<213> Diabrotica virgifera

<400> 838
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gttttgctgg ttattattat tatattattt aaaaatggag tggttatttg gaaaaaaagt 120
aacccccgaa gaaatgcttc gtaaaaacca acgagcatta aataaagcca tgagagattt 180
agatagagaa aagcaaaaga tggaacagca ggagaaaaaa gtaataaacg atattaaaaa 240
attagccaag gaaggtcaaa tggacgctgt caaaataatg gctaaagatc tggtcagaac 300
tagaaggtat gtgaagaaat tcatgttgat gaaggctaac attcaagcag tatcattgaa 360
aattcagact cttagatccc aaaatacaat ggcacaagct atgaaaggtg tcactaaagc 420
tatgcaaagt atgaataggc agctaaattt accacagata caaaggatat tacaagaatt 480
tgaaaagcag tctgaaatta tggatatgaa ggaagaagtt atgaatgatg ccattgatga 540
tgcgatggaa ggagatgatg atgaggagga aactgacgca gttgtcaatc aagttttaga 600
tgaattgggt cttcaattga atgatactct ttctggactg cctcaaaccg ctggatctct 660
tcctgcctct gggcaaaaac atcctgcagc tgcagctgct gttgcaggag gaggtaatgg 720

tggcactggt actggaggca gtggtggaaa cagtggcggc ggaggtggcc tttctgatgc 780
cgatgcggat ttg 793

<210> 839
<211> 767
<212> DNA
<213> Diabrotica virgifera

<400> 839
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ggcacggaag gcatctcttg ctcaatcata ccagccaatt cttcttctac agctgcttca 120
tcttcatctg tcaattgacc actaagaagt tcgttaatct cattctgttt gtcaacccct 180
tctcttgttt catccaatat acgttcaata tcttcaattt tgagggaatc attaatttgt 240
ttcaaagctt cgttgcctgc ttttagacca ctcactactt gagtttctaa ctgggcgaac 300
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tgttcttgat acctcttctt cttaagtaaa agttttgctc tgtctctttg gccattgtta 420
agtaacttct tagctatatc tttatcttta ccaagtgaga gctcaattct tttttggtat 480
tgtctcaatt tatctctttg ctgtttgagc tgtaacactg ctttatcgtg ttctgttact 540
ctggagggag gctttttttt actaaaaaag atacccattt tattacttta gtaaaatata 600
aaatttctct tgatttgtgt tattcaaaaa attgatacca tccttatatt atagttttcc 660
tattatcaca cgttttatgc tgttttctta tatcttttag gactaatttt taatcagggt 720
tgccagatga aatttcagaa tatccctaga cgggagcttc aatttcc 767

<210> 840
<211> 588
<212> DNA
<213> Diabrotica virgifera

<400> 840
ctgcttcaaa gaaggaccac atgactaccc tagaatttgt gctttcattg atgcttctat 60
gaattctgtc tctaacctgc atatattctt gttcttgttt tacaccagac aatgaatttg 120
taagttctct gatcatttcc tccaacttat tagcattttc accttcttgt tgttctgcct 180
ttggagattc cccaacagcc atattaaaca taacaacttt aggtgtcata gttgacatct 240
tgtttgagaa acaatatgta tatataccag atgtgtgggc tgcaaatgtg tattttccgg 300
cagtttccct ttcaccctgg tataagttct ggccgtttgg atctataata cgcacatcta 360
tgtcaaggaa tcctccttct gctatttcaa aagtgagacc catttttgtg ccagcttcca 420
ctttgtcaaa gaaacattct tctgcatgtg catctactgt gataaaatag gccaaacttt 480
gatttatgcc caaacaaacc agtgaaataa ggaagccgaa aagatacatg tttactttaa 540
attaaaatta gaaaacttcg gccacgtaac ctctcacact tgacgttc 588

<210> 841
<211> 1098
<212> DNA
<213> Diabrotica virgifera

<400> 841
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tactaatacc atttcttcta tgttccgtga agagactaat tcaagggcta gacttaaagt 120
cttcttgcgg acttctaagt caggagcaga gagtactctc agtatgtcca taactaaatc 180
ctgcagaatt ctttcgtgat taggaagctc cttaagtgct atcagcctgt ccaaaacgat 240
gagttttaca ttgttgtcac tttctttgat aattaactca atgtaacagc tagcagcagc 300
tttaacggca gtcggggcac tggagagggt gactaaagtt cctgcagctt cgtacctgac 360
agcaggactg cttgagttca acaagttata tatacatcta ataaatctag atctttccgc 420
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aaatgaattt acttgatcta aacatgatgc caaatacgac aacgcccttt cttggtcagc 540
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attggagatc agttcaggag catctggaat gagggcttca aaatttttgt aaatggtaaa 660
aattgccagt acagcattcc tcctcacata gctgtgccta tgatccaaac aagctctaat 720
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aatcatctct tgtagtagtt taccttctgg atttgttttt ggaactattt cccagaaaat 900
caataatagt ttttttgcca aatgatcttg tagaggtaaa acgtttctta taatggtcat 960
taggaatcca ttcggcaacc tttctcctgc cagaatcatg tgaattattt tttctaatgc 1020
tcttattttt actttaacct caccctttte taaatccatt tttagttgca tttcattgta 1080
gggctccgaa tctgttgg 1098

<210> 842
<211> 718
<212> DNA
<213> Diabrotica virgifera

<400> 842
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cccattcggt tcccggttct agttcgtcat cttcggctac gaactgcttt tcagcgttcc 180
tattagcagc ttttgtcttg gctatagctt cttcgtgatt cttgtaccaa tcttctaatt 240
ctttctttgc tacttccctc aattcttgct tctttttctc ttcttcctga tctttttcct 300
ccaacctctt gatttgctct tccctccata acctgatctt ttctggttct actctatctt 360
cttgtcttat tgtaagtggg gacactcttt ccctgtattc tttatctgga tcaaaatcgg 420
ctgggatatc attaaacttt ggctcttcca aaaaaccatc tggaccattg ttttctacca 480
tttcaaaact gctcgcagaa ttggttgggt catcaccatt aagaactgga gcaataactg 540
cggccggttt cacttcatct tcaaggcctg ctagttcgtc ttgctcgcgt gccaagaatt 600
ctgccgctgg gtcttcgtcg gcaactccaa aattgtctcc aaatccagac attcttgatt 660
ttgttaatct taaggataag aaaagctgct attttcccac tgacactgac agcaaagc 718

<210> 843
<211> 842
<212> DNA
<213> Diabrotica virgifera

<400> 843
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attttctttt atcttcagat cacgaatgta tggatgatca ggatttgcat ccttcaactg 120
agacagatat ctattagcaa tctcaggtgc tttggccata tgtctctgaa gagtgatcat 180
gttaacaagt gtatcaggat agttggcatc cttatcaagt gcttcttgaa gagctgcttc 240
ggcttcctca tatttggctt ggccaatgaa agtcactgct tgtccgttta gcaacaatgg 300
agtggatcca tatttgtcta caagttcttg gtaaatatag taggcgtcct ggagtttatc 360
tccaccagtg gatacattaa tccaagcttg agccagttgt gttaaagttg catcatcgtc 420
cttatcttgc atctctttca gcttcttcct tgccaaatct actctatcca atttcaaaag 480
tatatctata ataaaggcca ttgcttcgag gctttctgta gcgtgcaaaa ctttatacgc 540
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gttagcattt gcttggactt gttgctccac ttgagccacc acagaatcct tcttgatttt 660
gcctgctaag tagtcagcga ggtatttcag gggttggatt tctgggggag atgccccgtg 720
gatttcgtct aatactacta ggaatttatt ttgggccata taggaccggt aggtgtagaa 780
gtctctttgg actgctactt cgggcgttga cggctttctg agtttttgtg cctcgtttat 840
gc 842

<210> 844
<211> 679
<212> DNA
<213> Diabrotica virgifera

<400> 844
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ctctttgcta tagtctacac tacaagatac cttgacttag tgacgtcata tgtatctatg 120
tacaatactg ttatgaaatt tgtatttttg gccacatcgt atgcaactat ttatttaatc 180
tacatgaaat ttaaagccac ttatgaccat aaccatgaca cgttcagaat agagtttctc 240
attttaccat cgtttggttt ggctatgctt atcaatcacg agttttcatt tatggaggtc 300
ttgtggactt tcagtattta tttggaatca gtggctatat tgccgcaatt gttcatggtc 360
agtaaaacag gagaagcaga aagtattact tcgcactact tattcgcatt gggatcttat 420
agggccctat acattttgaa ctggatctac cgctatgcaa ctgaaactca ttacgatctc 480
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attactaaag tactcaaggg aaagaaacta caattgcccg cttaaacccc tcttatataa 600
gacttaactg tacaaacatt ttactttcag ctaaacggta ttaacacaat gatgcctaat 660
gatcatgtgt ttggatagc 679

<210> 845
<211> 725
<212> DNA

<213> Diabrotica virgifera

<400> 845
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caaacgttga ggggcggatt agggcccgat atgtattccg gacaaccggg cacttcgcct 120
ttcgccaaca tccacatcaa acaagaaata caaatacctc aagtgtcctc ccttacctca 180
tcgccagatt cgtcgcccag tcccatagca gtagctttag gccaggtgaa ctcctcgttg 240
gtgcagccca cgtccaatca gcagcccgct ctccagatcg tcggcgttcc tggaggtcac 300
tcgtcgatgg tcatgggccc ggataacaaa ctctgggccc aagcgaactc caccaccaca 360
tcacccctta gtcccaaagt gttccaattc gagactgtcg taccgggcag cagtgtaccg 420
ccttcgagta aagtgtcgcc gctcattagg gatttcgttg ccgccgttga cgatcgcgaa 480
tggcaaaact ctttgtacac tcttttacaa aaccagacgt acaatcagtg tgaagtggac 540
ttatttgaac taatgtgtaa agttttggac caaaatctct tttctcaagt cgattgggcg 600
aggaattcga tattctttaa agatctcaag gtggacgatc aaatgaaact tctgcagcat 660
tcatggtcgg atatgttggt gctggatcac atacaccagc gcacgcacaa taacctaccc 720
gacga 725

<210> 846
<211> 864
<212> DNA
<213> Diabrotica virgifera

<400> 846
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acgacgcagt tgaagccaga gccctaggtc taaacccgga acacatcgac atctacagcg 120
cttcctgggg acctgaagac gacgggaaaa ccgtagacgg tcccggacca ttagcaagac 180
gagcttttat atacggagta actagtggga gaaaaggaaa aggatctatt ttcgtttggg 240
cttcgggaaa tggaggccga catacggatt cctgcaattg tgatggatac accaacagta 300
tctttacctt gagtatatct agtgctacac aaggaggtta caaaccttgg tatttggaag 360
agtgttcttc aacattagca acaacttaca gctcaggaac acctggacat gacaaaagcg 420
tcgcgactgt tgatatggac gctagattac gaccagatca tatctgtact gtagaacata 480
ctggaacttc agcttcagca cctttagctg ctggaatatg cgccctagct cttgaagcca 540
accccacgtt gacgtggcgt gacatgcaat atttagtagt actaacttca agagctcctc 600
cactggaaaa agaggctgga tggatagtaa acggcgttgg gcgaaaagct tctcataaat 660
ttggttatgg tctcatggac gctggtgctt tggttacttt agctgaaaaa tggactacgg 720
taccacctca acacatctgt aaaagtcagg aaattgtaga agatcgacca attaatcctg 780
cctatggttc cagtttgaat ttcaatatgg aagtagacgc atgtagtggt accttgaacg 840
aagtcaggta cctggagcac gtgc 864

<210> 847
<211> 140
<212> DNA
<213> Diabrotica virgifera

<400> 847
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tgcaacaggg ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt 120
tgctactaaa ccaatcaaac 140

<210> 848
<211> 210
<212> DNA
<213> Diabrotica virgifera

<400> 848
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tgcaacaggg ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt 120
tgctactaaa ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa 180
ctacagaggt acagaaaaag ggtgtcaagg 210

<210> 849
<211> 280
<212> DNA
<213> Diabrotica virgifera

<400> 849
catcacgact atcctactag tggagaagta tgcgaagtcg atgtcagaga ttgggaagaa 60
tgcaacaggg ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt 120
tgctactaaa ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa 180
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cacggtgctg cacaattctt aagagagagg ctgtttgaag 280

<210> 850
<211> 350
<212> DNA
<213> Diabrotica virgifera

<400> 850
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tgcaacaggg ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt 120
tgctactaaa ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa 180
ctacagaggt acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca 240
cacggtgctg cacaattctt aagagagagg ctgtttgaag tctcttcagc aatagacaat 300
ttgactccct ttcctcttgg gagggaaacg aaggccttag ctcccttacc 350

<210> 851
<211> 420
<212> DNA
<213> Diabrotica virgifera

<400> 851
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tgcaacaggg ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt 120
tgctactaaa ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa 180
ctacagaggt acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca 240
cacggtgctg cacaattctt aagagagagg ctgtttgaag tctcttcagc aatagacaat 300
ttgactccct ttcctcttgg gagggaaacg aaggccttag ctcccttacc tcatcgtccg 360
tttggattca caaaaacaca tcgacttctc tctgaaatca cctttgggag gcggtcgtcc 420

<210> 852
<211> 140
<212> DNA
<213> Diabrotica virgifera

<400> 852
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ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa ctacagaggt 120
acagaaaaag ggtgtcaagg 140

<210> 853
<211> 210
<212> DNA
<213> Diabrotica virgifera

<400> 853
ctccaagtgc caggtccaac tcaactgccg gctgtgtctg ctgatgcagt tgctactaaa 60
ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa ctacagaggt 120
acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg 180
cacaattctt aagagagagg ctgtttgaag 210

<210> 854
<211> 280
<212> DNA
<213> Diabrotica virgifera

<400> 854
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ccaatcaaac gatgaggaac agacagaaca aaccgcaact gaaacggcaa ctacagaggt 120
acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg 180
cacaattctt aagagagagg ctgtttgaag tctcttcagc aatagacaat ttgactccct 240
ttcctcttgg gagggaaacg aaggccttag ctcccttacc 280

<210> 855
<211> 350
<212> DNA
<213> Diabrotica virgifera

<400> 855
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acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg 180
cacaattctt aagagagagg ctgtttgaag tctcttcagc aatagacaat ttgactccct 240
ttcctcttgg gagggaaacg aaggccttag ctcccttacc tcatcgtccg tttggattca 300
caaaaacaca tcgacttctc tctgaaatca cctttgggag gcggtcgtcc 350

<210> 856
<211> 420
<212> DNA
<213> Diabrotica virgifera

<400> 856
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acagaaaaag ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg 180
cacaattctt aagagagagg ctgtttgaag tctcttcagc aatagacaat ttgactccct 240
ttcctcttgg gagggaaacg aaggccttag ctcccttacc tcatcgtccg tttggattca 300
caaaaacaca tcgacttctc tctgaaatca cctttgggag gcggtcgtcc gatccttttc 360
gatttgttgc tgccattggg gatccatctg gacttctgga ggaagcaagg caggtgcagc 420

<210> 857
<211> 140
<212> DNA
<213> Diabrotica virgifera

<400> 857
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ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg cacaattctt 120
aagagagagg ctgtttgaag 140

<210> 858
<211> 210
<212> DNA
<213> Diabrotica virgifera

<400> 858
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ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg cacaattctt 120
aagagagagg ctgtttgaag tctcttcagc aatagacaat ttgactccct ttcctcttgg 180
gagggaaacg aaggccttag ctcccttacc 210

<210> 859
<211> 280
<212> DNA
<213> Diabrotica virgifera

<400> 859
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ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg cacaattctt 120
aagagagagg ctgtttgaag tctcttcagc aatagacaat ttgactccct ttcctcttgg 180
gagggaaacg aaggccttag ctcccttacc tcatcgtccg tttggattca caaaaacaca 240

tcgacttctc tctgaaatca cctttgggag gcggtcgtcc 280

<210> 860
<211> 350
<212> DNA
<213> Diabrotica virgifera

<400> 860
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ggtgtcaagg ggtgagatgg aacgagattg tcaaatttca cacggtgctg cacaattctt 120
aagagagagg ctgtttgaag tctcttcagc aatagacaat ttgactccct ttcctcttgg 180
gagggaaacg aaggccttag ctcccttacc tcatcgtccg tttggattca caaaaacaca 240
tcgacttctc tctgaaatca cctttgggag gcggtcgtcc gatccttttc gatttgttgc 300
tgccattggg gatccatctg gacttctgga ggaagcaagg caggtgcagc 350

<210> 861
<211> 140
<212> DNA
<213> Diabrotica virgifera

<400> 861
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ctgtttgaag tctcttcagc aatagacaat ttgactccct ttcctcttgg gagggaaacg 120
aaggccttag ctcccttacc 140

<210> 862
<211> 210
<212> DNA
<213> Diabrotica virgifera

<400> 862
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ctgtttgaag tctcttcagc aatagacaat ttgactccct ttcctcttgg gagggaaacg 120
aaggccttag ctcccttacc tcatcgtccg tttggattca caaaaacaca tcgacttctc 180
tctgaaatca cctttgggag gcggtcgtcc 210

<210> 863
<211> 280
<212> DNA
<213> Diabrotica virgifera

<400> 863
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ctgtttgaag tctcttcagc aatagacaat ttgactccct ttcctcttgg gagggaaacg 120
aaggccttag ctcccttacc tcatcgtccg tttggattca caaaaacaca tcgacttctc 180
tctgaaatca cctttgggag gcggtcgtcc gatccttttc gatttgttgc tgccattggg 240
gatccatctg gacttctgga ggaagcaagg caggtgcagc 280

<210> 864
<211> 140
<212> DNA
<213> Diabrotica virgifera

<400> 864
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ctcccttacc tcatcgtccg tttggattca caaaaacaca tcgacttctc tctgaaatca 120
cctttgggag gcggtcgtcc 140

<210> 865
<211> 210
<212> DNA
<213> Diabrotica virgifera

<400> 865
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ctcccttacc tcatcgtccg tttggattca caaaaacaca tcgacttctc tctgaaatca 120
cctttgggag gcggtcgtcc gatccttttc gatttgttgc tgccattggg gatccatctg 180
gacttctgga ggaagcaagg caggtgcagc 210

<210> 866
<211> 140
<212> DNA
<213> Diabrotica virgifera

<400> 866
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gcggtcgtcc gatccttttc gatttgttgc tgccattggg gatccatctg gacttctgga 120
ggaagcaagg caggtgcagc 140

<210> 867
<211> 70
<212> DNA
<213> Diabrotica virgifera

<400> 867
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tgcaacaggg 70

<210> 868
<211> 70
<212> DNA
<213> Diabrotica virgifera

<400> 868
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ccaatcaaac 70

<210> 869
<211> 70
<212> DNA
<213> Diabrotica virgifera

<400> 869
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ggtgtcaagg 70

<210> 870
<211> 70
<212> DNA
<213> Diabrotica virgifera

<400> 870
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ctgtttgaag 70

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<211> 70
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gaacgccttc cagtttctgt aaaagatatg ggtgcttgcg agatataccc tcagacaatt 1080
caacacaatc ccaatggccg ttttgttgtt gtctgtgggg atggagaata cataatctac 1140
acagcaatgg ctttaagaaa caaagcgttt ggtagcgcac aagaatttgt gtgggctcaa 1200
gattccagcg aatatgccat cagagaatcc ggatctacta tcagaatttt taagaatttc 1260
aaagagaaga agaattttaa gtccgatttt ggagctgaag gtatatacgg tggatacctt 1320
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agagataaca atcaggttgc ggatgatgga gtagaatcgg ctttcaatct tctaggtgaa 1560
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gttaatcgta tcaactactt cgttggaggt gaactggtta caattgctca tttggaccgg 1680
cctttgtatg tcttgggata tgtgcctaaa gacgatagat tatacctcgt agataaagag 1740
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agagtggcac atttcttaga aaagcaaggc ttcaaacagc aagctttggc cgtaagtaca 1920
gatccagagc acagattcga gctggcagta gcattagagg atcttaatat agccaaaact 1980
ctagctcaag aagcgaacag tccgcaaaag tggaatcaac tagcagaatt ggcagctgct 2040
actaataatg taagcgtagc caaggaatgt atgcaaaaag cgcaagatta tggaggcttg 2100
ttgcttcttg ctacgagctc cggtgatgaa aatttagtcc gtacttctagg agaaacgaca 2160
caagctgaaa gcaaacataa cttagcattt ttgtcacact tgttagtagg tgatttaaac 2220
aaatgtctag acattcttat taataccggt agattgccag aagctgcatt tttcgccaga 2280
tcttaccttc ctgataagat tacagaagtc gtggaactgt ggaagactca gttatcttca 2340
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ggtttacaag aggcggtggt agctcagaaa tttttggaac agcagaataa aggtttagcg 2460
cccgcaagag ttgccaccac cattcctcct aatcacgaca ggaatgttgt agccgaagtt 2520
caagcacaat cgaaacacga tgtaccatca tttagttctt cgtttatttc atcagaaata 2580
gaagcacaaa caaggagttc tgctaaacct gaagaatctt caaacattat acagctggac 2640
caagatgacg acgatatcga tttagatttg gacggtgtaa atatcgatga gaacattgac 2700
acgacggata tcaa 2714

<210> 880
<211> 669
<212> DNA
<213> Epilachna varivestis

<400> 880
cgagggccac acccaytatg ttatgcaaat tgccataaat cctaaggata ataatacttt 60
tgctagtgca tcattagata gaacactcaa agtttggcag ttaggtgctt ccacagcaaa 120
ttttacttta gaaggtcacg ataaaggagt aaactgcgtt gattattatc atggtggaga 180
taaarcttat cttatatctg gagctgatga tcgattggta aaaatatggg attatcaaaa 240
caagacatgt gttcaaactt tagaaggtca tgcccaaaat gtaactgcag tttgcttcca 300
tccagaattg ccagtagttt taacaggtag tgaagatgga actgttagga tttggcatgc 360
caatactcat aggctggaaa gcagtttgaa ttatggattc gagagagtat gggccatttc 420
ttgcttaaag gggtccaaca atgtggttct gggttatgat gaaggtagtg tcctagttaa 480
agttggtcgt gaagaaccag ctgtcagtat ggatgctagt ggtggaaaaa ttatttgggc 540
ccgccattcc gaattgcaac aggctaattt gaaggcgctt cctgaagggg cggaggttag 600
agatggcgaa cgtttacctg ttgctgttaa agacatgggc gcttgygaaa tttaccccca 660
gaccatcgc 669

<210> 881
<211> 1033
<212> DNA
<213> Leptinotarsa decemlineata

<400> 881
ccatggtggc gataaaccat acttgatatc gggagcagac gatcggttgg ttaaaatctg 60
ggactatcaa aacaaaacgt gtgtccaaac cttggaagga cacgcccaaa acgtaaccgc 120
ggtttgtttc caccctgaac tacctgtggc tctcacaggc agcgaagatg gtaccgttag 180
agtttggcat acgaatacac acagattaga gaattgtttg aattatgggt tcgagagagt 240
gtggaccatt tgttgcttga agggttcgaa taatgtttct ctggggtatg acgagggcag 300
tatattagtg aaagttggaa gagaagaacc ggcagttagt atggatgcca gtggcggtaa 360
aataatttgg gcaaggcact cggaattaca acaagctaat ttgaaggcgc tgccagaagg 420
tggagaaata agagatgggg agcgtttacc tgtctctgta aaagatatgg gagcatgtga 480
aatatacccc caaacaatcc aacataatcc gaatggaaga ttcgttgtag tatgcggaga 540
cggcgaatat atcatttaca cagcgatggc tctacggaac aaggcttttg gaagcgctca 600
agagtttgtc tgggctcagg actccagcga gtatgccatt cgcgagtctg gttccacaat 660
tcggatattc aaaaacttca aagaaaggaa gaacttcaag tcggatttca gcgcggaagg 720
aatctacggg ggttttctct tggggattaa atcggtgtcc ggtttaacgt tttacgattg 780
ggaaactttg gacttggtga gacggattga aatacaaccg agggcggttt attggtctga 840
cagtggaaaa ttagtctgtc tcgcaacgga ggacagctac ttcatccttt cttatgattc 900
ggagcaagtt cagaaggcca gggagaacaa tcaagtcgca gaggatggcg tagaggccgc 960
tttcgatgtg ttgggggaaa tgaacgagtc tgtccgaaca ggtctttggg tcggagactg 1020
tttcatctat acc 1033

<210> 882
<211> 601
<212> DNA
<213> Diabrotica balteata

<400> 882
gtcctgggga ggctattcaa aaactcagag agactgaaga aatgttaata aaaaaacagg 60
atttttaga aaagaagata gaagaatata cttagtagc aaagaaaaat gcgtcgaaaa 120
ataaaagagt tgcactccaa gctctcaaaa agaagaaacg attggaaaag acccaactac 180
aaatagatgg aacccttaca actattgaaa tgcagaggga agccctcgaa ggagctagca 240
caaatactgc tgtattagat tctatgaaaa atgctgcaga tgcccttaag aaagctcata 300
agaacttgaa tgtggatgat gttcacgaca tcatggatga catagccgaa caacacgaca 360
tagccaacga aatcacaaac gctattagca accctgttgg attcaccgac gatctggacg 420
acgatgaatt agagaaagaa ttagaagagc tcgaacaaga aggattggaa gaagacctgc 480
ttcaagtgcc aggtcccact caactgccgg ctgtgcctac tgatgcagtt gctaataaac 540
caatcaaacc agcagctaga aaagttgaag atgatgacga tatgaaagaa ttggaagcct 600
g 601

<210> 883
<211> 601
<212> DNA
<213> Diabrotica barberi

<400> 883
gtcctgggga ggctattcaa aaactcagag agactgaaga aatgttaata aaaaaacagg 60
atttttaga aaagaagata gaagaattta ccatggtagc aaagaaaaat gcgtcgaaaa 120
ataaaagagt tgcactccaa gccctcaaaa agaagaaacg attggaaaag actcaactac 180
aaatagatgg aacccttaca actattgaaa tgcagaggga agccctcgaa ggagctagca 240
caaatactgc tgtattagat tctatgaaaa atgctgcaga tgcccttaag aaagctcata 300
agaatttgaa tgtagatgat gttcacgata tcatggatga catagccgaa caacacgaca 360
tagccaacga aattacaaat gctattagca accctgttgg attcaccgac gatctggacg 420
acgatgaatt agaaaaagaa ttagaagagc tcgaacaaga aggattggaa gaagacctgc 480
tccaagtgcc aggtccaact caactgccgg ctgtgcctgc tgatgcagtt actactaaac 540
caatcaaacc agcagctaaa aaagttgaag atgatgacga tatgaaagaa ttggaagcct 600
g 601

<210> 884
<211> 601
<212> DNA

<213> Diabrotica undecimpunctata howardii

<400> 884
gtcctgggga ggctattcaa aaactcagag agactgaaga aatgttaata aaaaaacagg 60
atttttaga aaagaagata gaagaattta ccttagtagc aaagaaaaat gcgtcgaaaa 120
ataaaagagt tgcactccaa gccctcaaaa agaagaaacg attggaaaag acccaactac 180
aaatagatgg aacccttaca actattgaaa tgcagaggga agccctcgaa ggagctagca 240
caaatactgc tgtattagat tctatgaaaa atgctgcaga tgcccttaag aaagctcata 300
agaacttgaa tgtggatgat gttcacgaca tcatggatga catagccgaa caacacgaca 360
tagccaacga aatcacaaac gctattagca atcctgttgg attcaccgac gatctggacg 420
atgatgaatt agagaaagaa ttagaagagc tcgaacaaga aggattggaa gaagacctgc 480
ttcaagtgcc aggtccaact caactgccgg ctgtgcctac tgatgcagtt gctaataaac 540
caattaaacc agcagctaga aaagttgaag atgatgacga tatgaaagaa ttggaagcct 600
g 601

<210> 885
<211> 601
<212> DNA
<213> Diabrotica virgifera zeae

<400> 885
gtcctgggga ggctattcaa aaactcagag agactgaaga aatgttaata aaaaaacagg 60
atttttaga aaagaagata gaagaattta ccatggtagc aaagaaaaat gcgtcgaaaa 120
ataaaagagt tgcactccaa gccctcaaaa agaagaaacg attggaaaag acccaactac 180
aaatagatgg aacccttaca actattgaaa tgcagaggga agccctcgaa ggagctagca 240
caaatactgc tgtattagat tctatgaaaa atgctgcaga tgcccttaag aaagctcata 300
agaatttgaa tgtagatgat gttcacgata tcatggatga catagccgaa caacacgaca 360
tagccaacga aatcacaaac gctattagca atcctgtcgg attcaccgac gatctggatg 420
acgatgaatt agaaaaagaa ttagaagagc tcgaacaaga aggattggaa gaagacctgc 480
tccaagtgcc aggtccaact caactgccgg ctgtgcctgc tgatgcagtt gctactaaac 540
caatcaaacc agcagctaaa aaagttgaag atgatgacga tatgaaagaa ttggaagcct 600
g 601

<210> 886
<211> 601
<212> DNA
<213> Diabrotica virgifera virgifera

<400> 886
gtcctgggga ggctattcaa aaactcagag agactgaaga aatgttaata aaaaaacagg 60
atttttaga aaagaagata gaagaattta ccatggtagc aaagaaaaat gcgtcgaaaa 120
ataaaagagt tgcactccaa gccctcaaaa agaagaaacg attggaaaag acccaactac 180
aaatagatgg aacccttaca actattgaaa tgcagaggga agccctcgaa ggagctagca 240
caaatactgc tgtattagat tctatgaaaa atgctgcaga tgcccttaag aaagctcata 300
agaatttgaa tgtagatgat gttcacgata tcatggatga catagccgaa caacacgaca 360
tagccaacga aatcacaaac gctattagca atcctgtcgg attcaccgac gatctggatg 420
acgatgaatt agaaaaagaa ttagaagagc tcgaacaaga aggattggaa gaagacctgc 480
tccaagtgcc aggtccaact caactgccgg ctgtgcctgc tgatgcagtt gctactaaac 540
caatcaaacc agcagctaaa aaagttgaag atgatgacga tatgaaagaa ttggaagcct 600
g 601

<210> 887
<211> 145
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12
concatemer of highly effective WCR targets, ~50%
GC criterion, consisting of segments in order
5'-3' from Dv23-Dv13

<400> 887
cctcaagctg tcattggcat ggatattctg tgccaagcta aatccggtat gggaaaaacg 60
gctgtttttg caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc 120

aaatttcttc ctccagtgat catac 145

<210> 888
<211> 222
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from 23-Dv13-Dv26

<400> 888
cctcaagctg tcattggcat ggatattctg tgccaagcta aatccggtat gggaaaaacg 60
gctgtttttg caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc 120
aaatttcttc ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct 180
gaagcaacat ataaggggta tcaacaatac tagagagttg ag 222

<210> 889
<211> 275
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv23-Dv13-Dv26-Dv18

<400> 889
cctcaagctg tcattggcat ggatattctg tgccaagcta aatccggtat gggaaaaacg 60
gctgtttttg caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc 120
aaatttcttc ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct 180
gaagcaacat ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca 240
cattgtcctt ggatgtagta tccatcacgc agacc 275

<210> 890
<211> 338
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv23-Dv13-Dv26-Dv18-Dv49

<400> 890
cctcaagctg tcattggcat ggatattctg tgccaagcta aatccggtat gggaaaaacg 60
gctgtttttg caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc 120
aaatttcttc ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct 180
gaagcaacat ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca 240
cattgtcctt ggatgtagta tccatcacgc agaccgccga acaacacgac atagccaacg 300
aaatcacaaa cgctattagc aatcctgtcg gattcacc 338

<210> 891
<211> 418
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50%

GC criterion, consisting of segments in order 5'-3' from Dv23-Dv13-Dv26-Dv18-Dv49-Dv22

<400> 891
cctcaagctg tcattggcat ggatattctg tgccaagcta aatccggtat gggaaaaacg 60
gctgtttttg caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc 120
aaatttcttc ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct 180
gaagcaacat ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca 240
cattgtcctt ggatgtagta tccatcacgc agaccgccga acaacacgac atagccaacg 300
aaatcacaaa cgctattagc aatcctgtcg gattcaccgt aatgcactcc tacgtcgttt 360
ggttcgtatt ggagtactag acgagaacag aatgaagctc gattacgtat tgggtctc 418

<210> 892
<211> 152
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv13-Dv26

<400> 892
caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc aaatttcttc 60
ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct gaagcaacat 120
ataaggggta tcaacaatac tagagagttg ag 152

<210> 893
<211> 205
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv13-Dv26-Dv18

<400> 893
caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc aaatttcttc 60
ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct gaagcaacat 120
ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca cattgtcctt 180
ggatgtagta tccatcacgc agacc 205

<210> 894
<211> 268
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv13-Dv26-Dv18-Dv49

<400> 894
caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc aaatttcttc 60
ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct gaagcaacat 120
ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca cattgtcctt 180
ggatgtagta tccatcacgc agaccgccga acaacacgac atagccaacg aaatcacaaa 240
cgctattagc aatcctgtcg gattcacc 268

<210> 895

<211> 348
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv13-Dv26-Dv18-Dv49-Dv22

<400> 895
caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc aaatttcttc 60
ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct gaagcaacat 120
ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca cattgtcctt 180
ggatgtagta tccatcacgc agaccgccga acaacacgac atagccaacg aaatcacaaa 240
cgctattagc aatcctgtcg gattcaccgt aatgcactcc tacgtcgttt ggttcgtatt 300
ggagtactag acgagaacag aatgaagctc gattacgtat tgggtctc 348

<210> 896
<211> 408
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv13-Dv26-Dv18-Dv49-Dv22-Dv20

<400> 896
caaaggatcc aggatgacgt tccctattga taactgtacc tacacgaccc aaatttcttc 60
ctccagtgat catacccata cgatttacct gaggaaatgc cggataatct gaagcaacat 120
ataaggggta tcaacaatac tagagagttg agtcaaacat aattatggca cattgtcctt 180
ggatgtagta tccatcacgc agaccgccga acaacacgac atagccaacg aaatcacaaa 240
cgctattagc aatcctgtcg gattcaccgt aatgcactcc tacgtcgttt ggttcgtatt 300
ggagtactag acgagaacag aatgaagctc gattacgtat tgggtctccg aagtaatgta 360
caacggccac actggacgta agataaatgc tcagattttc ttaggacc 408

<210> 897
<211> 130
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv26-Dv18

<400> 897
ccatacgatt tacctgagga aatgccggat aatctgaagc aacatataag gggtatcaac 60
aatactagag agttgagtca aacataatta tggcacattg tccttggatg tagtatccat 120
cacgcagacc 130

<210> 898
<211> 193
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv26-Dv18-Dv49

<400> 898
ccatacgatt tacctgagga aatgccggat aatctgaagc aacatataag gggtatcaac 60
aatactagag agttgagtca aacataatta tggcacattg tccttggatg tagtatccat 120
cacgcagacc gccgaacaac acgacatagc caacgaaatc acaaacgcta ttagcaatcc 180
tgtcggattc acc 193

<210> 899
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer
of highly effective WCR targets, ~50% GC
criterion, consisting of segments in order 5'-3'
from Dv26-Dv18-Dv49-Dv22

<400> 899
ccatacgatt tacctgagga aatgccggat aatctgaagc aacatataag gggtatcaac 60
aatactagag agttgagtca aacataatta tggcacattg tccttggatg tagtatccat 120
cacgcagacc gccgaacaac acgacatagc caacgaaatc acaaacgcta ttagcaatcc 180
tgtcggattc accgtaatgc actcctacgt cgtttggttc gtattggagt actagacgag 240
aacagaatga agctcgatta cgtattgggt ctc 273

<210> 900
<211> 333
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer
of highly effective WCR targets, ~50% GC
criterion, consisting of segments in order 5'-3'
from Dv26-Dv18-Dv49-Dv22-Dv20

<400> 900
ccatacgatt tacctgagga aatgccggat aatctgaagc aacatataag gggtatcaac 60
aatactagag agttgagtca aacataatta tggcacattg tccttggatg tagtatccat 120
cacgcagacc gccgaacaac acgacatagc caacgaaatc acaaacgcta ttagcaatcc 180
tgtcggattc accgtaatgc actcctacgt cgtttggttc gtattggagt actagacgag 240
aacagaatga agctcgatta cgtattgggt ctccgaagta atgtacaacg gccacactgg 300
acgtaagata aatgctcaga ttttcttagg acc 333

<210> 901
<211> 116
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer
of highly effective WCR targets, ~50% GC
criterion, consisting of segments in order 5'-3'
from Dv18-Dv49

<400> 901
tcaaacataa ttatggcaca ttgtccttgg atgtagtatc catcacgcag accgccgaac 60
aacacgacat agccaacgaa atcacaaacg ctattagcaa tcctgtcgga ttcacc 116

<210> 902
<211> 196
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv18-Dv49-Dv22

<400> 902
tcaaacataa ttatggcaca ttgtccttgg atgtagtatc catcacgcag accgccgaac 60
aacacgacat agccaacgaa atcacaaacg ctattagcaa tcctgtcgga ttcaccgtaa 120
tgcactccta cgtcgtttgg ttcgtattgg agtactagac gagaacagaa tgaagctcga 180
ttacgtattg ggtctc 196

<210> 903
<211> 256
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv18-Dv49-Dv22-Dv20

<400> 903
tcaaacataa ttatggcaca ttgtccttgg atgtagtatc catcacgcag accgccgaac 60
aacacgacat agccaacgaa atcacaaacg ctattagcaa tcctgtcgga ttcaccgtaa 120
tgcactccta cgtcgtttgg ttcgtattgg agtactagac gagaacagaa tgaagctcga 180
ttacgtattg ggtctccgaa gtaatgtaca acggccacac tggacgtaag ataaatgctc 240
agattttctt aggacc 256

<210> 904
<211> 143
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv49-Dv22

<400> 904
gccgaacaac acgacatagc caacgaaatc acaaacgcta ttagcaatcc tgtcggattc 60
accgtaatgc actcctacgt cgtttggttc gtattggagt actagacgag aacagaatga 120
agctcgatta cgtattgggt ctc 143

<210> 905
<211> 203
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer of highly effective WCR targets, ~50% GC criterion, consisting of segments in order 5'-3' from Dv49-Dv22-Dv20

<400> 905
gccgaacaac acgacatagc caacgaaatc acaaacgcta ttagcaatcc tgtcggattc 60
accgtaatgc actcctacgt cgtttggttc gtattggagt actagacgag aacagaatga 120
agctcgatta cgtattgggt ctccgaagta atgtacaacg gccacactgg acgtaagata 180
aatgctcaga ttttcttagg acc 203

<210> 906
<211> 140

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C12 concatemer
of highly effective WCR targets, ~50%
GC criterion, consisting of segments in order
5'-3' from Dv22-Dv20

<400> 906
gtaatgcact cctacgtcgt ttggttcgta ttggagtact agacgagaac agaatgaagc 60
tcgattacgt attgggtctc cgaagtaatg tacaacggcc acactggacg taagataaat 120
gctcagattt tcttaggacc 140