

SEQUENCE LISTING

<110> Seminis Vegetable Seeds, Inc.

<120> LETTUCE PLANTS HAVING RESISTANCE TO NASONOVIA RIBISNIGRI BIOTYPE NR:1

<130> SEMB:042USP1

<160> 95

<170> PatentIn version 3.5

<210> 1

<211> 121

<212> DNA

<213> Lactuca serriola

<400> 1

acaagttgaa atcactatat ggttggtgga ttaattccct tgataatcta gcaaataag	60
tcaatggaaa ttcacagtca acactcgaac atcttaattc tcaagtctcc caaaattctt	120
c	121

<210> 2

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 2

cactatatgg ttgtggtatt aattcccttg a	31
------------------------------------	----

<210> 3

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 3

gggagacttg agaattaaga tgttcga	27
-------------------------------	----

<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>
 <223> Probe

 <400> 4
 tgaatttcca ttgacttcat 20

<210> 5
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

 <400> 5
 aatttccatt ggcttcat 18

<210> 6
 <211> 121
 <212> DNA
 <213> Lactuca serriola

<400> 6
 gagatatgac cgattaagga gtatttctgg aaggattcag acggttggtg gtgatttggc 60
 aacacaagga gagaggcttc agtctttgct gagctggcga gatcccagag caactgcatt 120
 g 121

<210> 7
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

 <400> 7
 accgattaag gattatttct ggaagga 27

<210> 8
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

 <400> 8
 cagcaaagac tgaagcctct ct 22

<210> 9
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 9
 tgggtgatttg gcaacacaa 19

<210> 10
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 10
 ttgggtgattt ggctacacaa 20

<210> 11
 <211> 121
 <212> DNA
 <213> Lactuca serriola

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (100)..(100)
 <223> n is a, c, g, or t

<400> 11
 cacnccatac tctacctcta caccataact actacaatca gacgccgccg taaacaacca 60
 cctatcggca ttcaactccg tcgtcgactc cgttcgcttn gcaaaccggc ctttgatcct 120
 c 121

<210> 12
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Primer

<400> 12
aatcagacgc cgccgtaa 18

<210> 13
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 13
gagtcgacga cggagttga 19

<210> 14
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 14
atgccgatag gtggttgt 18

<210> 15
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 15
tgccgatagc tggttgt 17

<210> 16
<211> 201
<212> DNA
<213> Lactuca serriola

<400> 16
cattgtcagt tgtgccctag gccatttcac agtccctttg atgcaagatt ccttaatggc 60
agacattttg ccactctaaa cgtccaaatt tgtgatttca tatcctcgaa acttcaagtc 120
tgttggctca attctggagg aaatggttga aaagggttcct cttgacaata caatattgag 180
ggagtatcag aagttaccat c 201

<210>	17	
<211>	24	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Primer	
<400>	17	
	gccactctaa acgtccaaat ttgt	24
<210>	18	
<211>	25	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Primer	
<400>	18	
	cagaattgag ccaacagact tgaag	25
<210>	19	
<211>	18	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Probe	
<400>	19	
	tttcgaggat atgaaatc	18
<210>	20	
<211>	15	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Probe	
<400>	20	
	cgaggatctg aaatc	15
<210>	21	
<211>	121	
<212>	DNA	
<213>	Lactuca serriola	

<220>
 <221> misc_feature
 <222> (16)..(16)
 <223> n is a, c, g, or t

<400> 21
 tactccaata gggggngggc ggggtcaacc gcccgataga agaaacccta atagcccaaa 60
 tatattcaat gggcccactt ctcaccccaa agaacaatct gacttgggtca acgctctttc 120
 c 121

<210> 22
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 22
 cccgcccgat agaagaaacc 20

<210> 23
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 23
 ggtgagaagt gggcccatt 19

<210> 24
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 24
 aatagcccaa atatattc 18

<210> 25
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

 <400> 25
 tagcccaaac atattc 16

<210> 26
 <211> 201
 <212> DNA
 <213> Lactuca serriola

<400> 26
 gtcctgtcct gtaaagtgtc aaccgactta cccttttaac ggttcaacag attcccacac 60
 tcgaggctcc gcatctttgt cttacatat ctttaaaaac aaaaaataaa aataaaaatt 120
 agaactttga aaagaaaaaa acgtgtatatt gttgtaata tcaaattttc atacttggag 180
 tccagaaaca ctatcggttg c 201

<210> 27
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 27
 ggctccgcat cttgtcctt a 21

<210> 28
 <211> 34
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 28
 caacaaatac acgttttttt cttttcaaag ttct 34

<210> 29
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 29

catatcttta aaaacaaaaa ata 23

<210> 30
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 30
atctttaaaa accaaaaata 20

<210> 31
<211> 432
<212> DNA
<213> Lactuca serriola

<220>
<221> misc_feature
<222> (273)..(273)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (298)..(298)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (348)..(348)
<223> n is a, c, g, or t

<400> 31
cgaaggacac gagcttgggt ctggtttgat cggaaaggct caagggtatt atgtatcgag 60
ttccatagat gggaagagtc agacgatggc gtttactgtg atgtttatgc acgggagtta 120
tattgatagt ttgagcttta tgggggttca ccggagtgcg gtggcggagt cccagctggc 180
ggtgatgggt ggcaccggga agtatgtgaa tgctaaaggg catgcggtgg tgaagacttt 240
tcaggggaca aaccagcaga ataatgatgg aantgagaca ctgcttcagt ttcatgtnta 300
tcttgcgtat tagtttgtat aagtctatgt gtgtttggtt tctattnta tgctttccat 360
gtttatgtga tgttatgaaa atttgtgtgt gaaatacaaa agaatttaac aatttctact 420
tttcccgag ag 432

<210> 32

<211> 17
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer

 <400> 32
 agtcccagct ggcgggtg 17

<210> 33
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer

 <400> 33
 ccatcattat tctgctgggtg tgtc 24

<210> 34
 <211> 14
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Probe

 <400> 34
 cttcccgggtg ccac 14

<210> 35
 <211> 14
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Probe

 <400> 35
 cttcccagtg ccac 14

<210> 36
 <211> 121
 <212> DNA
 <213> Lactuca serriola

 <400> 36
 agaggccaat gtgttgaaga tcaggaaagt ttatgatgca tttttggctg aatttcctct 60

ctgttatggc tactggaaga agtatgctga tcatgaagca agattgggggt ctattgataa 120

a 121

<210> 37

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 37

aaagtttatg atgcattttt ggctg 25

<210> 38

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 38

ttgcttcattg atcagcatatc ttcttc 26

<210> 39

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe

<400> 39

atttcctctc tggtatgg 18

<210> 40

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Probe

<400> 40

tttcctctgt gttatgg 17

<210> 41

<211> 2003

<212> DNA
 <213> Lactuca serriola

 <220>
 <221> misc_feature
 <222> (52)..(52)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (178)..(178)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (211)..(211)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (232)..(232)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (386)..(386)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (648)..(648)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (662)..(662)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (690)..(690)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (733)..(733)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (912)..(912)
 <223> n is a, c, g, or t

 <220>

<221> misc_feature
<222> (936)..(936)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (991)..(991)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1015)..(1015)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1033)..(1033)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1052)..(1052)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1062)..(1062)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1099)..(1099)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1169)..(1169)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1182)..(1182)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1213)..(1213)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (1238)..(1238)
<223> n is a, c, g, or t

<220>

<221> misc_feature
 <222> (1244)..(1244)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1252)..(1252)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1265)..(1265)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1283)..(1283)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1329)..(1329)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1344)..(1344)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1690)..(1690)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (1833)..(1833)
 <223> n is a, c, g, or t

<400> 41
 cgggggctag tgagttacgt tccgtcgtac ctgccggaa aacattcact gncgccataa 60
 actacgggtgt tgcagaaata gttgctctag gtgtgaagga aagttatcac tcggtggtta 120
 ttggatctat aagcttgcat ctttgaatct ctgttcgcac ttttcacttt ctctctcnag 180
 aaaatgagga cggatatggt gaataggtgt ntgagtttat cacaacattc gnttccacaa 240
 tcaccttctt cttcgtcttc tccttcttct tcattgcaaa ctctagcctc tgcaatctct 300
 tcaccgtcag caaacgacg gtgtttgacc caccgcgcac tggcttaccg ctacgttcac 360
 cggtcggcga tatttgggac gaagcngaag agatccgacc catctagaga gccgcagctt 420
 atccaacgca ccgtctccgc cagcttagat gcagagtttt cggatgaaga attctcaaag 480

aaaattcgag aactagctct ccagtttcaa gtttccgacg aatttgga taaagagaag	540
tatgacggtt tagcattgga attggaattg gcatcggaga gccagagccc atttgctggt	600
ttgaagatgg aagtgcctga ctggccaggg gatatgattc cggcgagnat tgagcgaaag	660
gngaacagcg ttgagttgcc attttcattn cgaattatca agaggaagaa acaatggcag	720
gagggataa ganacgcagg tgaatctgcc tattgttcag taaaaaagc tttctcttca	780
atggtgttca taatccgaga gcttcaaagc tacacacttc aaatgagaga gcttttatac	840
tacgaagatt tacaggggat tcttgtgaga gttcagcaag aaatgaacgc atctttcgtc	900
tggttgttcc ancaagtctt ttcccaaacc cctacnttaa tggtgtacgt gatgattctt	960
ttagccaatt acagtgtata ttcaatgtca nacaatatcg cactcgcggc gccgncacct	1020
cccgccaccg tanagtcgat tacagaacac cnaagtgaac cnaaattcga ttcttcatca	1080
gtcaaaacgt tttctgtana ttcaggtggg aaaaccacct caatcggcgg aaacaacggc	1140
ggcgggtggga aattcagggc agttgctanc gggacagacg gngacgggag atttgatgga	1200
tctataactt cancgatc aatcgtaaac ccgacaanga ctancgagga gncggtttcg	1260
ggtcnagcga gtaaggataa tgnatgggag tcatggaatt cgattgtgga tgaagctgac	1320
agaatgcang gtgtgatcgg aganaacggc gatctggatc atgaaactat gaaaagattt	1380
gtttctccgg tgactgtgaa aatcgaggaa gaagatacag aagatcactc caaacagag	1440
cttctttatc aaacgggtct ctcaacaaga cccgacaacc cgcttcttct tgcgaattac	1500
gcccagtttc tgtacctcgt tacacgagat tacgatagag ctgaggatta cttcaaaaga	1560
gcttcaatgg tggaacctaa agacgcagaa gcacttaaca aatacgcaag ctttttatgg	1620
caagttcgaa aagacttgtg ggctgctgaa gagacttatt tggaagccat ttctgctgat	1680
cctacaaacn ctttttatgc tgcaaattat gcacatttct tatggagcac cgggtggagaa	1740
gacacttggt tccctcttga ctgccggga aatatgttct ccgacgaagt gtgaattaac	1800
caccggcgtc ggagacgtgg gtttaactta ganagttggg acatgataat aaacgagatt	1860
tgagcgggaa gtggtggtgg atggttgaac ggtggaatat gataatcttg attttccggc	1920
gaaaggtggt ttgaagttgt caaaaattgt aattaagttt tgttgatatac aaattataaa	1980
tgaaaatgaa tttaggtgaa acg	2003

<211>	21	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Primer	
<400>	42	
	catctagaga gccgcagctt a	21
<210>	43	
<211>	26	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Primer	
<400>	43	
	attcttcatc cgaaaactct gcatct	26
<210>	44	
<211>	16	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Probe	
<400>	44	
	tccaacgcac cgtctc	16
<210>	45	
<211>	14	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Probe	
<400>	45	
	caacgcgccg tctc	14
<210>	46	
<211>	201	
<212>	DNA	
<213>	Lactuca serriola	
<400>	46	
	tggcttagga gatgggaaag aacgaaggtc aactgctcac catagaactc ttgctaaaca	60

ggttgattcg tcaccatcaa attaaacatg agttcacaat tctggggtag ggatctgatt 120
 ttcttagatg ataatgacga gaatgatggt gattcaagag acctatgctt tggggaaagg 180
 gtctatggga ttttttattt t 201

<210> 47
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 47
 gctaaacagg ttgattcgtc accat 25

<210> 48
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 48
 accatcattc tcgtcattat catctagga 29

<210> 49
 <211> 14
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 49
 accccagaat tgtg 14

<210> 50
 <211> 14
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 50
 accccaggat tgtg 14

<210> 51
 <211> 201
 <212> DNA
 <213> Lactuca serriola

<400> 51
 aaaagaattt gctaaccctg aagctaaaat aaaaggtctt tcatgtctcc actgttcaaa 60
 agttcatttt tgtcatcttc gtctgccaat tccttcaccg cagaaaagaa gcaaagatca 120
 ccgtttttgt ctattcttgt gtatcttcta ttgaaaaaac atgatgcaaa gtaagcaatc 180
 aatcaacttt ttttttattc a 201

<210> 52
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 52
 tgtcatcttc gtctgccaat tcc 23

<210> 53
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 53
 acacaagaat agacaaaaac ggtgatct 28

<210> 54
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 54
 tgcttctttt ctgcggtgaa 20

<210> 55
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 55
 ttgcttcttt tctacggtga a 21

<210> 56
 <211> 297
 <212> DNA
 <213> Lactuca serriola

<220>
 <221> misc_feature
 <222> (66)..(66)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (101)..(101)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (143)..(143)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (153)..(155)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (174)..(174)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (243)..(243)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (247)..(247)
 <223> n is a, c, g, or t

<400> 56
 gctaaggcac agcctgattt agttgcagat gaaaacgatg atgaattact cacagaaaaa 60
 gatagnttcg aggaggtgaa ggatatggaa catgcaaagc ngcaagaatc tagcccaagt 120
 gatgctaaaa actctatcaa agnggaagaa cannttgatg atgtttgtat gccnttaaaa 180

gatgatgaag atactatgaa ggatgttgaa gaggggactg atgttaagcc ctctgttgaa	240
agntctnatt taagagatgt tgcaaaagcc attgataatc aagaaccaga agtggat	297
<210> 57	
<211> 29	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 57	
cagatgaaaa cgatgatgaa ttactcaca	29
<210> 58	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 58	
agcatcactt gggctagatt cttg	24
<210> 59	
<211> 17	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Probe	
<400> 59	
aggagtgaa ggatatg	17
<210> 60	
<211> 17	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Probe	
<400> 60	
aggagtgaa tgatatg	17
<210> 61	

<211> 949
 <212> DNA
 <213> Lactuca serriola

<220>
 <221> misc_feature
 <222> (19)..(19)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (38)..(38)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (70)..(70)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (85)..(85)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (127)..(127)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (147)..(147)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (406)..(406)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (466)..(466)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (549)..(549)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (869)..(869)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (886)..(886)
 <223> n is a, c, g, or t

<400> 61
 cgcgggggaa tggcttgant atgatgaaac ggacggcnat tcacgatatt gaatactttt 60
 gtacccatcn gaacctgccg gaaanaatgc accacttatc atcatcgtcg tggatgctcc 120
 gccgctnttg ctgtcatgca acgcctncct tttcgcccc taccgccgtt ttatctactt 180
 ctgctgctac tctcactcct cccaagaaga aaaaactcgt tttcatgggt tctccctcgg 240
 taatctctcg cccaatgttc ctacaattta cgttaagcat cgccatgggc aataattttc 300
 gattggggct tcgattttga aatctgattc gtgttaggtc tcggcttcg ttctcgagac 360
 tcttcttgac gcacctccg ccgctgattc cttattcgag gttgcngcga ttgttaccca 420
 gccaccttca ggaagagata ggggaagaaa agtgatgcca tcaccngtag cacaacatgc 480
 tctcgataga ggcttccta atgacctaat tttcacacct gttaaagcca atgaggaagc 540
 atttttgtnc aatttcagag cacttgagcc tcaactttgc atcacagcag catatggcaa 600
 catattacca accaaatttt taaagattcc tttattaggg actgtgaata tacaccaag 660
 cttgttgctt ttataccgtg gagctgctcc tgttcaaaga gcattgcagg atggagttac 720
 agaaactggg gtatcattag cattcactat ccgggcatta gatgcgggcc ccattattgc 780
 ctatgaaaaa aatgaaaatc gatgatcata ttaaggctcc agaattgctt gatctactat 840
 ttgcacaagg atctaaactc ttgcttcana aacttcctct atattnaatg gatctgcaaa 900
 gacaaatgct caagaacaag atgactcaaa agccactttg gtcctcaaaa 949

<210> 62
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 62
 cgccatgggc aataattttc gatt 24

<210> 63
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 63
 gcgtcaagaa gagtctcgag aa 22

<210> 64
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 64
 taggtctcgg cttccg 16

<210> 65
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 65
 ttaggtctct gcttccg 17

<210> 66
 <211> 201
 <212> DNA
 <213> Lactuca serriola

<400> 66
 ctttttactg ttttatcagg aattaakttt ttttagtaac tataccatt ccctgagtgt 60
 ttgactacct attcttacct aacctatact acgtcgtgtg caggattaca tgcctagttt 120
 tttgatgggtc catagtttca ttgataacaa ttataagttc aatattgatt ataaattatg 180
 catcatgttt ttggcattgt t 201

<210> 67
 <211> 201
 <212> DNA
 <213> Lactuca serriola

<400> 67
 atattgggat tgggttcgtg aaatcgattt gaaaaatcag aaaaaattga tttgttctac 60

tagttgtagg aaacttgatt ttttgaacc tagtgtgacc ttttttgcc cctattgctt	120
tgtatagaca ctttttaggt agattttaac acaacactca aaatgttctc taatataata	180
tcatattatc ggatattttc a	201

<210> 68
 <211> 201
 <212> DNA
 <213> Lactuca serriola

<400> 68	
atgattatgt tggtttctaa ctcaaattcca tcatcccatg gtagatttga tgttggaatt	60
tctaaatctc cacaaactct agattttcta atgataatga taatgtgata atctaactct	120
tatatgattc cattaccact aaggaatgta tgattgcaa tccttcttag aagagcacia	180
ttcaaacaat ggtagaatcc t	201

<210> 69
 <211> 121
 <212> DNA
 <213> Lactuca serriola

<220>
 <221> misc_feature
 <222> (85)..(85)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (103)..(103)
 <223> n is a, c, g, or t

<400> 69	
agcaagcatc gccgtcatca atcctccggt acttgttccg gcatgacat caaagtaatc	60
tgcaattcgt gcctcaggtc catcnatttc ctgaagcttg gantcgagaa atgaaagtat	120
g	121

<210> 70
 <211> 121
 <212> DNA
 <213> Lactuca serriola

<400> 70	
ttccagttct agttccagtt ccatcaattt caaaggaatt atggtgggaa atgcagtgac	60
agattattac tatgacaacc ttggaactgt gacatattgg tggagtcacg ctatgatatc	120

t	121
<210> 71	
<211> 27	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 71	
agttccagtt ccatcaattt caaagga	27
<210> 72	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Primer	
<400> 72	
gtcacagttc caaggttgatc atagt	25
<210> 73	
<211> 17	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Probe	
<400> 73	
tgacgtgaca gattatt	17
<210> 74	
<211> 15	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Probe	
<400> 74	
cagtgacgga ttatt	15
<210> 75	
<211> 201	
<212> DNA	

<213> Lactuca serriola

<400> 75
cattggcatt agagatggta gtgaaataac tatcatctca aatcatcaca ctgtatgttg 60
acatttacta ttttgtatgt tgacatgtgt atagaatgat attttggtat gttctgttca 120
taggatctta tggaagtagt ttaataaaga gtttcacatg ctaagcatag acaatatgac 180
aggtcaacca ttaggtgttt c 201

<210> 76
<211> 121
<212> DNA
<213> Lactuca serriola

<220>
<221> misc_feature
<222> (114)..(114)
<223> n is a, c, g, or t

<400> 76
cgacattaca gccgcatcaa acgataacat tcgcgattct tgaagcccgt gattcacttc 60
tggactattc gcaatctttg aagtcggttt aggagacgat aaattcttgt tttngtttcg 120
a 121

<210> 77
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 77
gcatcaaacg ataacattcg cgatt 25

<210> 78
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 78
cgtctcctaa accgacttca aagat 25

<210> 79
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Probe

 <400> 79
 tgattcactt ctggactatt 20

 <210> 80
 <211> 17
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Probe

 <400> 80
 ttcacttccg gactatt 17

 <210> 81
 <211> 121
 <212> DNA
 <213> Lactuca serriola

 <400> 81
 ttctacgtct gctgcatctg ttgctaacct cgctgccact agactcgagt tatgctcctc 60
 ttcatcaaac cacccaactt catttctcat tatcgctgaa agcatcattc ttcgaactcg 120
 t 121

 <210> 82
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Primer

 <400> 82
 acctcgctgc cactagact 19

 <210> 83
 <211> 27
 <212> DNA
 <213> Artificial Sequence

 <220>

<223> Primer

 <400> 83
 agaatgatgc tttcagcgat aatgaga 27

 <210> 84
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Probe

 <400> 84
 agttatgctc ctcttcatca 20

 <210> 85
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Probe

 <400> 85
 agttatgctc ctcctcatca 20

 <210> 86
 <211> 870
 <212> DNA
 <213> Lactuca serriola

 <220>
 <221> misc_feature
 <222> (148)..(148)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (157)..(157)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (270)..(270)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (327)..(327)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (394)..(394)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (425)..(425)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (572)..(572)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (601)..(601)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (658)..(658)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (723)..(723)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (725)..(725)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (747)..(747)
 <223> n is a, c, g, or t

<400> 86
 ggaaaaacgg aaggacatag agttagagtg ggagttttaga agcagaagga agctatggcg 60
 tcagtgagag ttgactcgga ggtgactcgg ataatgatcg gtgtgaacga gtcaagcatc 120
 aaaggatatc cacatgcttc aattagtngc aaatcancat ttgaatggac tctgaacaag 180
 atcattcgct ccaatacctc cggttttaag ctcttttttc tccatgttca agttcctgat 240
 gaagacgggtt ttgatgatgt tgatagtatn tacgcctcac cacaagattt tagagatgca 300
 aatcgtaaag acaagattaa tggatcncat ttgctggagt actttgtgaa cagatgtcat 360
 gatatagggg ttgtttgtga agcatgggtg aagnggggtg atgccaaaga agtaatctgc 420

catgnggtca aaagagtcaa accagacctc cttgtagttg gaaacagagg tcttggaccc	480
ttccagaggg tatttgtggg aactgtgagt gaattctgtg tgaagcactg tgaatgccca	540
gttgtaacaa tcaaacgcag tgcagaagag anccctaattg atcctgtaga tgattgattg	600
ntcctctaaa agctactatt aataatgtaa aatcttctct acaaccctct ttcctggntt	660
gtctttttta atggagattt agctgtgtgt atctgtaaga cctatgagtt ctttttttct	720
agntnagttg ttatacaact atgttttncaa ggctgctttt gtgatatgta actagattga	780
caagcttttt agggatgaaa tcacatttat gtcttttcta ctctctaaca ttacatcaaa	840
aaatatattc cttatatact cttgacaaaa	870

<210> 87
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 87	
tgtgagtgaa ttctgtgtga agca	24

<210> 88
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 88	
cttctgcact gcgtttgatt gtt	23

<210> 89
 <211> 15
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Probe

<400> 89	
caactgggca ttcac	15

<210> 90

<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<400> 90
acaactggac attcac

16

<210> 91
<211> 1917
<212> DNA
<213> Lactuca serriola

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (24)..(24)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (182)..(182)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (262)..(262)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (268)..(268)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (275)..(275)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (304)..(304)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (356)..(356)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (360)..(360)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (391)..(391)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (535)..(535)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (603)..(603)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (620)..(620)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (627)..(627)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (632)..(632)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (636)..(636)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (670)..(670)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (695)..(695)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (716)..(716)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (735)..(735)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (765)..(765)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (837)..(837)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (840)..(840)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (882)..(882)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (914)..(914)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (926)..(926)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (929)..(929)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (947)..(947)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1101)..(1101)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1104)..(1104)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1109)..(1109)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1111)..(1111)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1116)..(1116)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1124)..(1124)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1153)..(1153)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1215)..(1215)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1221)..(1221)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1227)..(1227)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1241)..(1241)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1246)..(1246)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1251)..(1251)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1284)..(1284)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1291)..(1291)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1297)..(1297)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1305)..(1305)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1318)..(1318)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1321)..(1321)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1346)..(1346)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1348)..(1348)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1350)..(1350)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1366)..(1366)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1395)..(1395)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1400)..(1400)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1405)..(1405)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1407)..(1407)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1413)..(1413)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1419)..(1419)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1432)..(1432)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1444)..(1444)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1447)..(1447)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1477)..(1477)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1497)..(1497)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1502)..(1502)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1512)..(1512)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1515)..(1515)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1521)..(1521)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1527)..(1527)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1530)..(1530)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1545)..(1545)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1558)..(1558)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1584)..(1584)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1591)..(1591)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1593)..(1593)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1601)..(1601)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1612)..(1612)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1614)..(1614)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1621)..(1621)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1625)..(1625)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1627)..(1627)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1636)..(1636)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1644)..(1644)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1661)..(1661)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1666)..(1666)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1682)..(1682)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1689)..(1689)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1698)..(1698)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1701)..(1701)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1706)..(1706)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1716)..(1716)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1729)..(1729)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1735)..(1735)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1742)..(1742)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1747)..(1747)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1753)..(1753)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1755)..(1755)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1758)..(1758)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1765)..(1765)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1768)..(1768)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1775)..(1775)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1777)..(1777)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1784)..(1784)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1786)..(1786)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1791)..(1791)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1807)..(1807)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1818)..(1818)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1821)..(1821)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1828)..(1828)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1830)..(1830)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1837)..(1837)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1847)..(1847)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1850)..(1850)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (1914)..(1914)

<223> n is a, c, g, or t

<400> 91

gcggggggcg acgatttngg gggncagtt gatttcctta tactttactt caaaatcttc 60

tccatagttg aattgctgat aatcagttca gaagcttggt tgctgcattt cctggtgtat 120

ggcaccaatg aagggcattc tttctctgca aagggtgtt ctatcaaggc atcaaaatgc 180

anactggggg ataaatgcta ccggctagac ttttcagcac gcagtctgcg acaaccgcca 240

ccaccgcca accaccaccg cnaccacntc caccngaaaa aaccacttt ggtggcctga 300

aagntgaaga ccgcatcttc acaaacctat acggtttaca cgacccttt ctcaangcn 360

caatgaaacg tggcgattgg catagaacta nagacatagt aatcaaaggt gctgattgga 420

tagtaaacga aatgaaaaaa tccggcttac gtggacgtgg aggtgctggt ttcccatcag 480

ggctaaaatg gtcattcatg ccaaaagtat ccgatggtcg tccatcttat cttgntgtaa 540

acgcagacga aagtgaacct ggaacttgca aagatagaga aatcatgcgt aacgatccac 600

acnagcttct agaaggatgn ttaatanctg gngtangtat gcgtgcaacc gctgcctaca 660

tttacatcan gggcgaatac gtaaataaac gtttnaattt agaaaaagca agaaangaag 720

catatgcagc tggantactt ggaaaaaacg cgtgtgggtc cgggnatgat ttcgatgtcc 780

atatccattt cggagccgga gcctacattt gtggtgaaga aaccgcgctt ctcgaancn 840

tcgagggcaa acaaggaaaa ccgcgtttga agccgccttt tnccgccaac gcggggttat	900
acgggtgtcc cacnaccgtc acaaangtng aaacaatcgc ggtgtcnccg actattctaa	960
gacgtgggcc cgagtggttt tctagctttg gtagaaagaa cattcgggga ctaaactttt	1020
ctgtatatcg ggtcatgtga acaaaccgtg tacagtggaa gaggagatga gtattccatt	1080
gaaggagtgt ttggagcggc nttntggcng nttgangggc ggangggaca atttgctagc	1140
ggtgattccg ggnggttctt ctgttccttt gcttaciaag gatttatgcg aagacgtgtt	1200
gatggatttt gatngttga nagctgntca atctggatta nggacngctg ntgttattgt	1260
gatggataag tcgactgata ttnggatgc nattgcnagg ctttngtatt ttataanca	1320
ngagagttgt ggtcagtga cgcctngnan ggagggaact gggtgncctt ggatgattat	1380
ggaaaggatg aaagntgggn atgcnanatt ggnggagant gatatgcttc angaagtgc	1440
taancanatt gaagggcata ctatttgtgc acttggngat gctgctgctt ggcctgntca	1500
anggcttatt anacntttta ngcctngnan ggagaggagg atcanggagc gtgctgancg	1560
ggagtgtctt caagcagctg cttnaaatca ngntgaatgg nttcctacct gnangaaaac	1620
ntgangngac tttggncctt ggancataat atgattaatg nttaangttt gtgttgctgt	1680
tnaactacna tgtgattnaa nacagnacc ttctcnttag attgggggna acttntgtgt	1740
gnttaangat acnanganat cctantgnta ttatngnact tcantnagcc ntatgctttt	1800
ggacacntgt caaaatgnta ntaagccnan tgcattnttg taatcanacn atggaagctt	1860
ttcataagct caagtttcat gccttgtcag aacattaacc gttggtggtt tggngaa	1917

<210> 92
 <211> 26
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 92	
aaaggtgctg attggatagt aaacga	26

<210> 93
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>		
<223>	Primer	
<400>	93	
atttttagccc tgatgggaaa cca		23
<210>	94	
<211>	16	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Probe	
<400>	94	
cacgtaagcc ggattt		16
<210>	95	
<211>	16	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Probe	
<400>	95	
cacgtaagcc agattt		16