

SEQUENCE LISTING

<110> Temasek Life Sciences Laboratory Limited

<120> Flowering Modification in the Palm Family

<130> FP6175

<160> 22

<170> PatentIn version 3.5

<210> 1

<211> 593

<212> DNA

<213> Elaeis guineensis

<220>

<221> CDS

<222> (63)..(590)

<400> 1

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Met Pro Arg Glu Arg Asp Pro Leu Val Val Gly Arg Val Ile Gly
1 5 10 15

gat gtg ttg gat cca ttc ata aga agt gta ccc ctc agg gtg atc tac 155

Asp Val Leu Asp Pro Phe Ile Arg Ser Val Pro Leu Arg Val Ile Tyr
20 25 30

aat tcg agg gag gtg gcc aat gga tgt gag ctt aaa ccc tcg gct gtc 203

Asn Ser Arg Glu Val Ala Asn Gly Cys Glu Leu Lys Pro Ser Ala Val
35 40 45

gtt tac cga cct agg gtt gag gtt gga ggc act gac ctc agg acc ttc 251

Val Tyr Arg Pro Arg Val Glu Val Gly Gly Thr Asp Leu Arg Thr Phe
50 55 60

tac acc ctt att atg ata gac ccg gat gct cca agt cca agt gac cca 299

Tyr Thr Leu Ile Met Ile Asp Pro Asp Ala Pro Ser Pro Ser Asp Pro
65 70 75

cac ctc agg gag tat ttg cac tgg ttg gtc acg gat atc ccg gca acg 347

His Leu Arg Glu Tyr Leu His Trp Leu Val Thr Asp Ile Pro Ala Thr
80 85 90 95

act gga gct gcc tac ggt cag gag att gtg tgc tat gag agt cca cgg 395

Thr Gly Ala Ala Tyr Gly Gln Glu Ile Val Cys Tyr Glu Ser Pro Arg
100 105 110

ccg gcg ctt ggc atc cac cgg ttc atc ttt gtg ctg ttc cag cag ctt 443

Pro Ala Leu Gly Ile His Arg Phe Ile Phe Val Leu Phe Gln Gln Leu
115 120 125

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Gly Arg Gln Thr Val Tyr Ala Pro Gly Trp Arg Gln Asn Phe Asp Thr
130 135 140

cgg gac ttt gca gag ctc tac aac ctc gga tca ccg gtc gca gca gtc 539

Arg Asp Phe Ala Glu Leu Tyr Asn Leu Gly Ser Pro Val Ala Ala Val
145 150 155

tat ttt aac tgc cag aga gag tgc ggc tcc ggc ggg aga agg atg caa 587

Tyr Phe Asn Cys Gln Arg Glu Ser Gly Ser Gly Gly Arg Arg Met Gln
160 165 170 175

cct taa 593

Pro

<210> 2
 <211> 176
 <212> PRT
 <213> *Elaeis guineensis*

<400> 2

Met Pro Arg Glu Arg Asp Pro Leu Val Val Gly Arg Val Ile Gly Asp
 1 5 10 15

Val Leu Asp Pro Phe Ile Arg Ser Val Pro Leu Arg Val Ile Tyr Asn
 20 25 30

Ser Arg Glu Val Ala Asn Gly Cys Glu Leu Lys Pro Ser Ala Val Val
 35 40 45

Tyr Arg Pro Arg Val Glu Val Gly Gly Thr Asp Leu Arg Thr Phe Tyr
 50 55 60

Thr Leu Ile Met Ile Asp Pro Asp Ala Pro Ser Pro Ser Asp Pro His
 65 70 75 80

Leu Arg Glu Tyr Leu His Trp Leu Val Thr Asp Ile Pro Ala Thr Thr
 85 90 95

Gly Ala Ala Tyr Gly Gln Glu Ile Val Cys Tyr Glu Ser Pro Arg Pro
 100 105 110

Ala Leu Gly Ile His Arg Phe Ile Phe Val Leu Phe Gln Gln Leu Gly
 115 120 125

Arg Gln Thr Val Tyr Ala Pro Gly Trp Arg Gln Asn Phe Asp Thr Arg
 130 135 140

Asp Phe Ala Glu Leu Tyr Asn Leu Gly Ser Pro Val Ala Ala Val Tyr
 145 150 155 160

Phe Asn Cys Gln Arg Glu Ser Gly Ser Gly Gly Arg Arg Met Gln Pro
 165 170 175

<210> 3
 <211> 2432
 <212> DNA
 <213> *Elaeis guineensis*

<400> 3

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cattcataag aagtgtaccc ctcagggtga tctacaattc gagggagggt gccaatggat	180
gtgagcttaa accctcggct gtcgtttacc gacctagggt tgaggttgga ggcactgacc	240
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 2220 gggtaactca tcttgata tgaatttgcgt gtaatttgggt gataaaaagaa acttcatgca
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 2340 ttgatcggaat ttttatctt tcgtaaggaa acttaagctt ggagagatga aggccttgca
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2432

<210> 4
 <211> 179
 <212> PRT
 <213> *Oryza sativa*

<400> 4

Met Ala Gly Ser Gly Arg Asp Arg Asp Pro Leu Val Val Gly Arg Val
 1 5 10 15

Val Gly Asp Val Leu Asp Ala Phe Val Arg Ser Thr Asn Leu Lys Val
 20 25 30

Thr Tyr Gly Ser Lys Thr Val Ser Asn Gly Cys Glu Leu Lys Pro Ser
 35 40 45

Met Val Thr His Gln Pro Arg Val Glu Val Gly Gly Asn Asp Met Arg
 50 55 60

Thr Phe Tyr Thr Leu Val Met Val Asp Pro Asp Ala Pro Ser Pro Ser
 65 70 75 80

Asp Pro Asn Leu Arg Glu Tyr Leu His Trp Leu Val Thr Asp Ile Pro
 85 90 95

Gly Thr Thr Ala Ala Ser Phe Gly Gln Glu Val Met Cys Tyr Glu Ser
 100 105 110

Pro Arg Pro Thr Met Gly Ile His Arg Leu Val Phe Val Leu Phe Gln
 115 120 125

Gln Leu Gly Arg Gln Thr Val Tyr Ala Pro Gly Trp Arg Gln Asn Phe
 130 135 140

Lys Thr Lys Asp Phe Ala Glu Leu Tyr Asn Leu Gly Ser Pro Val Ala
 145 150 155 160

Ala Val Tyr Phe Asn Cys Gln Arg Glu Ala Gly Ser Gly Gly Arg Arg
 165 170 175

Val Tyr Pro

<210> 5
 <211> 176
 <212> PRT
 <213> *Elaeis guineensis*

<400> 5

Met Pro Arg Glu Arg Asp Pro Leu Val Val Gly Arg Val Ile Gly Asp
 1 5 10 15

Val Leu Asp Pro Phe Ile Arg Ser Val Pro Leu Arg Val Ile Tyr Asn
20 25 30

Ser Arg Glu Val Ala Asn Gly Cys Glu Leu Lys Pro Ser Ala Val Val
35 40 45

Asn Arg Pro Arg Val Glu Val Gly Gly Thr Asp Leu Arg Thr Phe Tyr
50 55 60

Thr Leu Ile Met Ile Asp Pro Asp Ala Pro Ser Pro Ser Asp Pro His
65 70 75 80

Leu Arg Glu Tyr Leu His Trp Leu Val Thr Asp Ile Pro Ala Thr Thr
85 90 95

Gly Ala Ala Tyr Gly Gln Glu Ile Val Cys Tyr Glu Ser Pro Arg Pro
100 105 110

Ala Leu Gly Ile His Arg Phe Ile Phe Val Leu Phe Gln Gln Leu Gly
115 120 125

Arg Gln Thr Val Tyr Ala Pro Gly Trp Arg Gln Asn Phe Asp Thr Arg
130 135 140

Asp Phe Ala Glu Leu Tyr Asn Leu Gly Ser Pro Val Ala Ala Val Tyr
145 150 155 160

Phe Asn Cys Gln Arg Glu Ser Gly Ser Gly Gly Arg Arg Met Gln Pro
165 170 175

<210> 6
<211> 176
<212> PRT
<213> Jatropha curcas

<400> 6

Met Pro Arg Asp Gln Phe Arg Asp Pro Leu Val Val Gly Arg Val Ile
1 5 10 15

Gly Asp Val Leu Asp Pro Phe Thr Lys Ser Ile Ser Leu Gln Val Thr
20 25 30

Tyr Asn His Arg Glu Val Asn Asn Gly Cys Glu Leu Lys Pro Ser Gln
35 40 45

Val Val Asn Gln Pro Arg Val Asp Ile Gly Gly Asp Asp Leu Arg Thr
50 55 60

Phe Tyr Thr Leu Val Met Val Asp Pro Asp Ala Pro Ser Pro Ser Asp
65 70 75 80

Pro Asn Leu Arg Glu Tyr Leu His Trp Leu Val Thr Asp Ile Pro Ala
85 90 95

Thr Thr Gly Val Thr Phe Gly Gln Glu Ile Val Cys Tyr Glu Ser Pro
100 105 110

Arg Pro Ser Leu Gly Ile His Arg Phe Val Phe Ile Leu Phe Arg Gln
115 120 125

Leu Gly Arg Gln Thr Val Tyr Pro Pro Gly Trp Arg Gln Asn Phe Asn
130 135 140

Thr Arg Asp Phe Ala Glu Leu Tyr Asn Leu Gly Ser Pro Val Ala Ala
145 150 155 160

Val Tyr Phe Asn Cys Gln Arg Glu Ser Gly Thr Gly Gly Arg Arg Arg
165 170 175

<210> 7
<211> 175
<212> PRT
<213> Manihot esculenta

<400> 7

Met Pro Arg Asp Arg Asp Pro Leu Ala Val Gly Arg Val Ile Gly Asp
1 5 10 15

Val Leu Asp Pro Phe Thr Arg Ser Ile Ser Leu Asn Ile Thr Tyr Asn
20 25 30

Asn Arg Asp His Val Thr Asn Gly Cys Glu Leu Lys Pro Ser Gln Val
35 40 45

Val Asn Gln Pro Arg Val Asp Val Gly Gly Asp Asp Leu Arg Thr Phe
50 55 60

Tyr Thr Leu Val Met Val Asp Pro Asp Ala Pro Ser Pro Ser Asp Pro
65 70 75 80

Asn Leu Arg Glu Tyr Leu His Trp Leu Val Thr Asp Ile Pro Gly Thr
85 90 95

Thr Gly Ala Ser Phe Gly Gln Glu Val Val Cys Tyr Glu Ser Pro Arg
100 105 110

Pro Ser Val Gly Ile His Arg Phe Val Phe Ile Leu Phe Arg Gln Leu
115 120 125

Gly Arg Gln Thr Val Tyr Ala Pro Gly Trp Arg Gln Asn Phe Asn Thr
130 135 140

Arg Asp Phe Ala Glu Leu Tyr Asn Leu Gly Leu Pro Val Ala Ala Val
145 150 155 160

Tyr Phe Asn Cys Gln Arg Glu Ser Gly Ser Gly Gly Arg Arg Arg
165 170 175

<210> 8
 <211> 175
 <212> PRT
 <213> *Arabidopsis thaliana*

<400> 8

Met Ser Ile Asn Ile Arg Asp Pro Leu Ile Val Ser Arg Val Val Gly
 1 5 10 15

Asp Val Leu Asp Pro Phe Asn Arg Ser Ile Thr Leu Lys Val Thr Tyr
 20 25 30

Gly Gln Arg Glu Val Thr Asn Gly Leu Asp Leu Arg Pro Ser Gln Val
 35 40 45

Gln Asn Lys Pro Arg Val Glu Ile Gly Gly Glu Asp Leu Arg Asn Phe
 50 55 60

Tyr Thr Leu Val Met Val Asp Pro Asp Val Pro Ser Pro Ser Asn Pro
 65 70 75 80

His Leu Arg Glu Tyr Leu His Trp Leu Val Thr Asp Ile Pro Ala Thr
 85 90 95

Thr Gly Thr Thr Phe Gly Asn Glu Ile Val Cys Tyr Glu Asn Pro Ser
 100 105 110

Pro Thr Ala Gly Ile His Arg Val Val Phe Ile Leu Phe Arg Gln Leu
 115 120 125

Gly Arg Gln Thr Val Tyr Ala Pro Gly Trp Arg Gln Asn Phe Asn Thr
 130 135 140

Arg Glu Phe Ala Glu Ile Tyr Asn Leu Gly Leu Pro Val Ala Ala Val
 145 150 155 160

Phe Tyr Asn Cys Gln Arg Glu Ser Gly Cys Gly Gly Arg Arg Leu
 165 170 175

<210> 9
 <211> 172
 <212> PRT
 <213> *Picea abies*

<400> 9

Met Ser Arg Phe Val Glu Pro Leu Val Val Gly Arg Val Ile Gly Asp
 1 5 10 15

Val Leu Asp Met Phe Val Pro Ser Val Asp Leu Ala Val Thr Tyr Ala
 20 25 30

Ser Arg Gln Val Asn Asn Gly Cys Glu Leu Lys Pro Ser Ala Ile Thr
 35 40 45

Leu Leu Pro Arg Val Asp Ile Gly Gly Glu Asp Leu Arg Asn Phe Tyr
50 55 60

Thr Leu Val Met Thr Asp Pro Asp Ala Pro Ser Pro Ser Asp Pro Thr
65 70 75 80

Leu Arg Glu Tyr Leu Gln Trp Ile Val Thr Asp Ile Pro Ala Thr Thr
85 90 95

Ser Ala Ser Phe Gly Arg Glu Leu Val Ser Tyr Glu Ser Pro Arg Pro
100 105 110

Thr Ile Gly Ile His Arg Phe Ile Phe Val Leu Phe Lys Gln Met Gly
115 120 125

Arg Gln Thr Val Tyr Pro Pro Gly Ser Arg Leu Asn Phe Asn Thr Arg
130 135 140

Asn Phe Ala Leu Ser Asn Ser Leu Gly Leu Pro Val Ala Ala Val Tyr
145 150 155 160

Phe Asn Ala Gln Lys Glu Ala Ala Gly Arg Arg Arg
165 170

<210> 10
<211> 173
<212> PRT
<213> Arabidopsis thaliana

<400> 10

Met Ala Ala Ser Val Asp Pro Leu Val Val Gly Arg Val Ile Gly Asp
1 5 10 15

Val Leu Asp Met Phe Ile Pro Thr Ala Asn Met Ser Val Tyr Phe Gly
20 25 30

Pro Lys His Ile Thr Asn Gly Cys Glu Ile Lys Pro Ser Thr Ala Val
35 40 45

Asn Pro Pro Lys Val Asn Ile Ser Gly His Ser Asp Glu Leu Tyr Thr
50 55 60

Leu Val Met Thr Asp Pro Asp Ala Pro Ser Pro Ser Glu Pro Asn Met
65 70 75 80

Arg Glu Trp Val His Trp Ile Val Val Asp Ile Pro Gly Gly Thr Asn
85 90 95

Pro Ser Arg Gly Lys Glu Ile Leu Pro Tyr Met Glu Pro Arg Pro Pro
100 105 110

Val Gly Ile His Arg Tyr Ile Leu Val Leu Phe Arg Gln Asn Ser Pro

115 120 125
Val Gly Leu Met Val Gln Gln Pro Pro Ser Arg Ala Asn Phe Ser Thr
130 135 140
Arg Met Phe Ala Gly His Phe Asp Leu Gly Leu Pro Val Ala Thr Val
145 150 155 160
Tyr Phe Asn Ala Gln Lys Glu Pro Ala Ser Arg Arg Arg
165 170

<210> 11
<211> 172
<212> PRT
<213> Jatropha curcas

<400> 11

Met Ala Ala Ser Val Asp Pro Leu Val Ala Gly Arg Val Ile Gly Asp
1 5 10 15
Val Ile Asp Leu Phe Val Pro Ser Val Thr Met Ser Val Tyr Tyr Gly
20 25 30
Ser Lys His Val Thr Asn Gly Cys Asp Val Lys Pro Ser Thr Ala Ser
35 40 45
Asn Pro Pro Lys Leu Thr Ile Ser Gly His Pro Asn Asp Leu Tyr Thr
50 55 60
Leu Val Met Thr Asp Pro Asp Ala Pro Ser Pro Ser Glu Pro Ser Met
65 70 75 80
Arg Glu Trp Val His Trp Val Val Ala Asp Ile Pro Gly Gly Thr Asn
85 90 95
Pro Thr Lys Gly Lys Glu Ile Leu Ser Tyr Ala Gly Pro Arg Pro Pro
100 105 110
Val Gly Ile His Arg Tyr Ile Leu Val Leu Phe Arg Gln Lys Ala Ala
115 120 125
Met Gly Val Val Glu Gln Pro Gln Ser Arg Ala Asn Phe Asn Thr Arg
130 135 140
Leu Phe Ala Ala His Leu Glu Leu Gly Leu Pro Val Ala Thr Val Tyr
145 150 155 160
Phe Asn Ala Gln Lys Glu Pro Ala Ala Lys Arg Phe
165 170

<210> 12
<211> 174
<212> PRT
<213> Picea abies

<400> 12

Met Ala Arg Ser Thr Asp Pro Leu Val Val Gly Arg Val Ile Gly Asp
1 5 10 15

Val Ile Asp Met Phe Val Pro Ser Asn Asp Met Ala Val Tyr Tyr Gly
20 25 30

Ser Lys Gln Val Arg Asp Gly Cys Glu Ile Lys Pro Ser Ala Thr Val
35 40 45

Asp Arg Pro Lys Val Gln Ile Ala Gly Arg His Phe Asp Asp Ser Leu
50 55 60

Tyr Thr Leu Val Met Thr Asp Pro Asp Ser Pro Ser Pro Ser Glu Pro
65 70 75 80

Asn Met Arg Glu Trp Val His Trp Val Val Thr Asp Ile Pro Gly Ala
85 90 95

Thr Asp Ala Ala Gln Gly Arg Glu Ile Leu Pro Tyr Met Gly Pro Arg
100 105 110

Pro Pro Ile Gly Ile His Arg Tyr Ile Phe Val Leu Phe Lys Gln Ser
115 120 125

Gly Pro Met Val Met Met Val Pro Pro Gln Ala Arg Asn Asn Phe Ser
130 135 140

Thr Arg Ala Phe Ala Ser Glu Tyr Ser Leu Gly Leu Pro Val Ser Ala
145 150 155 160

Ala Tyr Phe Asn Ala Gln Lys Glu Pro Gly Thr Arg Lys Arg
165 170

<210> 13

<211> 175

<212> PRT

<213> Jatropha curcas

<400> 13

Met Ala Arg Ser Leu Glu Pro Leu Val Val Gly Lys Val Ile Gly Glu
1 5 10 15

Val Leu Asp Met Tyr Asn Pro Val Ala Glu Phe Thr Val His Tyr Gly
20 25 30

Ser Lys Gln Val Ala Asn Gly Cys Glu Ile Lys Pro Ser Val Ala Ala
35 40 45

Gln Lys Pro His Val His Ile Leu Gly Ser Arg Leu Ser Ser Asp Leu
50 55 60

Tyr Thr Leu Val Met Val Asp Pro Asp Ala Pro Ser Pro Ser Glu Pro
65 70 75 80

Lys Trp Arg Glu Trp Leu Leu Trp Ile Val Val Asp Ile Pro Glu Gly
85 90 95

Ser Asp Ala Thr Lys Gly His Glu Leu Val Ser Tyr Met Gly Pro Gln
100 105 110

Pro Pro Thr Gly Ile His Arg Tyr Val Phe Ala Leu Phe Lys Gln Lys
115 120 125

Gly Ala Leu Met Gly Arg Ile Gln Pro Pro Asp Gly Arg Gly Asn Phe
130 135 140

Asn Thr Arg His Phe Ala Ala Gln Ser Gly Leu Gly Leu Pro Val Ala
145 150 155 160

Ala Val Tyr Phe Asn Ser Gln Lys Glu Pro Ala Val Lys Lys Arg
165 170 175

<210> 14

<211> 175

<212> PRT

<213> Manihot esculenta

<400> 14

Met Ala Arg Ser Leu Glu Pro Leu Val Val Gly Lys Val Ile Gly Glu
1 5 10 15

Val Leu Asp Met Tyr Asn Pro Val Ala Glu Phe Thr Val His Tyr Gly
20 25 30

Ser Lys Gln Ile Ala Asn Gly Cys Glu Ile Lys Pro Ser Ala Ala Ala
35 40 45

Gln Lys Pro His Val His Ile Leu Gly Ser Arg Leu Ser Ser Asp Leu
50 55 60

Tyr Thr Leu Val Met Val Asp Pro Asp Ala Pro Ser Pro Ser Glu Pro
65 70 75 80

Lys Trp Arg Glu Trp Leu His Trp Ile Val Val Asp Ile Pro Glu Gly
85 90 95

Ser Asp Ala Thr Lys Gly His Glu Leu Val Pro Tyr Met Gly Pro Gln
100 105 110

Pro Pro Thr Gly Ile His Arg Tyr Val Phe Ala Leu Phe Lys Gln Lys
115 120 125

Gly Ala Leu Lys Gly Arg Ser Leu Gly Pro Asp Gly Arg Gly Asn Phe
130 135 140

Ser Thr Arg Gln Phe Ala Ala Gln His Gly Phe Gly Val Pro Val Ala
145 150 155 160

Ala Val Tyr Phe Asn Ser Gln Lys Glu Pro Ala Val Lys Lys Arg
165 170 175

<210> 15
<211> 175
<212> PRT
<213> Ricinus communis

<400> 15

Met Ala Arg Ser Leu Glu Pro Leu Val Val Gly Lys Val Ile Gly Glu
1 5 10 15

Val Leu Asp Met Tyr Asn Pro Val Ala Glu Phe Thr Val His Tyr Gly
20 25 30

Ser Lys Gln Ile Ala Asn Gly Cys Glu Ile Lys Pro Ser Ala Ala Val
35 40 45

Gln Met Pro Arg Ala Gln Ile Leu Gly Ser Arg Leu Thr Pro Ser Leu
50 55 60

Tyr Thr Leu Val Met Val Asp Pro Asp Ala Pro Ser Pro Ser Asp Pro
65 70 75 80

Lys Trp Arg Glu Trp Leu His Trp Ile Ala Val Asp Ile Pro Glu Gly
85 90 95

Ser Asp Ala Thr Lys Gly His Gln Leu Val Pro Tyr Met Gly Pro Gln
100 105 110

Pro Pro Thr Gly Ile His Arg Tyr Val Phe Ala Val Phe Lys Gln Gly
115 120 125

Glu Ala Leu Asn Gly Arg Thr Lys Ala Pro Glu Gly Arg Gly Asn Phe
130 135 140

Ser Thr Arg Gln Phe Ala Ala Gln Asn Gly Leu Gly Leu Pro Val Ala
145 150 155 160

Ala Val Tyr Phe Asn Ser Gln Lys Glu Pro Ala Val Lys Lys Arg
165 170 175

<210> 16
<211> 177
<212> PRT
<213> Arabidopsis thaliana

<400> 16

Met Glu Asn Met Gly Thr Arg Val Ile Glu Pro Leu Ile Met Gly Arg
1 5 10 15

Val Val Gly Asp Val Leu Asp Phe Phe Thr Pro Thr Thr Lys Met Asn
20 25 30

Val Ser Tyr Asn Lys Lys Gln Val Ser Asn Gly His Glu Leu Phe Pro
35 40 45

Ser Ser Val Ser Ser Lys Pro Arg Val Glu Ile His Gly Gly Asp Leu
50 55 60

Arg Ser Phe Phe Thr Leu Val Met Ile Asp Pro Asp Val Pro Gly Pro
65 70 75 80

Ser Asp Pro Phe Leu Lys Glu His Leu His Trp Ile Val Thr Asn Ile
85 90 95

Pro Gly Thr Thr Asp Ala Thr Phe Gly Lys Glu Val Val Ser Tyr Glu
100 105 110

Leu Pro Arg Pro Ser Ile Gly Ile His Arg Phe Val Phe Val Leu Phe
115 120 125

Arg Gln Lys Gln Arg Arg Val Ile Phe Pro Asn Ile Pro Ser Arg Asp
130 135 140

His Phe Asn Thr Arg Lys Phe Ala Val Glu Tyr Asp Leu Gly Leu Pro
145 150 155 160

Val Ala Ala Val Phe Phe Asn Ala Gln Arg Glu Thr Ala Ala Arg Lys
165 170 175

Arg

<210> 17
<211> 177
<212> PRT
<213> Euphorbia esula

<400> 17

Met Ser Asn Asn Asn Asn Lys His Asn Asp Pro Leu Val Val Gly Arg
1 5 10 15

Val Ile Gly Glu Val Ile Asp Ser Phe Asn Pro Ser Val Lys Met Thr
20 25 30

Val Thr Tyr Asn Ser Asn Lys Gln Val Phe Asn Gly His Glu Leu Phe
35 40 45

Pro Ser Ala Val Thr Phe Lys Pro Lys Val Glu Val Gln Gly Ala Asp
50 55 60

Met Ile Ser Phe Phe Thr Leu Val Met Thr Asp Pro Asp Val Pro Asn
65 70 75 80

Pro Ser Asp Pro Tyr Leu Lys Glu His Leu His Trp Ile Val Thr Asp
85 90 95

Ile Pro Gly Thr Thr Asp Ala Thr Phe Gly Lys Glu Val Val Ser Tyr
100 105 110

Glu Met Pro Lys Pro Asn Ile Gly Ile His Arg Phe Val Phe Leu Leu
115 120 125

Phe Lys Gln Lys Arg Arg Gln Thr Val Lys Thr Pro Thr Ser Arg Asp
130 135 140

Lys Phe Asn Ser Arg Lys Phe Ala Val Asp Asn Glu Leu Ser Leu Pro
145 150 155 160

Val Ala Ala Val Phe Phe Asn Ala Gln Arg Glu Thr Ala Ala Arg Arg
165 170 175

Arg

<210> 18
<211> 175
<212> PRT
<213> Jatropha curcas

<400> 18

Met Ala Lys Val Ser Asp Pro Leu Val Val Gly Arg Val Ile Gly Asp
1 5 10 15

Val Ile Asp Tyr Phe Thr Pro Cys Met Lys Met Thr Val Ser Tyr Asn
20 25 30

Ser Asn Lys Gln Val Tyr Asn Gly His Glu Leu Phe Pro Ser Ala Val
35 40 45

Thr His Lys Pro Lys Val Glu Val Gln Gly Ala Asp Met Arg Ser Phe
50 55 60

Phe Thr Leu Val Val Met Thr Asp Pro Asp Val Pro Gly Pro Ser Asp
65 70 75 80

Pro Tyr Gln Arg Glu His Leu His Trp Ile Val Thr Asp Ile Pro Gly
85 90 95

Thr Thr Asp Ala Thr Phe Gly Gly Lys Glu Val Val Ser Tyr Glu Met
100 105 110

Pro Arg Pro Asn Ile Gly Ile His Arg Phe Val Phe Ile Leu Phe Lys
115 120 125

Gln Lys Arg Arg Gln Met Val Asn Thr Pro Thr Ser Arg Asp Lys Phe

130 135 140
 Asn Thr Arg Lys Phe Ala Glu Glu Asn Glu Leu Gly Leu Pro Val Ala
 145 150 155 160

Ala Val Phe Phe Asn Ala Gln Arg Glu Thr Ala Ala Arg Arg Arg
 165 170 175

<210> 19
 <211> 173
 <212> PRT
 <213> Jatropha curcas

<400> 19

Met Glu Lys Pro Val Asp Pro Leu Ile Val Glu Arg Val Ile Gly Asp
 1 5 10 15

Val Leu Asp Leu Phe Thr Pro Thr Ile Lys Met Ser Val Ala Tyr Thr
 20 25 30

Asp Arg Lys Val Cys Asn Gly His Glu Leu Tyr Pro Ser Thr Ile Ala
 35 40 45

Ser Lys Pro Lys Val Ala Val Glu Gly Asp Asp Met Arg Ser Phe Phe
 50 55 60

Thr Leu Val Met Thr Asp Pro Asp Val Pro Gly Pro Ser Asp Pro Tyr
 65 70 75 80

Leu Arg Glu His Leu His Trp Ile Val Ser Asp Ile Pro Gly Thr Thr
 85 90 95

Asp Ala Thr Phe Gly Lys Glu Ile Val Ser Tyr Glu Ile Pro Arg Pro
 100 105 110

Asn Ile Gly Ile His Arg Phe Val Phe Val Leu Phe Lys Gln Lys Lys
 115 120 125

Arg Ser Gln Ile Gln His Pro Pro Trp Ser Arg Asp Asn Phe Asn Thr
 130 135 140

Arg Asn Phe Ala Ala Glu Asn Glu Leu Gly Leu Pro Val Ala Ala Val
 145 150 155 160

Tyr Phe Asn Ala Gln Arg Glu Thr Ala Ala Arg Arg Arg
 165 170

<210> 20
 <211> 173
 <212> PRT
 <213> Ricinus communis

<400> 20

Met Ser Arg Ala Val Glu Ser Leu Val Val Gly Arg Val Ile Gly Asp

1 5 10 15
 Val Val Asp Ser Phe Thr Pro Met Leu Asn Met Ser Ile Ser Tyr Gly
 20 25 30
 Asn Arg Arg Val Phe Asn Gly Tyr Glu Leu His Pro Ser Leu Val Ala
 35 40 45
 Leu Lys Pro Lys Val Glu Val Gln Gly Gly Asp Met Arg Thr Phe Phe
 50 55 60
 Thr Leu Val Met Thr Asp Pro Asp Val Pro Gly Pro Ser Asp Pro Tyr
 65 70 75 80
 Leu Arg Glu His Leu His Trp Leu Val Thr Asp Ile Pro Gly Thr Thr
 85 90 95
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