

SEQUENCE LISTING

<110> Monash University

<120> METHOD FOR IMPROVING CROP PRODUCTIVITY

<130> 41054P

<160> 7

<170> PatentIn version 3.5

<210> 1

<211> 1422

<212> DNA

<213> *Sporobolus stapfianus*

<400> 1

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| tccccgagg actccgactt ctctgccctg gtcgcgcgcg ccgcgggcgc caaccgtcc | 180 |
| gtcaccttcc acatcctgcc tcagccgtcc tccacgccag acggttccaa caccgacgtc | 240 |
| actcccaagc acaagcaccc cgtgggtccac ttattcgaca ccctcggcgc catgaacgcg | 300 |
| ccgctccgcg acttctctcg ctgcgtgcca gccgtcgacg cgctcgtcgt ggacatgttc | 360 |
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<210> 2

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<212> DNA

<213> Sporobolus stapfianus

<400> 2

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<210> 3

<211> 473

<212> PRT

<213> Sporobolus stapfianus

<400> 3

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 35 40 45
 Ala Leu Val Ala Arg Ala Ala Ala Ala Asn Pro Ser Val Thr Phe His
 50 55 60
 Ile Leu Pro Gln Pro Ser Ser Thr Pro Asp Gly Ser Asn Thr Asp Val
 65 70 75 80
 Thr Pro Lys His Lys His Pro Val Val His Leu Phe Asp Thr Leu Gly
 85 90 95
 Ala Met Asn Ala Pro Leu Arg Asp Phe Leu Arg Ser Leu Pro Ala Val
 100 105 110
 Asp Ala Leu Val Val Asp Met Phe Cys Tyr Asp Ala Leu Asp Val Ala
 115 120 125
 Ala Glu Leu Glu Leu Pro Ala Tyr Phe Leu Tyr Ala Ser Gly Ala Gly
 130 135 140
 Asp Leu Ala Val Phe Leu Asn Leu Pro Ser Ala Arg Ala Gly Met Thr
 145 150 155 160
 Thr Ser Phe Ala Glu Leu Gly Asp Thr Leu Leu Thr Leu Pro Gly Ala
 165 170 175
 Pro Pro Phe Lys Ala Ser Asp Leu Pro Ala Asp Ala Ile Asn Asp Asn
 180 185 190
 Glu Val Ala Arg Cys Thr Arg Arg Met Phe Glu Arg Met Pro Glu Ser
 195 200 205
 His Gly Ile Leu Val Asn Ser Phe Glu Ala Leu Glu Thr Arg Ala Val
 210 215 220
 Arg Ala Leu Arg Asp Gly Leu Cys Val Pro Asp Arg Ala Thr Pro Pro
 225 230 235 240
 Ile Tyr Cys Ile Gly Pro Leu Val Ser Gly Gly Gly Gly Glu Lys Glu
 245 250 255
 His Glu Cys Leu Arg Trp Leu Asp Ala Gln Pro Asp Asn Ser Val Val
 260 265 270

Phe Leu Cys Phe Gly Ser Met Gly Thr Phe Ser Lys Lys Gln Leu His
275 280 285

Asp Ile Ala Val Gly Leu Glu Lys Ser Glu Gln Arg Phe Leu Trp Val
290 295 300

Val Arg Ser Pro Arg Ser Asp Asp His Lys Phe Gly Glu Pro Arg Pro
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Glu Leu Asp Leu Asp Ala Phe Leu Arg Asp Gly Phe Leu Glu Arg Thr
325 330 335

Lys Glu Arg Gly Leu Val Leu Lys Ser Trp Ala Pro Gln Val Asp Val
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Leu His His Arg Ala Thr Gly Ala Phe Val Thr His Cys Gly Trp Asn
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Ser Thr Leu Glu Gly Ile Met Ala Gly Ile Pro Leu Leu Cys Trp Pro
370 375 380

Leu Tyr Ala Glu Gln Arg Met Asn Lys Val Phe Ile Val Asp Glu Leu
385 390 395 400

Lys Leu Gly Val Glu Met Arg Gly Tyr Asn Gln Glu Val Val Lys Ala
405 410 415

Glu Glu Val Glu Ser Lys Val Arg Trp Val Leu Glu Ser Glu Ala Gly
420 425 430

Gln Ala Ile Arg Glu Arg Val Leu Ala Met Lys Asp Lys Ala Ala Glu
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Ala Leu Lys Glu Gly Gly Pro Ser His Val Glu Phe Val Lys Phe Leu
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<212> DNA
<213> *Sporobolus stapfianus*

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caggagtggc cgcaccagca cgggatggaa gaaacagggg agcagctctg ggacgacctc      780
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<213> Sporobolus stapfianus

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gacagggact gagctatggc acaggcaccg cggcgggtgg gacgagtacc gatgagaaga      420
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gcgattcggc ggctgggacg acgctcacgc cgccgtcgtc gtgcagcgtc gacgccgagg      720
atcagagcgc ggacggactt ggggatgaac tgtgggacgg attgcaggac ctgatgaaga      780
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<210> 6
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<212> PRT
<213> Sporobolus stapfianus

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<400> 6

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Glu Tyr Ile Ile Arg Phe Asp Gly Gln Phe Glu Asp Pro Ser Pro Ser
5

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 Ser Ser Gly Val Glu Pro Gln Pro Val Pro Glu Ala Ala Ser Phe Pro
 35 40 45
 Trp Arg Thr Ile Ser Pro Glu Gln Glu His Ala Val Ile Val Ser Ala
 50 55 60
 Leu Leu His Val Leu Ser Gly Tyr Thr Thr Pro Pro Pro Gln Val Phe
 65 70 75 80
 Pro Ala Ser Ala Ala Ala Arg Val Glu Ala Cys Arg Met Cys Gly Met
 85 90 95
 Glu Arg Cys Leu Gly Cys Glu Phe Phe Ala Ala Asp Ala Gly Val Val
 100 105 110
 Ala Ser Asp Gly Ser Glu Lys Val Pro Ala Ala Ala Glu Thr Thr Thr
 115 120 125
 Ala Pro Ala Ala Ala Gly Gly Gln Arg Arg Arg Arg Lys Lys Lys Asn
 130 135 140
 Lys Tyr Arg Gly Val Arg Gln Arg Pro Trp Gly Lys Trp Ala Ala Glu
 145 150 155 160
 Ile Arg Asp Pro Arg Arg Ala Val Arg Lys Trp Leu Gly Thr Phe Asp
 165 170 175
 Thr Ala Glu Glu Ala Ala Arg Ala Tyr Asp Arg Ala Ala Val Glu Phe
 180 185 190
 Arg Gly Pro Arg Ala Lys Leu Asn Phe Pro Phe Pro Glu Gln Leu Ala
 195 200 205
 Asp His Glu Asp Ala Ser Ala Ala Ala Lys Ser Asp Thr Leu Ser Pro
 210 215 220
 Ser Leu Cys Ser Gly Ser Ala Asp Ala Glu Asp Arg Ser Val Gly Arg
 225 230 235 240
 Gln Glu Trp Pro His Gln His Gly Met Glu Glu Thr Gly Glu Gln Leu
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 260 265 270
 Phe Pro Pro Thr Ser Thr Thr Trp Asn
 275 280

<210> 7
 <211> 263

<212> PRT

<213> Sporobolus stapfianus

<400> 7

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 20 25 30
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 35 40 45
 Ile Met Val Ala Ala Leu Arg His Val Leu Ser Gly Tyr Ser Thr Pro
 50 55 60
 Pro Pro Glu Val Val Thr Val Ala Ala Ser Gly Glu Ala Cys Gly Thr
 65 70 75 80
 Cys Gly Ile Asp Gly Cys Leu Gly Cys Asp Phe Phe Ala Gly Glu Glu
 85 90 95
 Pro Pro Gln Leu Leu Arg Gln Gly Leu Ser Tyr Gly Thr Gly Thr Ala
 100 105 110
 Ala Val Ala Thr Ser Thr Asp Glu Lys Arg Arg Lys Arg Arg Arg Lys
 115 120 125
 Arg Asn Ala Phe Arg Gly Val Arg Gln Arg Pro Trp Gly Lys Trp Ala
 130 135 140
 Ala Glu Ile Arg Asp Pro Arg Lys Ala Ala Arg Val Trp Leu Gly Thr
 145 150 155 160
 Phe Asp Thr Ala Glu Glu Ala Ala Arg Ala Tyr Asp Arg Ala Ala Leu
 165 170 175
 Glu Phe Arg Gly Ala Arg Ala Lys Leu Asn Phe Pro Tyr Gln Glu Glu
 180 185 190
 Pro Val Val Leu Leu Gly His His Asn Gly Asp Ser Ala Ala Gly Thr
 195 200 205
 Thr Leu Thr Pro Pro Ser Ser Cys Ser Val Asp Ala Glu Asp Gln Ser
 210 215 220
 Ala Asp Gly Leu Gly Asp Glu Leu Trp Asp Gly Leu Gln Asp Leu Met
 225 230 235 240
 Lys Met Asp Asp Ala Asp Phe Trp Ser Phe Ala Pro Phe Tyr Gly Ala
 245 250 255