Supplemental Data

Supplemental Figure Legends

Supplemental Figure 1. Phenotypes of osmads34 mutants.

A: Plant morphology of wild type (left), *osmads34-1* (middle) and *osmads34-2* (right) at heading stage. B and C: Stem elongation patterns of *osmads34-1*(B) and *osmads34-2*(C). D: The length pattern of five internodes and the panicle of wild type, *osmads34-1*, *osmads34-2* respectively. Numbers indicate the internode positions of plant from the top to base. E and F: The outer surfaces of lemmas *osmads34-1* (E) and *osmads34-2* (F) showing regular bulges as wild type (arrow). Bar= 10 cm in A, 5 cm in B and C, 50 μm in E and F.

Supplemental Figure 2. Histological analysis of the mutant spikelets

A and F: Wild-type spikelet. A: Transverse section of the top of a wild-type spikelet (green arrow in Fig. 1D) showing five vascular bundles in the lemma (star), three vascular bundles in the palea and only one vascular bundle in the sterile lemma. F: A close-up of the palea of top transverse section (green arrow in Fig. 1D). Note that four types of cell identity can be observed in the wild type lemma and palea, i.e, silicified cell (sc), fibrous sclerenchymatous cell (fs), spongy parenchymatous cell (spc) and non-silicified cell (nsc).

B: Transverse section of the top of the *osmads34-1* spikelet (green white arrow in Fig. 1E) showing five vascular bundles (indicated by blue stars) of the sterile lemma.

G: A close-up of the *osmads34-1* palea of top transverse section (green arrow in Fig. 1E) showing four cell types of sc, fs, spc and nsc.

C: Transverse section of the bottom of an *osmads34-2* spikelet (green arrow in Fig. 1F) showing more vascular bundles (indicated by blue stars) in the lemma/leaf-like sterile lemmas.

H: A close-up of palea of *osmads34-2* of top transverse section (green arrow in Fig. 1F). Four cell types of sc, fs, spc and nsc are observed.

D and I: osmads1-z spikeletes.

D: Transverse section of the bottom of an *osmads1-z* spikelet showing leafy le/pa, four enlarged lodicules and reduced stamens (green arrow in Fig. 1L).

I: Close-up of the sterile lemma (red arrow in Fig. 1L). The osmads1-z sterile lemma

had the similar internal sclerenchymatous cells as wild type.

E and J: osmads34-1 osmads1-z spikelets.

E: Transverse section of the top of the *osmads34-1 osmads1-z* spikelet showing le/pa like sterile lemma, leafy le/pa, four enlarged lodicules and reduced stamens(green arrow in Fig. 1M).

J: A close-up of the sterile lemma (red arrow in Fig. 1M), four cell types are observed in elongated sterile lemma.

sl: sterile lemma; lsl: lemma/leaf-like sterile lemma; le: lemma; pa: palea; st: stamen; ca: carpel; elo: enlarged lodicules; fs: fibrous sclerenchyma; nsc: non-silicified cell; sc: silicified cell; scl: sclerenchymatous cell; spc: spongy parenchymatous cell.

Bar=100 μ m in A to E, 50 μ m in F-J.

Supplemental Figure 3. Allelic and complementary analyses of *osmads34* mutants and ectopic expression of *OsMADS34* in wild type.

A: Panicle of osmads34-1 (left); F1 plant of osmads34-1 and osmads34-2 (middle) showing similar defect to osmads34-1 and osmads34-2; and osmads34-2 (right). B: RT-PCR analysis of OsMADS34 transcripts of wild type, osmads34-1 and osmads34-1 flowers at stage In 7. The expression level of OsMADS34 in osmads34-1 is close to that of wild type, but no detectable transcripts of OsMADS34 in osmads34-2. C: The osmads34-1 spikelet at In9. D: The Spikelet of F1 plant of osmads34-1 and osmads34-2 at stag In9. E: The osmads34-2 spikelet at stage In9. F: Sequencing analysis of OsMADS34 from the wild type, osmads34-1, osmads34-2, as well as the F1 plant of osmads34-1 and osmads34-2, the mutation marked by red box. G: The wild-type panicle at In9. H: The panicle of wild-type plant over expressing OsMADS34 at In 9. I: The panicle of osmads34-1 plant over expressing OsMADS34 at In 9. J: The panicle of osmads 34-2 plant over expressing OsMADS 34 at In 9. K: The panicle of osmads34-1 plant at In9. L: The panicle of osmads34-2 at In9. M: Spikelets of wild type (wt), wild-type plant over expressing OsMADS34 (wt-OX), osmads34-1 plant over expressing OsMADS34 (osmads34-1-OX), osmads34-2 plant over expressing OsMADS34 (osmads34-2-OX), osmads34-1 and osmads34-2. OE means over expressing OsMADS34. N: RT-PCR analysis of OsMADS34 mRNA levels in wild type, osmads34-1 and transgenic lines. RNA was extracted from young panicles of each plant (Stage In7). OX: Over expression. Bar=2 cm in A and G-L, 2 mm in C-E and 3 mm in M.

Supplemental Figure 4. Sequence analysis of the OsMADS34 gene and its

homologs.

A: 38 MADS-box genes from Lolium perenne, Oryza sativa, Sorghum bicolor,

Triticum aestivum and Zea mays, are used to construct Maximum-likelihood (ML)

tree using the PHYML software (http://atgc.lirmm.fr/phyml/) with the WAG model

and an estimated proportion of invariable sites plus 8 categories of gamma

distribution of substitution rates and 100 nonparametric bootstrap replicates. The

MIKC motifs of 22 grass SEP-like proteins (7 in OsMADS5 clade, 8 in OsMADS1

clade, and 7 in OsMADS34 clade) are indicated, and the exon-intron patterns of 6

grass SEP-like genes are compared.

B: OsMADS1, OsMADS5 and OsMADS34 were aligned to compare their MIKC

motifs. We also found that, after the gene duplication, OsMADS34 acquired distinct

sequence structure in its C-terminal region.

Supplemental Figure 5. Sequence alignment of the OsMADS34 and its homologs.

Black dark and grey boxex indicate the similar nucleotides.

Supplemental Figure 6. OsMADS34 has no transactivational activity, forms

homodimer and has no interaction with OsMADS1 in yeast cells.

Supplemental Figure 7. Analysis and identification of the *osmads1-z* mutant

A-C are the allelic test between the *nsr* and *osmads1-z*; A: spikelet of *nsr*; B: spikelet

of osmads1-z; C: spikelet of F1 progeny of nsr and osmads1-z. D: RT-PCR analysis

of OsMADS1 in wild-type and osmads1-z, no detectable transcript of OsMADS1 was

observed in the osmads1-z spikelet at stage In7; E: Identification of the deleted

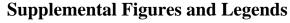
OsMADS1 fragment in osmads1-z with smaller size compared with wild type, M

indicates molecular marker.

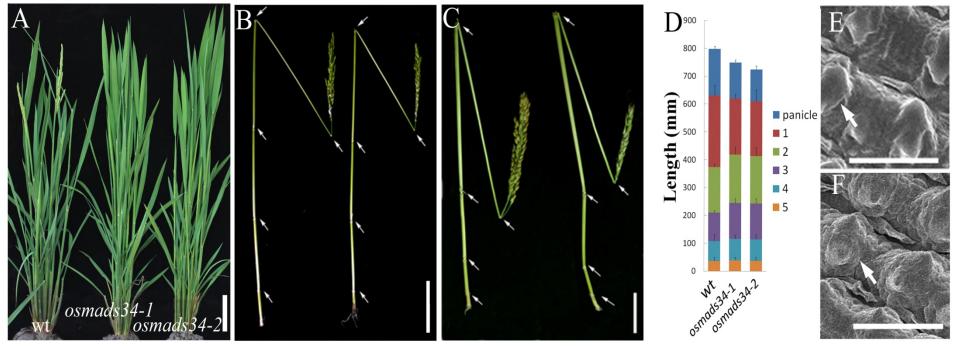
Bar: 2 mm in A-C.

Supplemental Table 1. Primers used in this study

Name	Sequence
RM3525	F 5-ACACTCTCAGCTCATCAAGACC-3
	R 5-GGGCAAGTGGTCAAATCTTG-3
WHM0302	F 5-CTATAAAAGCTGGACCGTGAA-3
	R 5-GCAAGCATTCCAAACCGA-3
RM520	F 5-AGGAGCAAGAAAGTTCCCC-3
	R 5-GCCAATGTGTGACGCAATAG-3
RM5813	F 5-GCAGCCCTAGCAATTCAGTC-3
	R 5-CTCCCTTTCCCTCCACCAC-3
WHM0312	F5-CCGACACTTCAGGGAATAAA-3
	R 5-CGCCAGGACTAAACTAAACAGC-3
LHS0312	F 5-CGGTACAGCCAGCCAGG-3
	R 5-TCTAAACAGCTCCATTCCCC-3
RM468	F 5-CCCTTCCTTGTTGTGGCTAC-3
	R 5-TGATTTCTGAGAGCCAACCC-3
34-qRTF	CAACCAGAGCACTTCTTCCA
34-qRTR	CTGAAGCTGAAACGGTAGCT
OsMADS1-qRTF	ATCACCATCAGGGTCTTCTC
OsMADS1-qRTR	CAACCATGTCTGCTTCA
G1RTF	ACGCATTCTGTCACGTCTCT
G1RTR	CTGCGTGAAGGTCTGCCAGT
34-RTF	5-ATGGGGCGAGGCAAGGTGG-3
34-RTR	5-CTAGGCCATCCACTCAGGAGGATAACC-3
34IF	5-CAGGAATATGTGAACTTGAAGGCACATGTTGAG-3
34IR	5-CGAGGGCCTGGAAGAAGTGCT-3
OsMADS1-IF	5-GCAACTACAACTCACAGGATGC-3
OsMADS1-IR	5-GATGAGCAACCATGTCTGCTGCT-3
34ProF	5-AAAAGAATTCCTTACTTTCTCAGACATCGCAACAGGCT-3
34ProR	5-GGATCCAGCTCGTAGGCCTTCTTG-3
OsMADS34-YF	5-GAATTCATGGGGCGAGGCAAGGTGG-3
OsMADS34-YR	5-GGATCCCTAGGCCATCCACTCAGGAG-3
OsMADS1-YF	5-CGCGGATCCAGATGGGGAGGGGAAGG-3
OsMADS1-YR	5-TGCCTGCAGGGAATGGTCACCC-3

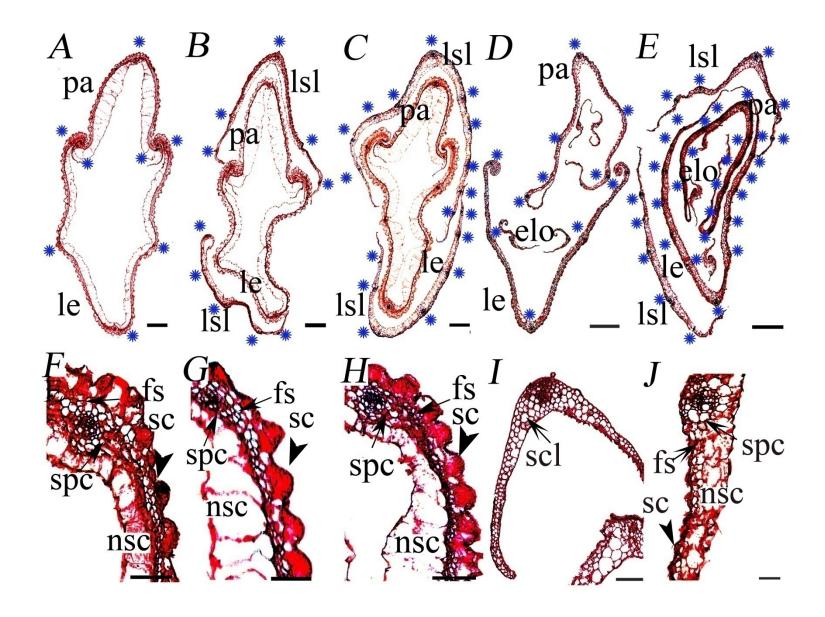






Supplemental Figure 1. Phenotypes of osmads34 mutants.

A: Plant morphology of wild type (left), osmads34-1 (middle) and osmads34-2 (right) at heading stage. B and C: Stem elongation patterns of osmads34-1(B) and osmads34-2(C). D: The length pattern of five internodes and the panicle of wild type, osmads34-1, osmads34-2 respectively. Numbers indicate the internode positions of plant from the top to base. E and F: The outer surfaces of lemmas osmads34-1 (E) and osmads34-2 (F) showing regular bulges as wild type (arrow). Bar= 10 cm in A, 5 cm in B and C, 50 µm in E and F.



Supplemental Figure 2. Histological analysis of the mutant spikelets

A and F: Wild-type spikelet. A: Transverse section of the top of a wild-type spikelet (green arrow in Fig. 1D) showing five vascular bundles in the lemma (star), three vascular bundles in the palea and only one vascular bundle in the sterile lemma. F: A close-up of the palea of top transverse section (green arrow in Fig. 1D). Note that four types of cell identity can be observed in the wild type lemma and palea, i.e, silicified cell (sc), fibrous sclerenchymatous cell (fs), spongy parenchymatous cell (spc) and non-silicified cell (nsc).

B: Transverse section of the top of the *osmads34-1* spikelet (green white arrow in Fig. 1E) showing five vascular bundles (indicated by blue stars) of the sterile lemma.

G: A close-up of the *osmads34-1* palea of top transverse section (green arrow in Fig. 1E) showing four cell types of sc, fs, spc and nsc.

C: Transverse section of the bottom of an *osmads34-2* spikelet (green arrow in Fig. 1F) showing more vascular bundles (indicated by blue stars) in the lemma/leaf-like sterile lemmas.

H: A close-up of palea of osmads34-2 of top transverse section (green arrow in Fig. 1F). Four cell types of sc, fs, spc and nsc are observed.

D and I: osmads1-z spikeletes.

D: Transverse section of the bottom of an *osmads1-z* spikelet showing leafy le/pa, four enlarged lodicules and reduced stamens (green arrow in Fig. 1L).

I: Close-up of the sterile lemma (red arrow in Fig. 1L). The *osmads1-z* sterile lemma had the similar internal sclerenchymatous cells as wild type.

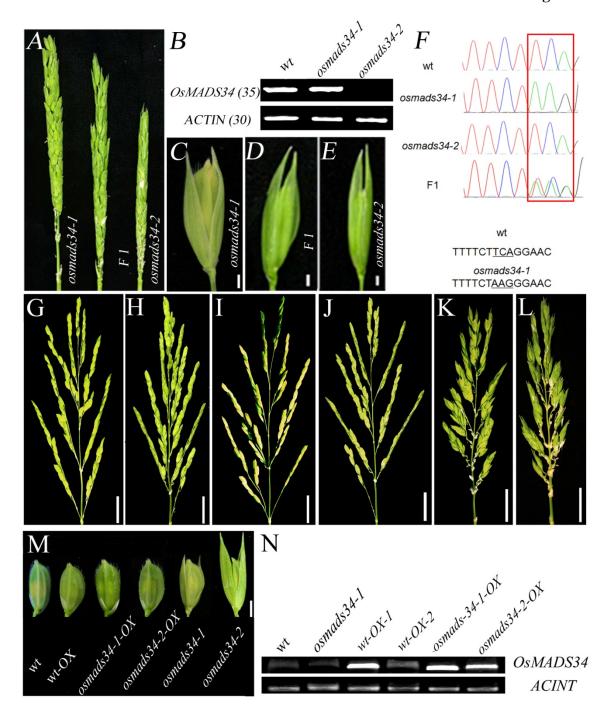
E and J: osmads34-1 osmads1-z spikelets.

E: Transverse section of the top of the *osmads34-1 osmads1-z* spikelet showing le/pa like sterile lemma, leafy le/pa, four enlarged lodicules and reduced stamens(green arrow in Fig. 1M).

J: A close-up of the sterile lemma (red arrow in Fig. 1M), four cell types are observed in elongated sterile lemma.

sl: sterile lemma; lsl: lemma/leaf-like sterile lemma; le: lemma; pa: palea; st: stamen; ca: carpel; elo: enlarged lodicules; fs: fibrous sclerenchyma; nsc: non-silicified cell; sc: silicified cell; scl: sclerenchymatous cell; spc: spongy parenchymatous cell.

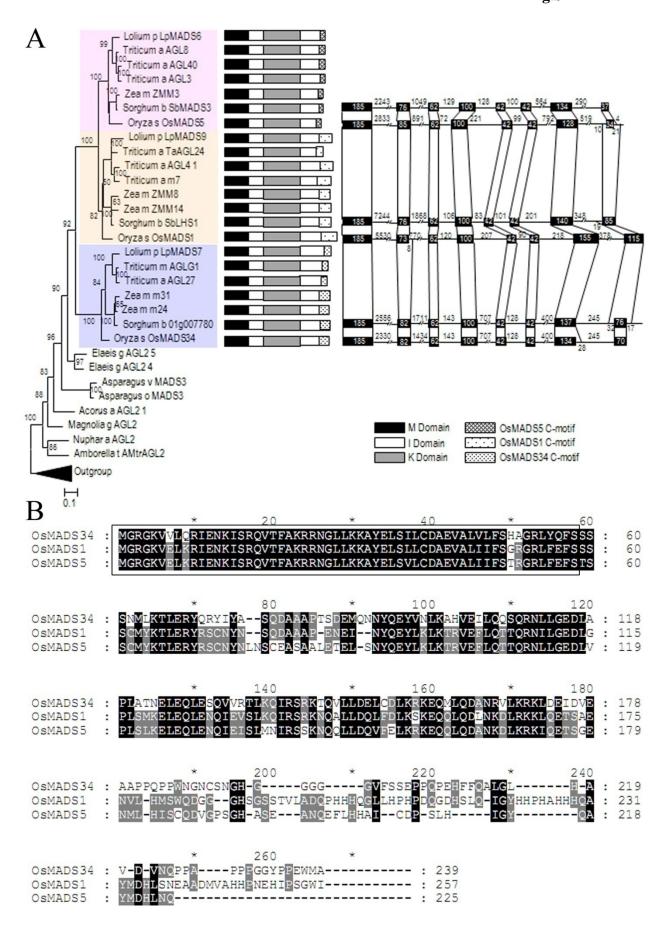
Bar=100 μ m in A to E, 50 μ m in F-J.



Supplemental Figure 3. Allelic and complementary analyses of *osmads34* mutants and ectopic expression of *OsMADS34* in wild type.

A: Panicle of *osmads34-1* (left); F1 plant of *osmads34-1* and *osmads34-2* (middle) showing similar defect to *osmads34-1* and *osmads34-2*; and *osmads34-2* (right). B: RT-PCR analysis of *OsMADS34* transcripts of wild type, *osmads34-1* and *osmads34-1* flowers at stage In 7. The expression level of *OsMADS34* in *osmads34-1*

is close to that of wild type, but no detectable transcripts of OsMADS34 in osmads34-2. C: The osmads34-1 spikelet at In9. D: The Spikelet of F1 plant of osmads34-1 and osmads34-2 at stag In9. E: The osmads34-2 spikelet at stage In9. F: Sequencing analysis of OsMADS34 from the wild type, osmads34-1, osmads34-2, as well as the F1 plant of osmads34-1 and osmads34-2, the mutation marked by red box. G: The wild-type panicle at In9. H: The panicle of wild-type plant over expressing OsMADS34 at In 9. I: The panicle of osmads34-1 plant over expressing OsMADS34 at In9. J: The panicle of osmads34-2 plant over expressing OsMADS34 at In9. K: The panicle of osmads34-1 plant at In9. L: The panicle of osmads34-2 at In9. M: Spikelets of wild type (wt), wild-type plant over expressing OsMADS34 (wt-OX), osmads34-1 plant over expressing OsMADS34 (osmads34-1-OX), osmads34-2 plant over expressing OsMADS34 (osmads34-2-OX), osmads34-1 and osmads34-2. OE means over expressing OsMADS34. N: RT-PCR analysis of OsMADS34 mRNA levels in wild type, osmads34-1 and transgenic lines. RNA was extracted from young panicles of each plant (Stage In7). OX: Over expression. Bar=2 cm in A and G-L, 2 mm in C-E and 3 mm in M.



Supplemental Figure 4. Sequence analysis of the *OsMADS34* gene and its homologs.

A: 38 MADS-box genes from *Lolium perenne*, *Oryza sativa*, *Sorghum bicolor*, *Triticum aestivum* and *Zea mays*, are used to construct Maximum-likelihood (ML) tree using the PHYML software (http://atgc.lirmm.fr/phyml/) with the WAG model and an estimated proportion of invariable sites plus 8 categories of gamma distribution of substitution rates and 100 nonparametric bootstrap replicates. The MIKC motifs of 22 grass SEP-like proteins (7 in OsMADS5 clade, 8 in OsMADS1 clade, and 7 in OsMADS34 clade) are indicated, and the exon-intron patterns of 6 grass SEP-like genes are compared.

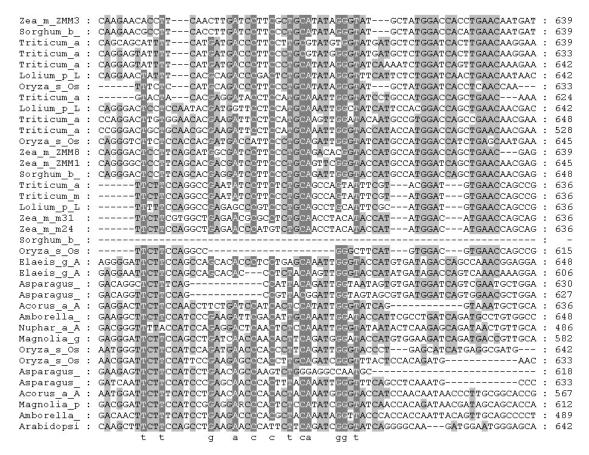
B: OsMADS1, OsMADS5 and OsMADS34 were aligned to compare their MIKC motifs. We also found that, after the gene duplication, *OsMADS34* acquired distinct sequence structure in its C-terminal region.

Zea_m_ZMM3: Sorghum_b_: Triticum_a: Triticum_a: Triticum_p_L: Oryza_s_Os: Triticum_a: Lolium_p_L: Triticum_a: Triticum_a: Triticum_a: Triticum a:	AT GGGGC C GGCAAGGTGGAGCT GAAGCGGA AT GGGGCEC GGCAAGGTGGAGCT GAAGCGGA GCAAGGTGGAGCT GAAGCGGA AT GGGGC GGCAAGGTGGAGCT GAAGCGGA AT GGGTCGT GGTAAGGTTGAGCTGAAGCGGA AT GGGCCAGGGAAAGTAGAGCTGAAGCGGA AT GGGTCGGGGGAGAGGTGGAGAT GAGCGGA	CGAGAACAAGATCAGOC CGACAACAAGATCAGOC CGACAACAAGATCAGOC CGACAACAAGATCAGOC CGACAACAAGATCAGOC CGAGAACAAGATAAGOC CGAGAACAAGATAAGOC CGAGAACAAGATAAGOC	GCCAGGTGACGTTCGCCAAGCGCCCGCCAAGCGCCCCGCCAAGCGCCCCGCAAGCGCCCCCAAGCGCCCCCGCAAGCGCCCCCGCAAGCGCCCCCC	72 63 72 72 72 72
Oryza_s_Os zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m24 : Sorghum_b : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Asparagus_: Asparagus_: Acorus a A : Zea_m_s a . Acorus a A : Zea_m_z a . Zea_m_s a . Zea_m	AT GGETC & C SECAAGGTG A CCT GAAGCGGA' AT GGETC & C GCAAGGTG C A CCT GAAGCGGA' AT GGETC & C GCCAAGGTG C A CCT C AAGCGGA' AT GGETC & C GCCAAGGTG C A CCT C CAGCGGA' AT GGETC & C GCCAAGGTG T C T C C AGCGGA' AT GGGTC & C GCCAAGGTG T C T C C AGCGGA' AT GGGCC & C GCAAGGTG T C T C C AGCGGA' AT GGGCC & C GCAAGGTG T C T C AGCGGA' AT GGGCC & C GCAAGGTG T C T T C AGCGGA' AT GGGCC & C GCAAGGTG T C T T C AGCGGA' AT GGGCC & C GCAAGGTG T C T T C AGCGGA' AT GGGGC & C GCAAGGTG T C T T C AGCGGA' AT GGGGC & C GCAAGGTG T C T T C AGCGGA' AT GGGGC & GCAAGGTG T C T T C AGCGGA' AT GGGGA G G C GAAGGTG T C C T GAAAAGGA' AT GGGGA G G G GAAGGTG C C C T GAAAAGGA'	CGAGAACAAGATCAGOC CGAGAACAAGATAAACA	GCAGGTGACGTTCGCCAAGCCC GCCAGGTGACGTTCGCCAAGCCC GCCAGGTGACGTTCGCCAAGCCC GCCAGGTGACGTTCGCCAAGCCC GCCAGGTGACGTTCGCCAAGCCC GCCAGGTGACGTTCGCCAAGCCC GCCAGGTGACCTTCGCCAAGCCC GCCAGGTGACCTTCGCCAAGCCC GGCAGGTGACCTTCGCCAAGCCC GGCAGGTGACCTTCGCCAAGCCC GGCAGGTGACCTTTCGCCAAGCCG GGCAGGTGACGTTCGCCAAGCCG GGCAGGTGACGTTCGCCAAGCCG GGCAGGTTACCTTTGCAAGCCG GACAGGTGACGTTCGCAAGCCG GACAGGTGACGTTCGCGAAGCCG GGCAGGTGACGTTCGCGAAGCCG GGCAGGTGACGTTCGCGAAGCCG GGCAGGTGACGTTCGCGAAGACG GGCAGGTGACGTTCGCGAAGACG	72 72 72 72 72 72 72 72 72 72 72 72 72
Amborella : Nuphar_a_A : Nagnolia_g : Oryza_s_Os : Oryza_s_Os : Asparagus_ : Asparagus_ : Acorus_a_A : Magnolia_p : Amborella : Arabidopsi :	AT GGGAAGAGGTAGAGTT GAGCTCAAGAGGA AT GGGGAGGGGTGGAGCTGAAGAGGA AT GGGGAGAGGGGGGGGGAGCTGAAGAGGA AT GGGGAGGGGGGAGAGTCGAGCTGAAGAGGA AT GGGGAGAGGGGAGAGTTGAGCTGAAGAGGA	AGAGAACAAGATCAAGA CGAGAACAAGATCAAGA CGAGAACAAGATCAAGA CGAGAACAAGATCAAGA CGAGAACAAGATCAAGA CGAGAACAAGATTAATC	GGCAGGTGACCTTTGCGAAGACG AAGCGA GGCAGGTGACGTTCGCGAAGCCC GGCAGGTGACGTTCGCGAAGCCG GGCAAGTGACCTTCGCGAAGACG GGCAAGTGACCTTCGCGAAGACG GGCAAGTGACCTTCGCGAAGACC	
	CGCAACGCCTGCTCAAGAAGGCGTACGAGCCGGAACGCGTGCTCAAGAAGGCGTACGAGCCGGAACGGGTGCTCAAGAAGGCGTACGAGCCGAACGACGGTACGAGCCTGCAGAAGAAGGCGTACGAGCCGGAACGCGTGCTCAAGAAGGCCTACGAGCCGGAACGCGTACGAGCCAAGAAGGCCTACGAGCCAGAACGCCTACGAGCCAGAACGCCTACGAGCCAACGAACG	GT CGGTGCT CT GCGACG CT CGT GCT CT GCGACG CT CCT CT CT GCGACG CT CGT CT CT CT CGCGACG CT CGT CT CT CT CGCGACG CT CTGT CT CT CT GCGACG CT CTGT CT CT CT CT CT	CCGAGGT CGCCT TATCATCTT C CCGAGGT CGCGCT CATCATCTT C CCGAGGT CGCGCT CATCATCTT C CCGAGGT CGCCT CATCATCTT C CCGAGGT CGCGT CGT CTCTT C CCGAGGT CGCGT CGT CTCTT C CCGAGGT CGCCT CATCATTTT C CCGAGGT CGCCT CATCATCTT C CCGAGGT TGCT CT C TCT C CCGAGGT TGCT CT CATCATCT C CCGAGGT TGCT CT C TCT C TCCCCCC CATCATCATCT C CCGAGGT TGCT CT C TCT C TCCCCCC C	135 144 144 144 144 144 144 144 144 144 14

Zea m ZMM3 :	: TCCAGCCCCGGCCCCTCTTCGAGTTCTCCACCTCCTCATGCATCTACAAGACGCTGGAGCGA : TCCAGCCCCGGCCGCCTCTTCGAGTTCTCCACCTCCTCATGCATCTACAAGACGCTGGAGCCA	raccgcagc : 216
Sorghum b :		TACCGCAGC : 216
Triticum a :	: TCCACCCCCGCCCCCTCTTCGAGTTCTCCACATCCTCATGCATG	PACCGCAGC : 216
	: ICCACCGGGGCCGCCTCTTCGAGTTCTCCACATCCTCATGCATG	ACCGCAGC: 216
Triticum_a :		raccgcagc : 207
Triticum a :	: TCCACCCGCGGCCGCCTCTTCGAGTTCTCCACATCCTCATGCATCTACAAGACACTAGACCCGG	TACCGC <mark>A</mark> GC : 216
Lolium p L :		racegeage : 216
Oryza s Os :		TACCGCAGT : 216
Triticum a :		PACCGTACC : 216
70 DECEMBER 1	. ICCGGCCGCGCCCCCTCTCGAGTTCTCAAGCTCCTCATGCATG	ACCGIACC . 216
Lolium_p_L:		TACCGCACT : 216
Triticum_a :	: TCCGGCCGCGGCCGCCTCTTCGAGTTCTCAAGCTCCTCATGCATG	raccgc <mark>a</mark> cc : 216
Triticum a :		FACCGCACC : 114
Oryza s Os :		TACCGCAGC : 216
Zea m ZMM8 :		TACCGCAGC : 216
		acade ac 816
Zea_m_ZMM1 :		TACOGCAGC : 216
Sorghum_b_ :	: TCCGGCCGCGCCGCCTCTTCGAGTTCTCCAGCTCGTCATGCATG	racc <mark>gca</mark> gc : 216
Triticum a :	: TCCCACGCCGCCGCCTCTACCAGTTCTCCTCCTCCAACATGTTTAAG <mark>ACCCTCGAGAG</mark>	TACCAG <mark>A</mark> GG : 216
Triticum m :	: TCCCACGCCGCCGCCTCTACCAGTTCTCCTCCTCCTCCTCCAACATCCTTAAGACCCTCGAGAAG : TCCCACGCCGGCCGCCTCTACCAGTTCTCCTCATCCTCCAACATCCTTAAGACCCTTGAGAGG	TACCAGAGG : 216
Lolium p L :		TATCAGAGG : 216
Zea m m31 :	TCCCACGCCGCCCCCTCTACCAGTTCTCATCCTCCTCCGATCTCCTTAAGACTCTAGACCCC	PACCAGAGG : 216
		216 . 216
Zea_m_m24 :	: TCCCACGCCGGCCGCCTCTACCAGTTCTCATCCTCCTCCAATCTGCTTAAGACTCTAGAGCCGG	raccagagg : 216
Sorghum_b_ :	: TCCCACGCCGGCCGCCTCTACCAGTTCTCATCCTCCTCCAATCTGCTTAAGACTCTAGGACCGA	TACC <mark>AGA</mark> GG : 216
Oryza s Os :	TCCCACGCCGGCCGCCTCTACCAGTTCTCCTCCTCATCCAACATGCTTAAGACGCTTGAGACA	TACCAG <mark>A</mark> GG : 216
Elaeis q A :	: TCCAGCCCCCCCCCTCTTCCAATTCTGCAGCAGCTCCAGCATCCTTAAGACACTCGAAACG	TACCAAAGA : 216
Elaeis g A :		TACCAAACA : 216
Asparagus :		PACAGAAAA : 216
	TCCAAOCGAGGCAGGCTCTACGAGTTCTGCAGCAGCTCCAGCGTGCTTAAAACTATTGAGACA	210
Asparagus_ :	: TCCAACCGAGGCAGGCTCTACGAGTTCTGCAGCAGCTCCAGCGTGCTTAAAACTALTGAGACA	TACAGAAAA : 216
Acorus_a_A :		ra <mark>tcaaa</mark> aa : 216
Amborella_:	: TCCAATAGAGGGAAGCTTTACGAGTTTTGTAGCACCTCTAGCATGGTGAAGACATTAGAGAGG	TACCAAAAA : 216
Nuphar a A:	:CATGAATTCTGCAGCACCTCCAGTATGCTAAAAACATTAGAGACG	raccaaaaa : 54
Magnolia g :	TCCACCAGAGGCAAGCTCTATGAATTCTGCAGCAGTCCCAGCATGCTCCAGACCCTCGAGAGG	TATCAAAAA : 150
Orvza s Os :		PATCAGAAA : 216
		PACCAAAAA : 216
Oryza_s_Os :	: TCCAACCGCGGCAAGCTCTACGAGTMCMGCAGGGGCCAAAGCAMGACCAGAACTTMGGAAAGA	A CAAAAA : 216
Asparagus_ :	: TCCACTCGAGGCAAGCTCTACGAGTTCTGCAGCAGCCCCAGCATCCTGAAAACACTCGACAG	TACCAAAAA : 216
Asparagus_ :	: TCCAACCGTGGAAAGCTCT <mark>ATGAGTTCTG</mark> CAGCAGCTC <mark>TA</mark> GCATGCTGAA <mark>AACACTTGA</mark> GAGAGA	raccaaaag : 216
Acorus_a_A :	: TCCGGCCGCGGCAAGCTCTACGAGTTCTGCAGCAGCAACAACATGCTTAAAAACACTCGAGAGG	TATCAGAAA : 138
Magnolia p :	: TCCAATACAGCAAAGCTCTACCAGTTTTGCAGCAGCTCCAGCATGTTAAAAACATTGGAGACG	TATCAGAAA : 183
Amborella :	: Totaacagaggaaaacagracgagttttgcagtagctccagcatgctcaagacacttgacacg	raccaaaag : 75
Arabidopsi :		raccaaaag : 216
Zea m ZMM3 :	: TGCAGCTTTGCATCCGAAGCATCACCTCCACTACAGGCTGAATTAAATTA	ITGAAGTTA : 285
	: TGCAGCTTTGCATCCGAAGCATCACCTCCACTACAGGCTGAATTAAATTA	rtgaagt h a : 285 rtgaag tha : 285
Sorghum_b_ :	: TGCAATTTTGCATCCGAAGCATCACCTCCACTAGAGGCTGAATTAAATTA	rtgaagt <mark>t</mark> a : 285
Sorghum_b_ : Triticum_a :	: TGCAATTTTGCATCCGAAGCATCACCTCCACTACAGGCTGAATTAAATTA	ITGAAGT <mark>TA : 285</mark> ITAAAGC TA : 282
Sorghum_b_ : Triticum_a : Triticum_a :	: TGCAATTTTGCATCCGAAGOATCACCTCCACTACAGGCTGAATTAAATTATCAGGAGTAC: : TGTAACTTCAACTCCGAGGOAACTTCAACTCCGCAGTCCGAAGATTACCAGGAGTAT: : TGTAACTTCAACTCCGAGGOAACTCCAACTCCGCAGGACCGAACTAAACTACCAGGAGTAT:	ITGAAGTTA : 285 ITAAAGCTA : 282 ITAAAGCTA : 276
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a :	: TGCAATTTTGCATCCGAAGCATCAECTCCACTAEAGGCTGAATTAAATTATCAGGAGTAC: : TGTAACTTCAACTCCGAGGCAACTTCAACTCCGCAGTCCGAAGATTACCAGGAGTAT: : TGTAACTTCAACTCCGAGGCAACTECAACTCCGCAGACCGAACTAAACTACCAGGAGTAT: : TGCAACTTCAACTCCGAGGCAACTECAACTCCGAGACTGAACAAAATTACCAGGAGTAC:	TTGAAGT <mark>TA : 285</mark> TTAAAGCTA : 282 TTAAAGCTA : 276 TTGAAGCTG : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 276 TTGAAGCTG : 285 TTAAAGATG : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a :	: TGCAATTTTGCATCCGAAGCATCAECTCCACTAGAGGCTGAATTAAATTATCAGGAGTAC: TGTAACTTCAACTCCGAGGCAACTTCAACTCCGAGTCCGAAGATTACCAGGAGTAT: TGTAACTTCAACTCCGAGGCAACTECAACTCCGAGACTGAACAAATTACCAGGAGTAT: TGCAACTTCAACTCCGAGGCAACTECAACTCCGAGACTGAACAAAATTACCAAGAGTATAC TGCAACTACAACTCCAAGGCAACTECAACTCCGAGACTGAATTAAATTACCAAGAGTAT:	TTGAACTTA: 285 ITAAACCTA: 282 ITAAACCTA: 276 ITGAACCTG: 285 ITAAACTTA: 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L :	: TGCAATTTTGCATCCGAAGCATCAECTCCACTAGAGGCTGAATTAAATTATCAGGAGTAC: TGTAACTTCAACTCCGAGGCAACTTCAACTCCGAGTCCGAAGATTACCAGGAGTAT: TGTAACTTCAACTCCGAGGCAACTECAACTCCGAGACTGAACAAATTACCAGGAGTAT: TGCAACTTCAACTCCGAGGCAACTECAACTCCGAGACTGAACAAAATTACCAAGAGTATAC TGCAACTACAACTCCAAGGCAACTECAACTCCGAGACTGAATTAAATTACCAAGAGTAT:	TTGAACTTA: 285 ITAAACCTA: 282 ITAAACCTA: 276 ITGAACCTG: 285 ITAAACTTA: 288
Sorghum_b_: Triticum_a: Triticum_a: Triticum_a: Tolium_p_L: Oryza_s_Os: Triticum_a:	: TGCAATTTTGCATCCGAAGCATCAECTCCACTAGAGGCTGAATTAAATTATCAGGAGTACT : TGTAACTTCAACTCCGAGGCAACTTCAACTCCGGAGTCCGAAGATTACCAGGAGTATT : TGTAACTTCAACTCCGAGGCAACTECAACTCCGGAGCCGAACTAAACTACCAGGAGTACT : TGCAACTTCCACTCCAAGGCAACTCCGAACTCCGGAGACTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_L : Lolium_pL : Oryza_s_Os : Triticum_a : Lolium_pL :	: TGCAATTTTGCATCCGAAGCATCAECTCCACTAGAGGCTGAATTAAATTATCAGGAGTACT : TGTAACTTCAACTCCGAGGCAACTTCAACTCCGGAGTCCGAAGATTACCAGGAGTATT : TGTAACTTCAACTCCGAGGCAACTECAACTCCGGAGCCGAACTAAACTACCAGGAGTACT : TGCAACTTCCACTCCAAGGCAACTCCGAACTCCGGAGACTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_L : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 276 TTGAAGCTG : 285 TTAAAGTTA : 288 TTGAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTG : 288
Sorghum_b_: Triticum_a: Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os: Triticum_a: Lolium_p_L: Triticum_a: Triticum_a: Triticum_a:	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 276 TTGAAGCTG : 285 TTAAAGTTA : 288 TTGAAGCTC : 288 TTGAAGCTC : 288 CTGAAGCTG : 288 CTGAAGCTG : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 276 TTGAAGCTG : 285 TTAAAGTTA : 288 TTGAAGCTC : 288 TTGAAGCTC : 288 TTAAAGCTG : 288 CTGAAGCTG : 288
Sorghum_b_: Triticum_a: Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os: Triticum_a: Lolium_p_L: Triticum_a: Triticum_a: Triticum_a:	: TGCAATTTTGCATCCGAAGCATCACTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os :	: TGCAATTTTGCATCCGAAGGATCAECTCGACTAGAGGCTGAATTAAATTATCAGGAGTACT : TGTAACTTCAACTCCGAGGGAACTTCAACTCCGAGTCCGAAGATTACCAGGAGTATT : TGTAACTTCAACTCCGAGGGAACTTCAACTCCGAGCCGAACTAAACTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b : Triticum_a : Lolium_p L : Oryza_s_Os : Triticum_a : Lolium_b L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 276 TTAAAGCTG : 285 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGCTG : 288 CTGAAGCTG : 288 CTGAAGCTG : 285 TTGAAGTTG : 285 TTGAAGTTG : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Sea_m_ZMM1 : Sorghum_b :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 276 TTGAAGCTG : 285 TTAAAGTTA : 288 TTGAAGCTC : 288 TTGAAGCTC : 288 TTGAAGCTG : 288 CTGAAGCTG : 285 CTGAAGTTG : 285 TTGAAGTTG : 285 CTGAAGTTG : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b : Triticum_a :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 276 TTGAAGCTG : 285 TTAAAGTTA : 288 TTGAAGCTC : 288 TTGAAGCTC : 288 TTGAAGCTG : 288 CTGAAGCTG : 285 CTGAAGTTG : 285 TTGAAGTTG : 285 CTGAAGTTG : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Coryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM8 : Sorghum_b : Triticum_a : Triticum_a :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L :	: TGCAATTTTGCATCCGAAGCATCACTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 287 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAGCTA : 288 TTAAAGCTC : 285 TTAAAGCTC : 285 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGTTC : 288 TTAAAGCTC : 288 TTAAAAGTTC : 288 TTAAAAGTC : 288 TTAAAAGTTC : 288 TTAAAAGTC : 288 TTAAAAGTTC : 2
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Oryza_S_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Triticum_a : Triticum_a : Triticum_s : Lolium_p_L : Zea_m_m31 :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 285 TTAAAGCTG : 285 TTAAAGCTG : 285 TTAAAGTTA : 288 TTAAAGTTC : 288 TTAAAGCTG : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Oryza_S_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Triticum_a : Triticum_a : Triticum_s : Lolium_p_L : Zea_m_m31 :	: TGCAATTTTGCATCCGAGGATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 286 TTGAAGCTG : 285 TTAAAGCTG : 288 TTGAAGCTG : 285 TTGAAGTTG : 285 TTGAAGTTG : 285 TTGAAGTTG : 288 TTGAAGCTG : 288 TTGA
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Coryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Lolium_a : Coryza_s_Os : Zea_m_ZMM1 : Sorghum_b : Triticum_a : Triticum_a : Triticum_b : Zea_m_ZMM1 : Sorghum_b : Triticum_b : Triticum_b : Triticum_b : Triticum_b : Colium_p_L : Zea_m_m24 : Sorghum_b :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 285 TTAAAGCTG : 285 TTAAAGCTG : 288 TTGAAGCTG : 288 TTGAAGTTG : 288 TTGAAGCTG : 288 TTGAACCTTG : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Coryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM8 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Coryza_s_Os : Zea_m_ZMM1 : Sorghum_b_ : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m32 : Zea_m_m24 : Sorghum_b_ : Oryza_s_Os :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 285 TTAAAGCTG : 285 TTAAAGCTG : 288 TTGAAGCTG : 288 TTGAAGTTG : 288 TTGAAGCTG : 288 TTGAACCTTG : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_b_ : Triticum_a : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b_ : Triticum_b_ : Lolium_p_L : Zea_m_m31 : Zea_m_m24 : Sorghum_b_ : Oryza_s_Os : Elaeis_g_A :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAGTTA : 288 TTAAAGCTC : 288 TTAAAAGCTC : 288 TTAAAAAGCTC : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_b_ : Triticum_a : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b_ : Triticum_b_ : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m24 : Sorghum_b_ : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A :	: TGCAATTTTGCATCCGAAGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TAAAGCTA : 287 TAAAGCTA : 287 TAAAGCTA : 285 TAAAGCTA : 285 TAAAGCTA : 288 TAAAAGCTA : 288 TAAAGCTA : 288 TAAAGCTA : 288 TAAAAGCTA : 288 TAA
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_pL : Triticum_a : Triticum_a : Cryza_s_Os : Zea_m_ZMM1 : Sorghum_b : Triticum_a : Triticum_a : Triticum_a : Zea_m_MSM1 : Sorghum_b : Triticum_b : Colium_pL : Zea_m_m31 : Zea_m_m31 : Zea_m_m24 : Sorghum_b : Coryza_s_Os : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Asparagus_ :	: TGCAATTTTGCATCCGAGGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 282 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGCTG : 288 TTAA
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Coryza_s_Os : Zea_m_ZMM1 : Sorghum_b : Triticum_a : Triticum_a : Triticum_a : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b : Triticum_b : Colium_p_L : Zea_m_M24 : Sorghum_b_ : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Asparagus_ : Asparagus_ :	: TGCAATTTTGCATCCGAGGATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 287 TTAAAGCTA : 287 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGCTG : 288 TTAAAGCTG : 288 TTAAAGCTG : 288 TTAAAGCTG : 288 TTAAAGTTG : 282 TTAAAAGTTG : 283 TTAAAAGTTG : 283
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_L : Coryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m31 : Zea_m_m32 : Zea_m_d4 : Sorghum_b_ : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m32 : Zea_m_d4 : Sorghum_b_ : Coryza_s_Os : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A :	: TGCAATTTTGCATCCGAGGATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 287 TTAAAGCTA : 287 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGTTA : 288 TTAAAGCTG : 288 TTAAAGCTG : 288 TTAAAGCTG : 288 TTAAAGCTG : 288 TTAAAGTTG : 282 TTAAAAGTTG : 283 TTAAAAGTTG : 283
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_b_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b_ : Triticum_b_ : Triticum_b_ : Colium_p_L : Zea_m_m31 : Zea_m_m32 : Zea_m_m32 : Zea_m_m32 : Sorghum_b_ : Oryza_s_Os : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A : Amborella_ :	: TGCAATTTTGCATCCGAGGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TGAAGCTA : 287 TTAAAGCTA : 287 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTG : 288 CTGAAGCTG : 288 CTGAAGCTG : 285 CTGAAGCTG : 285 CTGAAGCTG : 288 CTGAAGCTG : 288 CTGAAGCTG : 288 ATGGAGCTG : 288 ATGGAGCTG : 288 ATGGAGCTG : 288 GTGAAGCTG : 288 GTGAGCTG : 288 GTGAGCTG : 288 GTGAGCTG : 288 TTGGAGCTG : 288 TTGAAAATTG : 288 TTTAAAATTG : 288 TTTAAAATTG : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_L : Coryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m31 : Zea_m_m32 : Zea_m_d4 : Sorghum_b_ : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m32 : Zea_m_d4 : Sorghum_b_ : Coryza_s_Os : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A :	: TGCAATTTTGCATCCGAGGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TTGAAGTTA : 285 TTAAAGCTA : 287 TTAAAGCTA : 287 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTC : 288 TTAAAGCTG : 288 TTAAAGCTG : 285 TTAAAGCTG : 285 TTGAAGCTG : 285 TTGAAGCTG : 285 TTGAAGCTG : 288 TTGGAGCTG : 282 TTGAAGCTG : 288 TTGGAGCTG : 288 TTGAAAGCTG : 288 TTAAAATTG : 288 TTAAAACTTG : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_b_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b_ : Triticum_b_ : Triticum_b_ : Colium_p_L : Zea_m_m31 : Zea_m_m32 : Zea_m_m32 : Zea_m_m32 : Sorghum_b_ : Oryza_s_Os : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A : Amborella_ :	: TGCAATTTTGCATCCGAGGCATCAGCTCCACTAGAGGCTGAATTAAATTA	TGAAGTTA : 285 TAAAGCTA : 287 TAAAGCTA : 287 TAAAGCTA : 285 TAAAGCTA : 285 TAAAGCTA : 285 TAAAGCTA : 288 TAAAGCTA : 288 TGAAGCTG : 288 TGAAGCTG : 288 TGAAGCTG : 288 TGAAGCTG : 285 TGAAGTTG : 288 TGAAGCTG : 288 TGAAGTTG : 288 TGAAGTTG : 288 TGAAGTTG : 288 TGAAGTTG : 288 TGAAGCTG : 288 TTGGGGCTG : 282 TTGGGGTTG : 282 TTGGGGTTG : 282 TTGGGTTG : 222
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Triticum_a : Triticum_a : Triticum_b : Cea_m_m31 : Zea_m_m31 : Zea_m_m31 : Zea_m_m24 : Sorghum_b : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Asparagus_ : Asparagus_ : Acorus_a_A : Amborella_ : Nuphar_a_A : Magnolia_g :	: TGCAATTTTGCATCCGAGGCATCAGCTCCACTAGAGCTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Coryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Lolium_p_L : Triticum_a : Coryza_s_Os : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Coryza_s_Os : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b : Coryda_s_Os : Elaeim_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A : Amborella_ : Nuphar_a_A : Magnolia_g : Oryza_s_Os :	: TGCAATTTTGCATCCGAGGCATCAGCTCCACTAGAGCTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b : Triticum_b : Triticum_b : Triticum_b : Triticum_b : Triticum_b : Coryda_s_Os : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A : Amborella_ : Nuphar_a_A : Magnolia_g : Oryza_s_Os : Oryza_s_Os : Oryza_s_Os :	: TGCAATTTTGCATCCGAGGCATCAGCTCCACTAGAGCTGAATTAAATTA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_b_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Zea_m_M31 : Zea_m_M31 : Zea_m_M31 : Zea_m_M32 : Sorghum_b_ : Oryza_s_Os : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A : Amborella_ : Nuphar_a_A : Magnolia_g : Oryza_s_Os : Oryza_s_Os : Oryza_s_Os : Asparagus_ : Asparagus_ :	: TGCAAT "TTGCAT CGAGGATCAGCT CACTA SAGGCTGAATTAAAT TATCAG SAGTAC": TGTAAC TCCAACT CGAGGCAACTTCAACTCCGAAGACCAAGAT ACCAG AGTAT": TGTAAC TCCAACT CCGAGGCAACTTCAACTCCGAAGACCAAAATTAACT ACCAG AGTAT": TGCAAC TCCAACT CCGAGGCAACT CCAACTCCGAAGACTAAACTACCAG AGTAT": TGCAAC TACAACT CAAAG AACTACCAGAGACTGAACTAAACTACCAG AGTAT": TGCAAC TACAACT CAAAG AACTACCAGAACTCCGAAGACTGAACTAAATTACCAA SAGTAT": TGCAAC TACAACT CACAGGAACCAACCCTCCGCTAGAAAATTAAATT	TGAAGTTA : 285 TAAAGCTA : 287 TAAAGCTA : 287 TAAAGCTA : 285 TAAAGCTA : 285 TAAAGCTA : 288 TGAAGCTA : 288 TGAAGCTA : 285 TGAAGCTA : 285 TGAAGCTA : 285 TGAAGCTA : 288 TGAAGCTA : 282 TTGAAACTA : 222 TTGAAACTA : 222 TTGAAACTA : 228 TTAAAACTA : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_b_L : Triticum_a : Triticum_b_ : Triticum_a : Triticum_b_ : Triticum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b_ : Corghum_b_ : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Asparagus_ : Acorus_a_A : Asparagus_ : Acorus_a_A : Magnolia_g : Oryza_s_Os : Oryza_s_Os : Oryza_s_Os : Asparagus_ :	: TGTAACTTTGCATOCGAGGATCAGCTCCAGTAGAGCTGAATTAAATTACAGGAGTACT : TGTAACTTCAACTCCGAGGAACTTCAACTCCGAAGTCCGAAGATTACCAGGAGTATT : TGTAACTTCAACTCCGAGGAACTTCAACTCCGAAGACCGAACTAACTACCAGAAGTATT : TGCAACTTCAACTCCGAGGAACTTCAACTCCGAAGACTGAACAAAATTACCAGAAGTATT : TGCAACTTCAACTCCAAAGAACTCCAACTCCGAAGACTGAACTAAATTACCAAGAAGTATT : TGCAACTACAACTCTCAAAGAACCCAACTCCGAAGACTGAACTAAATTACCAAGAAGTACT : TGCAACTACAACTCATGTGAAGAACTCTCGCTAGAACTGAACTAAATTACCAAGAACTACT : TGCAACTACAACTCAACGAAGAAGAACCCTCCGCTAGAAACTGAACTAAATTACCAAGAAATT : TGCAACTCAACTCAACGGAAGAACCCACCTCCGCTAGAAAACTGAAATTAATT	TIGAAGTTA : 285 TIGAAGCTA : 282 TIGAAGCTA : 285 TIGAAGCTA : 285 TIGAAGCTA : 285 TIGAAGCTA : 285 TIGAAGCTA : 288 TIGAAGCTC : 285 TIGAAGCTC : 285 TIGAAGCTC : 285 TIGAAGCTC : 288 TIGAGCTC : 288 TIGAAGCTC : 288
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Coryza_s_Os : Zea_m_ZMM1 : Sorghum_b : Triticum_a : Triticum_a : Triticum_a : Zea_m_ZMM1 : Sorghum_b = : Triticum_a : Triticum_a : Triticum_b = : Coryza_s_Os : Elaeim_d2 : Sorghum_b = : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A : Magnolia_g : Oryza_s_Os : Oryza_s_Os : Oryza_s_Os : Asparagus_ : Acorus_a_A :	: TGCAATTTTGCAT CC GAGGATCACTCCACTAGAGCTGAATTAATTATCAGGAGTACC : TGTAACTTCAACT CC GAGGAACTTCAACTCCGAGTCCGAAGATACCAGAGTAT : TGTAACTTCAACT CC GAGGAACTTCAACTCCGAGTCCGAACTAACTAACCAGAGTAT : TGCAACTTCAACT CC GAGGAACTGCAACTCCGAGACTGAACTAACTACAGAGAGTAT : TGCAACTTCAACT CCAAGGAACACCAACTCCGAGACTGAACTAACTACAGAGATACC : TGCAACTACAACT CCAAGGAACACCAACTCCGAGACTGAACTAAATTACCAGAGATACC : TGCAACTACAACT CACAAGGAACACCAACTCCGGAGACTGAACTAAATTACCAAGAGTACC : TGCAACTACAACT CACAGAAGAACACCTCCGCTAGAAACTGAACTAAATTACCAAGAGTACC : TGCAACTACAACT CACAGAAGAACACCTCCGCTAGAAAATGAAATTAATTACCAAGAATAT : TGCAACTACAACT CACAGAAGGAACCCTCCGCTAGAAAATGAAATTAATTAC CAGGAATAT : TGCAACTACAACT CACAGAAGGAACCCCTCCACTGAAAAAGAAATTAATTAC CAGGAATAT : TGCAACTACAACT CACAGAAGGAACCCCTCCAGCAGAAATGAAAT	TGAAGTTA : 285 TAAAGCTA : 287 TTAAAGCTA : 287 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 285 TTAAAGCTA : 288 TTAAAACTA : 288 TTAAAA
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_ : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_b_L : Triticum_a : Triticum_b_ : Triticum_a : Triticum_b_ : Triticum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b_ : Corghum_b_ : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Asparagus_ : Acorus_a_A : Asparagus_ : Acorus_a_A : Magnolia_g : Oryza_s_Os : Oryza_s_Os : Oryza_s_Os : Asparagus_ :	: TGCAATTTTGCAT CC GAGG ATCACTTCACTACAGGCTGAATTAATTAT CAG GAGTAC': : TGTAACTTCAACT CC GAGG AACTTCAACTCCGAGTCCGAA	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Coryza_s_Os : Zea_m_ZMM1 : Sorghum_b : Triticum_a : Triticum_a : Triticum_a : Zea_m_ZMM1 : Sorghum_b = : Triticum_a : Triticum_a : Triticum_b = : Coryza_s_Os : Elaeim_d2 : Sorghum_b = : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Asparagus_ : Asparagus_ : Asparagus_ : Acorus_a_A : Magnolia_g : Oryza_s_Os : Oryza_s_Os : Oryza_s_Os : Asparagus_ : Acorus_a_A :	: TGCAATTTTCATTCCTTCCTTCAACTACACTCCACTACAAGCTCCAACTTACAATTATTACAGAACTACT : TGTAACTTCAACTCCTTCAACTCCGGACACTACAACTACCAGAACTACT : TGCAACTTCAACTCCTTCAACTCCAACTCCGGACACTACAACTACTACCAGAACTATT : TGCAACTTCAACTCCTTCAACTCCAACTCCGGACACTACAACAACTACTACCAGAACTATT : TGCAACTTCAACTCCTTCAACTCCAACTACCAACTACTCCGGACACTCAACAACAATTACCAAGAACTACT : TGCAACTTCAACTCCTTCAACGAACTCCGGACACTCGACAACAACTATTACCAAGAACTACT : TGCAACTACAACTCATGTGAAGCAACCACCACCTGGACACTGAACTAATTACCAAGAACTACT : TGCAACTCCAACTCAACGAAGCAACCCTCGGACACTGAACTGAACTTACTACCAAGAACTACT : TGCAACCCCAACTCAACGAAGCAACCCCTCGACTAGAAAACGAAATTAGTTACCAAGAAATATT : TGCAACTGCAACTCAACAGAAGCAACCCTCGACTAGAAAAATGAAATTAACTACCAGGAATATT : TGCAACTGCAACTCAACAGAAGCAACCCCTCGACAAAAATGAAATTAACTACCAAGAATATAC : TGCAACTACAACTCAACAGAAGCAACCCCTCGACAAAAATGAAATTAAATTACCAAGAAATATAC : TGCAACTACAACTCAACAGAAGCAACCCCTCGACAAAAATGAAATTAAATTACCAAGAAATATAC : TCCAACTACAACTCAACAGAATGAACCACTCCACTGAACAACAACAATTAATT	TTGAAGTTA : 285
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_b_c : Coryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Lolium_p_L : Triticum_a : Oryza_s_Os : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b : Coryda_s_Os : Lolium_p_L : Zea_m_m31 : Zea_m_m31 : Zea_m_m32 : Sorghum_b_ : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Elaeis_g_A : Asparagus_ : Asparagus_ : Acorus_a_A : Amborella_ : Nuphar_a_A : Magnolia_g : Oryza_s_Os : Oryza_s_Os : Asparagus_ :	: TGCAATTTTGCATOC GAAGCATCAGCTCCACTAGAGGCTGAATTAAATTAT AAGAATAC: : TGTAACTTCAACTCC GAGGCAACTTCAACTCCGAGATCCGAACTACAACTACCAGAAGTAT: : TGTAACTTCAACTCC GAGGCAACTCCAACTCCGGAGACCACTAACACTACCAGGAGTAT: : TGCAACTTCAACTCC GAGGCAACTCCAACTCCGGAGACCACTAACAATTACCAGGAGTAT: : TGCAACTTCAACTCC GAGGCAACTCCAACTCCGGAGACTGAACAAATTACCAAGAGTAT: : TGCAACTACAACTCC AAGCAACACCACACTCCGGAGACTGAACTAATTACCAAGAGTAC: : TGCAACTACAACTCATGTGAAGCAACACCACACTCGGAGACTGAACTAATTACCAAGAGTAC: : TGCAACTCCAACTCAACGGAAGCAACCCTCCGCTAGAAAATGAATTAATT	TTGAAGTTA : 285

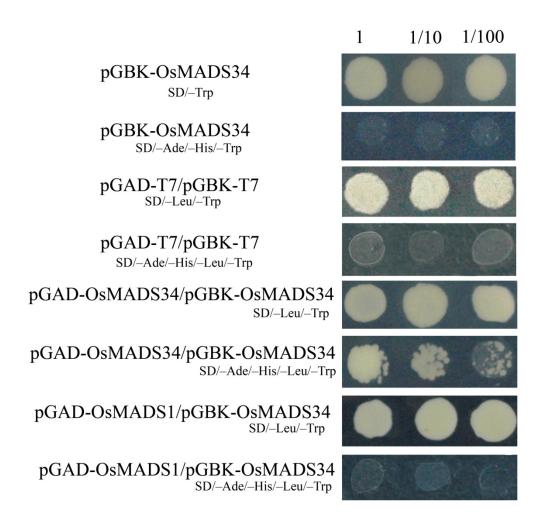
Zea_m_ZMM3 :	AAGACAAGAGTT	GAGTTCTT.	acaaacaa c i	CAGAGAAATC	ласттестс	aggacttgggtcc	ACTTAGOGTG : 357
Sorghum_b_ :	MAGAGAAAAGIIII	GAGTTCTT.	ACAAACAACI	CAGAGAAATC	HACHTECT	AGGACTIGGGTCC	CACTTAACGTG : 357
Triticum_a : Triticum a :	AAGACAACAGIII	GACTTCCT.	ACAGACAACI	CAGAGAAATC	TTOTTGGCC	ACCACTRICECCO	CACTTAACATG : 354 CACTTAACATG : 348
Triticum_a :	AAGACAAGAGTT	GAGTTCCT	ACAGACAACT	CAGACAAATC	TTOTTGGC	AGGACTTGGGCCC	ACTTAACATG: 357
Lolium p L :	AAGACAAGAGTT	GAGTTCCT	ACAGACAACT	CAGAGAAATC	TTCTTGGTG	AAGACTTGGGCCC	ACTTAGCATT : 357
Oryza s Os :	AAGACAAGAGTT	GAGTTCCT.	acaaacaac1	CAGAGAAATC	TTCTTGGC	AGGACTT GGGTC AGGACTT GGGCC AGGACTT GGGCC AGGACTT GGGCC AGGACTT GGGCC AAGACTT GGGCC AAGACTT GGGCC AAGACTT GGTTC AAGATCT GGGCC	ACTTAGETTG : 360
Triticum_a :	AAGACCAGAGTT	GAATTTCT	TCAAAGTTCA	ACAAAGAAATA	TTCTCGGT	AGGATCTGGGCCC	CACTTAGCATG: 360
Lolium_p_L :	AAGACCAGAGTC	GAATTCCT	TGAAAGTTCA	ACAGAGAAATA	TTCTCGGTC	AAGATCTGGGTCC	CACTTAGCATT : 360
Triticum_a :							
Triticum_a:	AAGACCACACIIII	GAATATCT	TCAAAGTTCA	ACAAACAAATA	TOTOGGTO	AGGATCTGGGCCC AGGATTTGGGCCC AAGATCTGGGCCC AGGATCTGGGTCC	CACTTAGCATG : 258
Oryza_s_Os : Zea m ZMM8 :	AMAACAACACINI	CAMPRES	CCACACCACA	ACAGA GAAATA	TCTTGGTG	AGGATTT GGGCCC	ACTAAGCATG : 357 ACTCAGCATG : 360
Zea_m_ZMM0 : Zea m ZMM1 :	AGGACAGAGIT	CAATTTCT	CCAGACTACA		TT CTT CCC	AGGATCH GGGCCC	CACTTAGCATG: 357
Sorghum b :	AGGACAAGAGTT	CAATTTCT	TCAAACTAGA	САААСАААТА	ттсттсстс	AGGATCHGGGTCC	ACTTAGCATG: 360
Triticum a :	AAGGCAAGAGTT	GAGGTTTT	GCAACACTCA	CAAACGAATC	TCCTAGGT 6	AGGATCTGGGTCC AGGATTTGGCTCC AGGATTTGGCTCC ATGATTTGGCTCC	CACEGAGCACA : 360
Triticum m :	AAGGCAAGAGTT	GAGGTTTT.	ACAACGCT C A	CAAAGGAATC	TCCTAGGC	a <mark>ggatttggct</mark> cc	CACTGAGTACA: 360
Lolium_p_L :	AAGGCAACAGTT	GAGGTTTT.	ACAACACT <mark>C</mark> I	CAAACGAATC	TACTAGGC	A <mark>TGA</mark> TTTGG <mark>CT</mark> CC	CACTCAATACA : 360
Zea_m_m31 :	AAAGCACGAGTT	GAGGTTTT.	ACAACACTC	CAAACGAATC	TTCT <mark>TGG</mark> TC	A <mark>AGAACT</mark> GGCTCC A <mark>AGATCT</mark> GGCCCT	CAC <mark>T</mark> TAGOCCA : 360
Zea_m_m24 :	AAGGCACGAGTT	GAGGTTTT.	ACAGCACT C A	ACAAACGAATC	TTCTTGGTG	AAGATCTGGCCCT	ACTTAGCCCA : 360
Sorghum_b_ :	AAGGCACGAGTT	GAGGTTTT.	ACAACACTCA	ACAAACGAATC	TTOTTGGTG	AAGATCTGGCTCC	ACTTAGCCCT : 360
Oryza_s_Os :	AAGGOACATGINI	CAGATTCT	GOAACAATGA	ACAAACGAACC	TOWACCT C	AGGATTTACCTCC	ACTGGCTACA: 360 ACTAAGTACA: 360
Elaeis_g_A : Elaeis q A :	AAGGCAAGAGII	CACTTTCT	GCAGCACTOA		TCCT1GGTG	AGGACTTGGACCC AGGACTTGGACCC AGGACTTGACTCC	ACHAAGTACA: 360
Asparagus :	AAAGGAACCGTT	GAGATTOT	ACAACGTTCA	CAAACAAACC	TTOTCGGG	AGGACTTGACTCC	ATTAAGCACT : 354
Asparagus :	ABAGGAAGAGUU	CACATTON	A CAACGTT A	ACAAACAAACC	nnenceec:	ACCACHTEACTER	ATMARGRACT : 354
Acorus a A :	AAAGCAAAAGTG	GAAGCTTT	GCAACGTT C A	CAGAGGAACC	TTCTTGGGG	A <mark>aga</mark> cttgggccc A <mark>agactt</mark> gggcc	ATTAAACAGT : 360
Amborella_:	AAAGCGACGCTC	GAGTCTCT.	ACAACGATC	CAGAGGAACC	TTCTTGGTG	aagacttgggccc	CTTAAGTTCA: 360
Nuphar_a_A :	AAGTCCAAGGTT	GAGGCACT	gcaacatt <mark>c</mark> a	ACAAAGGAACC	TTTTGGGT	AAGATTTGGGTCC AAGACTTGGGCCC AAGATCTTGATTC AAGATCTTGGGAC	GCTCAACTCA : 198
Magnolia_g :	AAAGCGAGGTC	GAGATTCT	gcaacgta <mark>c</mark> t	CAAAGGAACC	TTCTCGGCG	AAGACTTGGGCCC	ATTGAGCACC : 294
Oryza s Os :	AAGGCAAGGGTT	GAAAATTT.	ACAACGGACI	CAAACAAATT	TGCTGGGT	AAGATCTTCATT	ATTAGGCATA: 360
Oryza_s_Os : Asparaqus :	AAGGCACGGTG	GAGAGATTII.	ACAGAGGACC	CAAAGGAATC	THETTGETE	AAGATOTTGGGAC AAGATOTTGGGCC	CACTTGGCATA : 360 CATTGAGCAGC : 360
Asparagus_ :	AAAGCCCCTCTT	CAACCTT.	ACAGAGAICI ACAACGCTCI	CAAAGGAAIC		AACATCHIGGGCC	CATEGAGCAGC : 360
Acorus a A :	AAAGCACCCAT	GAAGAACT	AATGAGAAC	CAAAAGCACT	тсттесст	AAGATCTTGGTCC AGGATTTGGGGCC AGGACTTGGGCCC	ACTGAACAGC: 282
Magnolia p :	AAGGCCCCCCTC	GAGGCACT	ACAACGGTC	CAAACGAATC	TTCTAGGT	AGGACTTGGGCCC	ACTAAGOGGC : 327
Amborella :	AAGGCACATTIC	GAGGCCCT	GCAACGTTCT	CAAAGAAATC	THOTIGGE	AGCACTICCGTCC	TCMTMGTGGA: 219
Arabidopsi :	AAGGAGCCTTAT	GACGCCTT.	acagagaa <mark>c</mark> o	CAAAGGAATC	TGTTGGGAC	AAGATCTTGGACC	TCTAAGTACA: 360
Zea_m_ZMM3 :	AAGGAGTTAGAG	CAACTT GA	GAACC <mark>A</mark> AATI	GAGATATOTO	TCAAGCAA	TCC <mark>GA</mark> TCATCAAA	GA <mark>AC</mark> CA <mark>GCAG : 429</mark>
Sorghum_b_ :	AAGGAGCTAGAG	CAACTTGA	GAACGAAATT	GAGATATOTO	TCAAGCATA	IICCCGTCATCAAA	GAACCAGCAG : 429
Sorghum_b_ : Triticum_a :	AAGGAGCTAGAG	CAACTTGA	GAACCAAATT	GAGATATOTO	TCAAGCATA	TCCEGTCATCAAA	GAACCAGCAG : 429
Sorghum_b_ : Triticum_a : Triticum_a :	AAGGAGCTAGAG	CAACTTGA	GAACCAAATT	GAGATATOTO	TCAAGCATA	TCCEGTCATCAAA	GAACCAGCAG : 429
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a :	AAGGAGCTAGAG AAGGAACTTGAG AAGGAACTTGAG	CAACTTGA CAACTGGA CAACTGGA	GAACCAAATI GAACCACATI GAACCAAATI	GAGATATOTO GAGATGTOTO GAGATOTOTO	T <mark>C</mark> AAGCATA TCAAACATA TCAAACATA	.T.CC <mark>G</mark> T C <mark>AT</mark> CAAA T.CAGGGCGACAAA T.CAGGGCGACAAA	AGAACCAGCAG : 429 AGAGCCAGCAG : 426 AGAGCCAGCAG : 420
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L :	AAGGAGCTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAACTTGAG	CA <mark>ACTTGA</mark> CAACTGGA CAACTGGA CAGCTTGA	GAACCAAATI GAACCACATI GAACCAAATI GAACCAAATI GAACCAAATI	GAGATATOTC GAGATGTOTC GAGATOTOTC GAGATATOTC	TCAAGCATA TCAAACATA TCAAACATA TCAAACATA TCAAAAATA	TCCGGTCATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGGCGACAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 420 AAGCCAGCAG : 429
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Tolium_p_L : Oryza_s_Os :	AAGGAGCTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG AAGGAGCTGAG AAGGAGCTGGAG	CAACTTGA CAACTGGA CAACTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATI GAACCAAATI GAACCAAATI GAACCAAATI GAACCAGATO GAACCAGATO	GAGATATOTO GAGATOTOTO GAGATATOTO GAGATATOTO GAGATATOCO AGATGOATOCO	TCAAGCATA TCAAACATA TCAAACATA TCAAACATA TCAAAAATA TCATGAATA	TCCEGT CATCAAA TCA GGGCGACAAA TCA GGGCGACAAA TAA GGT CGACAAA TCA GGT CATCAAA	AGAACCAGCAG : 429 AGAGCCAGCAG : 426 AGAGCCAGCAG : 420 AGAGCCAGCAG : 429 AGAGCCAGCAG : 429 AGAATCAACAG : 432
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a :	AAGGAGCTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG	CAACTTGA CAACTGGA CAGCTTGA CAACTTGA CAACTTGA CAACTTGA CAGATAGA	GAACCAAAHI GAACCAAAHI GAACCAAAHI GAACCAAAHI GAACCAAAHI GAACCAGAHG GAACCAAAHA	CAGATAR CTC CAGATCR CTC CAGATAR CTC CAGATAR CTC CAGATAR CCC CAGATAR CCC CATGCAR CCC	TCAAGCATA TCAAACATA TCAAACATA TCAAAACATA TCAAAAAATA TCATCAATA TCAAGCATA	TCCGGT OATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCGACAAA TCAGGTCATCAAA TCAGGTCAAAAAA TCAGGTCAAAAAA	AGAACCAGCAG : 429 AGAGCCAGCAG : 426 AGAGCCAGCAG : 420 AGAGCCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGAATCAACAG : 432 AGAGCAACAG : 432
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Tolium_p_L : Oryza_s_Os :	AAGGAGTTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAT	CAACTTGA CAACTGGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGATAGA	TAAACOAAA TAAACOAAA TAAACOAAA TAAAACOAAA TAAAACOAAAA TAAAACAAAAAAAAAA	AGAGATANCTC AGAGATGNCTC AGAGATANCTC AGAGATANCTC AGAGATANCTC AGATGCANCCC AGATGCANCCC	TCAAGCATA TCAAACATA TCAAACATA TCAAAAAATA TCATGAATA TCATGAATA TCAAGCATA	TCCGGT CATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TAAGGTCACAAA TCAGGTCACAAA TCAGGTCAAAAAA TCAGGTCAAAAAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 420 AGAGCAACAG : 429 AGAATCAACAG : 432 AGAGTCAACTA : 432 AGAGTCAACTA : 432
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L :	AAGGAGTTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAACTTGAG	CAACTTGA CAACTGGA CAACTTGA CAACTTGA CAGATTGA CAGATTGA CAGATTGA	GAACADAATI	REAGATATOTO REAGATETOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO AGATGCATCOCO AGATGCATATOCO AGACATATOCO	TCAAGCATA TCAAACATA TCAAACATA TCAAAAATA TCATGAATA TCATGATA TCAAGCATA TCAAGCATA	TCCGGT CATCAAA TCAGGG GACAAA TCAGGG GACAAA TCAGGT CACAAA TCAGGT CAAA TCAGGT CAAAAAA TCAGGT CAAAAAAA TCAGGT CAAAAAA	AGAACCAGCAG : 429 AGAGCCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGAATCAAGTA : 432 AGAATAAAGTA : 432 AGAATAAAGTA : 432
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_c : Lolium_p_L : Oryza_s_os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_os :	AAGGAGCTAGAGAGAGAACTTGAGAGAGAGCTTGAGAGAGCTTGAGAAGGAGCTTGATAAGGAGCTTGATAAGGAAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGA	CAACTTGA CAACTGGA CAACTTGA CAACTTGA CAACTTGA CAGATTGA CAGATTGA CAGATTGA CAGATTGA CAACTTGA CAACTTGA	GAACAAATT	CAGATATOTO CAGATGTOTO CAGATATOTO CAGATATOTO CAGATATOTO CAGATATOTO CAGATATOCO AGATGTATOCO AGATGTATOCO AGATGTATOCO AGACATATOTO AGACATATOTO	T CAAGCATA T CAAACATA T CAAACATA T CAAACATA T CAAGCATA T CAAGCATA T CAAGCATA T CAAGCATA T CAAGCATA	TCCGGT CATCAAA TCAGGG GACAAA TCAGGG GACAAA TCAGGT CACAAA TCAGGT CATCAAA TCAGGT CAAAAAA TCAGGT CAAAAAAA TCAGGT CAAAAAAA TCAGGAAAAAAAAAA	AGAACCAGCAG : 429 AGAGCCAGCAG : 426 AGAGCCAGCAG : 420 AGAGCCAGCAG : 429 AGAGCAACAG : 432 AGAATCAACAG : 432 AGAATCAAGTA : 432 AGAATAAAGTA : 432
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8	AAGGAGTTAGAG AAGGAACTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG	CAACTTGA CAACTGGA CAACTTGA CAACTTGA CAGATTGA CAGATTGA CAGATTGA CAAATTGA CAAATTGA CAAATTGA CAAGTTGA	GAACAAATI	REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO AGATGCATOCO AGATGTATOCO AGACATATOCO AGACATATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO	T CAAGATA T CAAAAATA T CAAAAATA T CAAAAATA T CAAGAATA T CAAGATA	TCCGGT CATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGGTCACAAA TCAGGTCATCAAA TCAGGTCAAAAAAA TCAGGTCAAAAAAA TCAGGTCAAAAAAA TCAGGTCAAAAAAA TCAGGTCAAAAAAA TCAGGACAAAAAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 420 AAGCCAGCAG : 429 GAACCAGCAG : 432 GAATCAACAG : 432 GAATCAAGTA : 432 GAATAAAGTA : 432
Sorghum_b_: Triticum_a: Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os Triticum_a: Lolium_p_L: Triticum_a: Triticum_a: Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1:	AAGGAGCTAGAGAGAGGAACTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGACAAGGAAGCTTGACAAGGAAGTTGACAAGGAAGTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAAGGAAGCTTGACAAGGAAGCTTGACAAGGA	CAACTGA CAACTGA CAACTGA CAACTGA CAACTGA CAGATGA CAAATGA CAAATGA CAAATGA CAAATGA CAAATGA	GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACGAAATT GAACGAAATT GAACCAAATT GAACCAAATT GAACCAAATT	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGATATOTO AGATGATOCO AGATGATOCO AGATGATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO	TCAAGCATA TCAAACATA TCAAACATA TCAAACATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGATA TCAAGATA	TCCGGTCATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCACAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 420 GAGCCAACAG : 429 GAATCAACAG : 432 GAATCAACTA : 432 GAATCAACTA : 432 GAATAAACTA : 432 GAATAAACTA : 330 GAATCAACCA : 429 GAATCAACCA : 429
Sorghum_b_: Triticum_a: Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os: Triticum_a: Lolium_p_L: Triticum_a: Triticum_a: Oryza_s_Os: Zea_m_ZMM8: Sorghum_b_:	AAGGAGCTAGAGAGAGGAACTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGACAAGGAAGCTTGACAAGGAAGTTGACAAGGAAGTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAAGGAAGCTTGACAAGGAAGCTTGACAAGGA	CAACTGA CAACTGA CAACTGA CAACTGA CAACTGA CAGATGA CAAATGA CAAATGA CAAATGA CAAATGA CAAATGA	GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACGAAATT GAACGAAATT GAACCAAATT GAACCAAATT GAACCAAATT	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGATATOTO AGATGATOCO AGATGATOCO AGATGATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO	TCAAGCATA TCAAACATA TCAAACATA TCAAACATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGATA TCAAGATA	TCCGGTCATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCACAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 420 GAGCCAACAG : 429 GAATCAACAG : 432 GAATCAACTA : 432 GAATCAACTA : 432 GAATAAACTA : 432 GAATAAACTA : 330 GAATCAACCA : 429 GAATCAACCA : 429
Sorghum_b_: Triticum_a: Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os: Triticum_a: Lolium_pL : Triticum_a: Triticum_a: Triticum_a: Oryza_s_Os: Zea_m_ZMM8: Zea_m_ZMM1: Sorghum_b_: Triticum_a:	AAGGAGCTAGAGAGAGGAACTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGACAAGGAAGCTTGACAAGGAAGTTGACAAGGAAGTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAAGGAAGCTTGACAAGGAAGCTTGACAAGGA	CAACTGA CAACTGA CAACTGA CAACTGA CAACTGA CAGATGA CAAATGA CAAATGA CAAATGA CAAATGA CAAATGA	GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACGAAATT GAACGAAATT GAACCAAATT GAACCAAATT GAACCAAATT	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGATATOTO AGATGATOCO AGATGATOCO AGATGATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO	TCAAGCATA TCAAACATA TCAAACATA TCAAACATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGATA TCAAGATA	TCCGGTCATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCACAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 420 GAGCCAACAG : 429 GAATCAACAG : 432 GAATCAACTA : 432 GAATCAACTA : 432 GAATAAACTA : 432 GAATAAACTA : 330 GAATCAACCA : 429 GAATCAACCA : 429
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b : Triticum_a :	AAGGAGCTAGAGAGAGGAACTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGACAAGGAAGCTTGACAAGGAAGTTGACAAGGAAGTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAGGAAGCTTGACAAAGGAAGCTTGACAAGGAAGCTTGACAAGGA	CAACTGA CAACTGA CAACTGA CAACTGA CAACTGA CAGATGA CAAATGA CAAATGA CAAATGA CAAATGA CAAATGA	GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACCAAATT GAACGAAATT GAACGAAATT GAACCAAATT GAACCAAATT GAACCAAATT	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGATATOTO AGATGATOCO AGATGATOCO AGATGATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO	TCAAGCATA TCAAACATA TCAAACATA TCAAACATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGCATA TCAAGATA TCAAGATA	TCCGGTCATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCACAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA TCAGGTCAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 420 GAGCCAACAG : 429 GAATCAACAG : 432 GAATCAACTA : 432 GAATCAACTA : 432 GAATAAACTA : 432 GAATAAACTA : 330 GAATCAACCA : 429 GAATCAACCA : 429
Sorghum_b_ Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b : Triticum_a : Triticum_a : Triticum_a : Triticum_b : Lolium_p_L :	AAGGAGTTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGTTTGAG AAGGAGTTTGAG AAGGAGCTTGAG AAGGAGCTTGAT AAGGAACTTGAC AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG AAGGAGCTTGAG	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGA CAGCTGA CAGCTTGA CAGCTTGA CAGCTTGA CAGCTTGA CAGCTTGA	GAACAAATI	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOCO AGATATOCO AGATATOCO AGATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGACATATOCO AGAGATATOCO AGAGATATOCO AGAGATATOCO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO	T CAA GO ATA T CAA AC ATA T CAA AC ATA T CAA AC ATA T CAA GO ATA T GAA GO ATA	T CCGGT CATCAAA T CAGGG GACAAA T CAGGG GACAAA T CAGGT CACAAA T CAGGT CAACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA	GAACCAGCAG : 429 GAGCAGCAG : 426 GAGCCAGCAG : 420 GAGCCAGCAG : 429 GAATCAACAG : 432 GAATCAACTA : 432 GACTCAACTA : 432 GACTCAGCTA : 432
Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Oryza_s_os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b : Triticum_a :	AAGGAGCTTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG AAGGAGCTGGAG AAGGAGCTCGAG AAGGAGCTTGAG AAGGAGCTTGAG	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGATTGA CAGATTGA CAGATTGA CAGATTGA CAGCTTGA	GAACCAAATT GAGTCAAGTT GAGTCAAGTT	REAGATATOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGTATOTO REAGAGTATOTO REAGAGTATOTO REAGAGACATO REGCAAGACOT REAGAGACOT REGCAAGACOT	T CAAGATA T CAAA CATA T CAAA CATA T CAA CATA T CAAGATA T GAAGATA T GAAGATA T GAAGATA T GAGAGATA T GAGAGATA T GAGAGATA T GAGAGATA T GAGAGATA T GAGAGATA	TCCGGT CATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCGACAAA TCAGGTCAAAAAA TCAGGTCAAAAAA TCAGGTCAAAAAA TCAGGTCAAAAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 426 GAGCCAGCAG : 429 GAGCCAGCAG : 429 GAATCAACAG : 432 GAATCAACTA : 432 GAATCAACTA : 432 GAATAAACTA : 432 GAATAAACTA : 432 GAATCAACTA : 429 GAATCAACTA : 429 GAATCAACTA : 432 GACTCAACTA : 432
Sorghum_b_ Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os Triticum_a : Lolium_p_L : Triticum_a : Oryza_s_Os Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b = : Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Lolium_p_L : Zea_m_31 :	AAGGAGCTTAGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG AAGGAGCTGGAG AAGGAGCTCGAG AAGGAGCTTGAG AAGGAGCTTGAG	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGATTGA CAGATTGA CAGATTGA CAGATTGA CAGCTTGA	GAACCAAATT GAGTCAAGTT GAGTCAAGTT	REAGATATOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGTATOTO REAGAGTATOTO REAGAGTATOTO REAGAGACATO REGCAAGACOT REAGAGACOT REGCAAGACOT	T CAAGATA T CAAA CATA T CAAA CATA T CAA CATA T CAAGATA T GAAGATA T GAAGATA T GAAGATA T GAGAGATA T GAGAGATA T GAGAGATA T GAGAGATA T GAGAGATA T GAGAGATA	TCCGGT CATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCGACAAA TCAGGTCAAAAAA TCAGGTCAAAAAA TCAGGTCAAAAAA TCAGGTCAAAAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 426 GAGCCAGCAG : 429 GAGCCAGCAG : 429 GAATCAACAG : 432 GAATCAACTA : 432 GAATCAACTA : 432 GAATAAACTA : 432 GAATAAACTA : 432 GAATCAACTA : 429 GAATCAACTA : 429 GAATCAACTA : 432 GACTCAACTA : 432
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_a Triticum_s Corghum_b_c Oryza_s_Os	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGAGAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGAAGAAGGAGCTTGAAGAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGTGAAATCCAGTGAACTTGAACAGTGAACATTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAAATTGAACAGTGAAACTTGAACAAGTGAAACTTGAACAAGTGAAACTTGAACAAAAAAAA	CAACTTGA CAACTGGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTGGA CAGCTTGA	GAACCAAATT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGATGATATOCO AGATGATATOCO AGATGTATOCO AGAGATATOCO AGAGATATOCO AGAGATATOCO AGAGATATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACAT	T CAAGATA T CAAAAATA T CAAAAATA T CAAAAATA T CAAGAATA T CAAGATA	TCCGGT CATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCATCAAA TCAGGTCAAAAAAA TCAGGTCAAAAAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 426 GAGCCAGCAG : 429 GAACCAGCAG : 432 GAATCAACAG : 432 GAATCAACAG : 432 GAATAAACTA : 432 GAATAAACTA : 432 GAATCAACAG : 429 GAATCAACAG : 429 GAATCAACAG : 429 GAATCAACTA : 432 GAATCAACTA : 432 GACTCAACTA : 432 GACTCAACTG : 432
Sorghum_b_ Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Triticum_a : Triticum_a : Triticum_b : Ca_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b_ : Triticum_a : Triticum_a : Triticum_a : Triticum_b_ : Triticum_b_ : Triticum_b_ : Corghum_b : Oryza_s_Os : Ca_m_m31 : Ca_m_m24 : Sorghum_b : Oryza_s_Os : Elaeis_g_A :	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGAGAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGAAGAAGGAGCTTGAAGAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGTGAAATCCAGTGAACTTGAACAGTGAACATTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAAATTGAACAGTGAAACTTGAACAAGTGAAACTTGAACAAGTGAAACTTGAACAAAAAAAA	CAACTTGA CAACTGGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTGGA CAGCTTGA	GAACCAAATT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGATGATATOCO AGATGATATOCO AGATGTATOCO AGAGATATOCO AGAGATATOCO AGAGATATOCO AGAGATATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACAT	T CAAGATA T CAAAAATA T CAAAAATA T CAAAAATA T CAAGAATA T CAAGATA	TCCGGT CATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCATCAAA TCAGGTCAAAAAAA TCAGGTCAAAAAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 426 GAGCCAGCAG : 429 GAACCAGCAG : 432 GAATCAACAG : 432 GAATCAACAG : 432 GAATAAACTA : 432 GAATAAACTA : 432 GAATCAACAG : 429 GAATCAACAG : 429 GAATCAACAG : 429 GAATCAACTA : 432 GAATCAACTA : 432 GACTCAACTA : 432 GACTCAACTG : 432
Sorghum_b_ Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Oryza_s_Os : Triticum_a : Lolium_p_L : Triticum_a : Oryza_s_Os : Zea_m_ZMM8 : Zea_m_ZMM1 : Sorghum_b : Triticum_a : Triticum_a : Triticum_a : Triticum_b : Zea_m_ZMM1 : Sorghum_b : Triticum_m : Lolium_p_L : Zea_m_m31 : Zea_m_m24 : Sorghum_b : Oryza_s_Os : Elaeis_g_A : Elaeis_g_A :	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGAGAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGATAAGGAGCTTGAAGAAGGAGCTTGAAGAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGCTTGAAATCCAGTGAAATCCAGTGAACTTGAACAGTGAACATTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAACTTGAACAGTGAAAATTGAACAGTGAAACTTGAACAAGTGAAACTTGAACAAGTGAAACTTGAACAAAAAAAA	CAACTTGA CAACTGGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTGGA CAGCTTGA	GAACCAAATT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT	AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGAGATATOTO AGATGATATOCO AGATGATATOCO AGATGTATOCO AGAGATATOCO AGAGATATOCO AGAGATATOCO AGAGATATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGGTATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACATOCO AGAGACAT	T CAAGATA T CAAAAATA T CAAAAATA T CAAAAATA T CAAGAATA T CAAGATA	TCCGGT CATCAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGGCGACAAA TCAGGTCATCAAA TCAGGTCAAAAAAA TCAGGTCAAAAAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TCAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA TAAGGTCAAGAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 426 GAGCCAGCAG : 429 GAACCAGCAG : 432 GAATCAACAG : 432 GAATCAACAG : 432 GAATAAACTA : 432 GAATAAACTA : 432 GAATCAACAG : 429 GAATCAACAG : 429 GAATCAACAG : 429 GAATCAACTA : 432 GAATCAACTA : 432 GACTCAACTA : 432 GACTCAACTG : 432
Sorghum_b_ Triticum_a : Triticum_a : Triticum_a : Lolium_p_L : Triticum_a : Lolium_p_L : Triticum_a : Triticum_b_ : Triticum_b : Triticum_b : Triticum_a : Triticum_b : Triticum_a : Triticum_b : Tritic	AAGGAGCTTGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG ACGAGCTTGAG ATCGAGCTTGAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA	GAACCAAATT GAACTAAGTT GAACTAACTT GAACTAACT GAACTAACTT GAACTAACTT GAACTAACTT GAACTAACTT GAACTAACTT GAACTAACT GAACT GAACTAACT GAA	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTOTO	T CAA GATA T CAA A CATA T CAA A CATA T CAA GATA T GAA GATA T GAA GATA T GAA GA ATA T GAA GA AAA T T AAA GA AGA	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGAT CAAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCACATCA : 432 AGACCCACATCA : 432 AGACCCACATCA : 432 AGACCCACATCA : 432
Sorghum_b_ Triticum_a Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os Triticum_a: Lolium_pL : Triticum_a: Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a: Triticum_a: Triticum_a: Zea_m_M31 Zea_m_M34 Sorghum_b_ Oryza_s_Os Elaeis_g_A Asparagus_ Asparagus_	AAGGAGCTTGAG AAGGAACTTGAG AAGGAACTTGAG AAGGAGCTTGAG ACGAGCTTGAG ATCGAGCTTGAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA	GAACCAAATT GAACTAAGTT GAACTAACTT GAACTAACT GAACTAACTT GAACTAACTT GAACTAACTT GAACTAACTT GAACTAACTT GAACTAACT GAACT GAACTAACT GAA	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTOTO	T CAA GATA T CAA A CATA T CAA A CATA T CAA GATA T GAA GATA T GAA GATA T GAA GA ATA T GAA GA AAA T T AAA GA AGA	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGAT CAAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCACATCA : 432 AGACCCACATCA : 432 AGACCCACATCA : 432 AGACCCACATCA : 432
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b_ Triticum_a	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Sorghum_b_ Triticum_a Lolium_pL Zea_m_31 Zea_m_32 Zea_m_32 Zea_m_31 Zea_m_32 Zea_m_32 Zea_m_32 Zea_m_32 Zea_m_33	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b_ Triticum_a	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Aca_m_ZMM1 Sorghum_b Oryza_s_Os Elaeis_g_A Asparagus_A Asparagus_A Asparagus_A Amborella_ Nuphar_a_A Magnolia_g Oryza_s_Os	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_s Elaeim_m24 Sorghum_b_c Oryza_s_Os Elaeis_g_A Asparagus_A Asparagus_A Asparagus_A Amborella_ Nuphar_a_A Magnolia_g Oryza_s_Os Oryza_s_Os Oryza_s_Os	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Lolium_p_L Zea_m_m31 Zea_m_m31 Zea_m_m32 Zea_m_m32 ATRITICUM_B COTYZA_S_OS Elaeis_g_A Elaeis_g_A Asparagus_ASparagus_ACOTUS_AA AMBOROLIA_NUPHAR_AA Magnolia_g OTYZA_S_OS OTYZA_S_OS ASPARAGUS_	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT GAACTAAACT GAACTAAGT GAACTAAACT GAACTAACT GAACTA	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_a Triticum_b Triticum_a Lolium_p_L Zea_m_31 Zea_m_24 Sorghum_b Oryza_s_Os Elaeis_g_A Elaeis_g_A Elaeis_g_A Asparagus Acorus_a_A Amborella_ Nuphar_a_A Magnolia_g Oryza_s_Os Oryza_s_Os Oryza_s_Os Oryza_s_Os Asparagus_ Asparagus_ Asparagus_ Asparagus_ Asparagus_ Asparagus_ Asparagus_ Asparagus_ Asparagus_	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT GAACTAAACT GAACTAAGT GAACTAAACT GAACTAACT GAACTA	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_m Lolium_p_L Zea_m_ZMM1 Sorghum b Triticum_m Lolium_p_L Zea_m_m31 Zea_m_m32 Sorghum_b Oryza_s_Os Elaeis_g_A Elaeis_g_A Elaeis_g_A Elaeis_g_A Asparagus_ Asparagus_ Acorus_a_A Amborella_ Nuphar_a_A Magnolia_g Oryza_s_Os Oryza_s_Os Oryza_s_Os Asparagus_ Acorus_a_A	AAGGAGCTTAGAGAGAGGAACTTGAGAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAGCTTGACAAGGAACTTGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAATGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAGGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAGGAACTTGACAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAGAACTTGACAAAAAAAA	CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAACTTGA CAGCTGGA CAGCTTGA CAACTTGA CAACTTGA	GAACCAAATT GAACTAAGTT GAACTAAGT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGTT GAACTAAGT GAACTAAACT GAACTAAACT GAACTAAGT GAACTAAACT GAACTAACT GAACTA	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOCO REAGATATOTO REAGAGATATOTO REAGAGATATOTO REGEAAGACOT REGEAAGACOT REAGAGACOT REACAGAGACOT RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO RECCATGTOTO REACAGATOTO RECCATGTOTO RECCATGTO	T CAA GA TA T CAA A CATA T CAA A CATA T CAA A CATA T CAA GA TA T GAA GA TA T GAA GA TA T GAA GA TA T GAG GA GA T GAG GA AA T GAG GA AA T GAA GA GA T GAA GA AA T GAA GA GA T GAA GA GA T GAA GA GA T GAA GA GA T T GAA GA GA T T GAA GA GA T T GAA GA GA T T T T T T T T T T T T T T T T T T T	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	AGAACCAGCAG : 429 AGAGCAGCAG : 426 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAGCAGCAG : 429 AGAATCAACAG : 432 AGACCAACAG : 432 AGACTCAACAG : 432 AGACCCAATCA : 432 AGACCCAACAG : 432 AGACCAACAG : 432 AGACCAACA
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_pL Triticum_a Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Sorghum_b_ Oryza_s_Os Elaeis_g_A Asparagus_A Asparagus_A Amborella_ Nuphar_a_A Magnolia_p Oryza_s_Os Asparagus_ Asparagus_ Asparagus_ Asparagus_ Oryza_s_Os Asparagus_ Acorus_a_A Magnolia_p	AAGGAGCTTGAGAGAGGAACTTGAGAGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAAGGAACTTGAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAAGGAACTTGAAAAAAGAACTTGAAAAAAGAACTTGAAAAAAAGAACTTGAAAAAAAA	CAACTTGA CACCTTGA CAC	GAACCAAATT GAACCAACTT GAACCAACT GAACCAACTT GAACCAACTT GAACCAACTT GAACCAACTT GAACCAACTT GAACCAACT GAAC	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REGCAAGACOT REAGATATOTO REAGATOTO REAGATO REAGATOTO REAGATOTO REAGATOTO REAGATO REAGATO REAGATO REAGATOTO REAGATO RE	T CAA GO ATA T CAA AC ATA T CAA AC ATA T CAA AC ATA T CAA GO ATA T GAA GO AGA T GA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GA GO	T C C G T C AT C AAA T C A G G C G A C AAA T C A G G C G A C AAA T C A G G C G A C AAA T C A G G T C A C AAA T C A G G T C A C AAA T C A G G T C A A AAAA T C A G G T C A A G AAA T C A G G T C A A G AAA T C A G G T C A A G AAA T C A G G T C A A G AAA T C A G G T C A A G AAA T C A G G T C A A G AAA T C A G G T C A A G AAA T A A G G T C A A G AAA T A A G G T C A A G AAA T A A G G T C A A G AAA T A A G G T C A A G AAA T C A G A T C A G AAA T C A G A T C A G AAA T C A G A T C A G AAA T C A G A T C A G C AAA T C A G A T C A C G AA T C A G A T C A C C AA T T A G A T C T C A C AAA T T A G A T C A C C AAA T T A G A T C A C C AAA T C A G A T C A C C AAA T T A G A T C A C C AAA T C A G A T C A C C AAA T C A G A T C A C C AAA T C A G A T C A C AAA T C C A G A T C A C AAA T C C A G A T C A C AAA T C C A G A T C A C AAA T C C A C AAA T C C A C A C C AAA T C C A C A C C AAA T C C A C A C C AAA T C C A C A C C AAA T C C A C A C C AAA T C C A C C C C C C C C C C C C C C C C	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 429 GAGCCAGCAG : 429 GAGCCAGCAG : 429 GAGCCAGCAG : 432 GAATCAACAG : 432 GAATCAACTA : 432 GACTCAACTA : 432 GACCCAATCA : 432 GACCCAATCA : 432 GACCCAGTTA : 426 GACCCAGTTA : 426 GACCCAGTTA : 432 GACCAAACCA : 432 GACCAACAATCA : 432 GACCAACAATCA : 432 GACCAACAATCA : 432 GACCAACAATCA : 432 GACCACAATCA : 432 GACCAACAATCA : 432 GACCACAATCA : 432 GACCAACAATCA : 432 GACCACAATCA : 339
Sorghum_b_ Triticum_a Triticum_a: Triticum_a: Lolium_p_L: Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_m Lolium_p_L Zea_m_ZMM1 Sorghum b Triticum_m Lolium_p_L Zea_m_m31 Zea_m_m32 Sorghum_b Oryza_s_Os Elaeis_g_A Elaeis_g_A Elaeis_g_A Elaeis_g_A Asparagus_ Asparagus_ Acorus_a_A Amborella_ Nuphar_a_A Magnolia_g Oryza_s_Os Oryza_s_Os Oryza_s_Os Asparagus_ Acorus_a_A	AAGGAGCTTGAGAGAGGAACTTGAGAGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAGAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAGGAGCTTGAAAAGGAACTTGAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAGGAACTTGAAAAAAGGAACTTGAAAAAAGAACTTGAAAAAAGAACTTGAAAAAAAGAACTTGAAAAAAAA	CAACTTGA CACCTTGA CAC	GAACCAAATT GAACCAACTT GAACCAACT GAACCAACTT GAACCAACTT GAACCAACTT GAACCAACTT GAACCAACTT GAACCAACT GAAC	REAGATATOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTOTO REAGATATOTO REAGATATOTO REAGATATOCO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REAGATATOTO REGCAAGACOT REAGATATOTO REAGATOTO REAGATO REAGATOTO REAGATOTO REAGATOTO REAGATO REAGATO REAGATO REAGATOTO REAGATO RE	T CAA GO ATA T CAA AC ATA T CAA AC ATA T CAA AC ATA T CAA GO ATA T GAA GO AGA T GA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GAA GO AGA T GA GO	T CCGGT CATCAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGGC GACAAA T CAGGT CACAAA T CAGGT CAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAAA T CAGGT CAAAAAA T CAGGT CAAGAAA T AAGGT CAAGAAA T AAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGGT CAAGAAA T CAGAT CAAGAAA T CAGAT CAAGAAA T CAGAT CAGAAA T CAGAT CAGAAA T CAGAT CAGAAA	GAACCAGCAG : 429 GAGCCAGCAG : 426 GAGCCAGCAG : 429 GAGCCAGCAG : 429 GAGCCAGCAG : 429 GAGCCAGCAG : 432 GAATCAACAG : 432 GAATCAACTA : 432 GACTCAACTA : 432 GACCCAATCA : 432 GACCCAATCA : 432 GACCCAGTTA : 426 GACCCAGTTA : 426 GACCCAGTTA : 432 GACCAAACCA : 432 GACCAACAATCA : 432 GACCAACAATCA : 432 GACCAACAATCA : 432 GACCAACAATCA : 432 GACCACAATCA : 432 GACCAACAATCA : 432 GACCACAATCA : 432 GACCAACAATCA : 432 GACCACAATCA : 339

1000000000 000 00000000000000000000000				-				-		100	27200
Zea_m_ZMM3									AAGAATGAAC		501
Sorghum b	: ATGCTCG	ACCA <mark>A</mark> CTCG	ATCTCAAG	CG <mark>C</mark> AAGGA/	ACAACAAC	GCAAGAI	GCTAACA	AAGACT	a agaaggaac	:	501
Triticum a	· TCATHTE	ATCACCTCC	ACCTCAAC	CCCAACCA	CAACAAC	CCAACAT	CTT AATA	ACACTO	acgaaagaac	:	498
	TONIE TO	70.00100		222		0070.00					
Triticum_a									acgaaaaaa		492
Triticum_a									acgg <mark>aag</mark> aac		501
Lolium p L	: TCACTTC	ATCAGCTCG.	AGCTCAAG	CGTAAGGA	ACAACAAC	GCAAGAI	GTTAACA	AAGACTI	a ag a aggaac		501
Oryza s Os	· maccane	ATCAACTAC	A C C T C A A A	CCTAACCA	CARCARC	тса а са т	CCTAATA	ACACTA	aaaa aggaac	:	504
	. 1	A COMO NO			CAAC	I CAACAAI		MOACI			
Triticum_a									GA <mark>GG</mark> A <mark>AG</mark> AAC		504
Lolium p L	: TTAGTTG	accaget a g	ACCTGAAA	AATAAGGA(GCAAGAAC	GCAGGAI	CAAAACA	AAGACTT	ga <mark>gg</mark> a ag aac	:	504
Triticum a	: TTACTTG	ATGAGCTAG	ACCTGAAA	AGTAAGGA	CAAGAAT	GCAGGAT	CAAAACA	AAAACCT	gagga a gaac		504
Triticum a	· mm s cmm c	am ca cmu a c	ACCACAAA	ACMAACC	CARCACH	cemeern	CAARACA	A CACCU	ga <mark>gg</mark> aggaac		402
. 1972 (1974) (1974) (1974) (1974) (1974)											
Oryza_s_Os	: CHGCHTE	ATCAGCTGG.	ATCTGAAG	A GCAAGGA	SCAACAGC	GCAAGAT	CTCAACA	AAGACTI	ga <mark>gg</mark> a aa aac	:	501
Zea m ZMM8	: CTACTCG	ATCAGCTCG.	ATCTCAAA	ag <mark>c</mark> aagga <i>i</i>	ACAA <mark>GAGT</mark> I	GCAGCAI	CTCAACA	AAGACC	<mark>aagg</mark> a aa aac	:	504
Zea m ZMM1	: CTACTTG	ATCAGCTCG.	ACCTCAAA	AGCAAGGA/	CAAGAAT	GCTGGAT	CTCAATA	AAGACCI	aaggaagcac		501
Sorghum b	· TTACTTC	ATCACCTCC	атстсава	ACCAACCA	CAACAAT	CCACCAT	CTCAATA	AGACC	<mark>a</mark> agga aa aa	:	504
	. Grants	. mg m . g g	. gamai a		GAAT	OCAGO T	CICALI	and a a a a			
Triticum_a	: ChGenAe	ATGAATIGE	ACCTGAAG	AGAAAGGA	SCAPATGT	ACAGGAT	GCAMACA!	r GACCCIII	GA AA AG A AAG	:	504
Triticum_m	: CIGCIGG	ATGAAATGG	ACCT GA AG	AG <mark>A</mark> AAGG <u>A</u> (GCAAATAT	GCAGGAI	GCAAACA!	rgaccc <mark>ii</mark>	ga aa ag a aac	•	504
Lolium p L	: CTACTCG	ATGAGCTCG.	ACCTGAAG	ag <mark>g</mark> aagga/	CACATGT	AGAGGAC	GCAAACT!	rgaccc <mark>i</mark>	ga <mark>aa</mark> aggaac		504
Zea m m31	· THACTES	ATGAACTTC	ACTUARAG	AGAAAGGA	CAAATGC	GCAAGAC	GCTAACAC	SCOTTON	ga aa aggaac	÷ :	504
Zea m m24	· mm a cmmc	A M C A A C M M C	CHUAAAC	1011100	CAAAMCC	CCAACAT	CCARAC	CCMMC	ga aa aggaad		504
Sorghum_b_	: THACHTE	ATGAACTTG	ACTHAAAG	agaaagga.	ACAAATGC	GCAAGAI	GCAAACA	GGTTC	ga aa aggaac	5 :	504
Oryza_s_Os	: CTACTTG	ATGAACTCG.	acct aa ag	ag <mark>a</mark> aagga <i>i</i>	ACAA <mark>ATGC</mark>	ACAAGAI	GCAAACA	GGT CC	ga aa aggaac	÷ :	504
Elaeis g A	: ATGCTCG	ATCAGCTTG	ATCTTAAA	ACAAGCCA	CAAGAGA	GCAGGAA	ACAAACA	FATCACI	A AACAGGAAC		504
Elaeis g A									A A A AG A AAG		465
	·	Lagranua e	. m . m						GGAAGAGAA		
Asparagus_	: ANGENTE	ACCAGTTGG.	ATCTTAAA	AGGAAGCA	ACAAGCCT	GCAGGAA	GCCAATA	SAGACTU	GGAAGAGAA	:	498
Asparagus_	: ATGCTTG	accagtigg.	ATCTTAAA	aggaagc <u>a</u> /	ACATGCCC	GCAGGA	GCCAGTA	GAGACT	ggaaaagaa	÷ :	498
Acorus a A	: ATGCTTG	ACCAGCTTG.	ATCTGAAA	ag <mark>g</mark> aagga/	ACAAATGT	GCAGGAA	GCTAATA	AATCTT	AAAGAGAAA		504
Amborella									ga aa cgtaac		504
Nuphar_a_A									agtg aggaac		342
Magnolia_g	: ATGCTGG	ATCAGCTTG.	ATCTTAAA	ag <mark>a</mark> aagga/	ACAA <mark>ATGC</mark>	GGTGGAA	GCCAACA.	AGGCCT	ga <mark>aa</mark> aggaac	:	438
Oryza s Os	: CIGGITG	ACCA <mark>A</mark> CTGG.	AGCTTCAG	ag <mark>a</mark> aagga/	ACAA <mark>ATGG</mark>	TTCTGAA	GCAAATA	SATGCCT	TAGGAG A AAA	: 4	504
Oryza s Os	· ATGCTTG	ATCAGCTCG	ATCTCCAG	AGGAGGGA	CAAATGT	GTGTGAA	GCAAATA.	A CT CCC	CAGAAGAAA	٠.	504
									GAGAAAACG		504
Asparagus_											
Asparagus_									gagaa <mark>aac</mark> g		504
Acorus a A	: ATGCTTG	ATCA <mark>A</mark> CT <mark>A</mark> G.	ATCTTCAA	ag <mark>a</mark> aagga <i>i</i>	ACAA <mark>GTGC</mark> I	CGTTGAA	ACAAACA	GAGATC <mark>I</mark>	TAAAAGAAA	:	426
Magnolia p	: ATGCTCG	ATCAGCTTG.	ATCTTCAA	ACAAGCCA	CATATGC	TAGTGAA	GCGAACA	AGACACII	gacacgaag0		471
Amborella									ga aa ag a aac		363
2.3											
Arabidopsi	: ATGCTTG	ACCAGCTCG	ATCTTCAG	AGHAAGGA	CGCATGC	GACTICAG	ACABATA	AAACTC	AAGACTAAG		504
	_										
Zea m ZMM3	: ATAGAAG	AAACTAGTG	AAGTGCTG	CGACTGTC	ragecagg <i>a</i>	ATGGGTGI	'AGTGGAT	CTAGTGG	gcatggtga <i>a</i>	A :	573
Zea_m_ZMM3									GCATGGTGA <i>I</i> GCATGGTGA <i>I</i>		
Sorghum_b_	: ATACAAG	AAACTAGTG	AAGTGCTG	GACTGTC:	TGCCAGGA	ACGGGTGT	AGTGGAT	CTAGTGG	GCATGGTGAA	١:	573
Sorghum_b_ Triticum_a	: ATACAAG : ATACAAG	AAACTAGTG AAACTAGTG	a <mark>agtgct</mark> g aagttcta	C <mark>GACTGTC</mark> CA <mark>GATGTT</mark>	TGCCAGGA	ACGGGTGI ATGGACCI	AGTGGAT	CTAGTGG CTAGTGG	GCATGGTGAA CCATGCTCAA	4 : 4 :	573 570
Sorghum_b_ Triticum_a Triticum_a	: ATACAAG : ATACAAG : ATACAAG	AAACTAGTG AAACTAGTG AAACTGGTG	A <mark>AGTGC</mark> TG AAGTTCTA ATGTTCTA	C <mark>GACTGTC</mark> CAGATGTT CAGATGTT	TGCCAGGA TGCCAGGA TGCCAGGA	ACGGGTGT ATGGACCT ATGGACCA	AGTGGAT AGTGGAT AGTGGGT	CTAGTGG CTAGTGG CTAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA	: A : A	573 570 564
Sorghum_b_ Triticum_a	: ATACAAG : ATACAAG : ATACAAG	AAACTAGTG AAACTAGTG AAACTGGTG	A <mark>AGTGC</mark> TG AAGTTCTA ATGTTCTA	C <mark>GACTGTC</mark> CAGATGTT CAGATGTT	TGCCAGGA TGCCAGGA TGCCAGGA	ACGGGTGT ATGGACCT ATGGACCA	AGTGGAT AGTGGAT AGTGGGT	CTAGTGG CTAGTGG CTAGTGG	GCATGGTGAA CCATGCTCAA	: A : A	573 570
Sorghum_b_ Triticum_a Triticum_a Triticum_a	: ATACAAG : ATACAAG : ATACAAG : ATACAAG	AAACTAGTG AAACTAGTG AAACTGGTG AAACTAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG	C <mark>GACTGTC</mark> CAGATGTT CAGATGTT CAAATGTC	T GCCAGGA T GCCAGGA T GCCAGGA T GCCAGGA	ACGGGTGT ATGGACCI ATGGACCA ATGGACCI	AGTGGAT(AGTGGAT(AGTGGGT(AGTGGGT	CTAGTGG CTAGTGG CTAGTGG CTAGTGG	GCATGGTGA/ CCATGCTCA/ CCATGCTCA/ CCATGCTCA/	4 : 4 : 4 :	573 570 564
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L	: ATACAAG : ATACAAG : ATACAAG : ATACAAG : ATACAAG	AAACTAGTG AAACTAGTG AAACTGGTG AAACTAGTG AAACTAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAGTGCTG	C <mark>GACTGTC</mark> CAGATGTT CAGATGTT CAAATGTC CATATGTC	TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA	ACGGGTGI ATGGACCI ATGGACCI ATGGACCI	AGTGGAT(AGTGGAT(AGTGGGT(AGTGGGT(CTAGTGG CTAGTGG CTAGTGG CTAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA	A : A : A : A :	573 570 564 573 573
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os	: ATACAAG : ATACAAG : ATACAAG : ATACAAG : ATACAAG : ATACAAG	AAACTAGTG AAACTAGTG AAACTGGTG AAACTAGTG AAACTAGTG AAACTAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAGTGCTG AAATGCTT	CGACTGTC CAGATGTT CAGATGTT CAAATGTC CATATGTC CATATATC	TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCAGGA TGCAAGA	ACGGGTGI ATGGACCI ATGGACCI ATGGACCI ATGGGCC	AGTGGAT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGGT(CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG	GCATGGTGA/ CCATGCTCA/ CCATGCTCA/ CCATGCTCA/	A : A : A : A :	573 570 564 573 573 576
sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a	: ATACAAG : ATACAAG : ATACAAG : ATACAAG : ATACAAG : ATACAAG : TTGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAGTGCTG AAATGCTT GAGCGGTC	CGACTGTC CAGATGTT CAGATGTC CAAATGTC CATATGTC CATATATC CATATGTC CATATGTC	TTGCAGAGA TTGCAGGA TTGCAGGA TTGCAGGA TTGCAAGA TTGCAAGA TTGCAAGA TTGCAAGA	ACGGGTGI ATGGACCI ATGGACCA ATGGACCI ATGGGCC ACGGGCAG	AGTGGAT(AGTGGAT(AGTGGGT(AGTGGGT(AGTGGCC, AGTGGCC,	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA	A : A : A : A : A :	573 570 564 573 573 576 564
sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L	: ATACAAG : TTGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT	CGACTGTC CAGATGTT CAGATGTT CAAATGTC CATATGTC CATATATC CATATGTC CATATGTC CATATGTC	TTGCCAGGA TTGCCAGGA TTGCCAGGA TTGCCAGGA TTGCCAAGA TTGCCAAGA TTGCCAAGA TTGCCAAGA TTGCCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCI ATGGACCI ATGGGCC ACGGGCAG	AGTGGAT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGCC) AGTGGCC) AGTGGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA 	A : A : A : A : A : - : - :	573 570 564 573 573 576 564 570
sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a	: ATACAAG : TTGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT	CGACTGTC CAGATGTT CAGATGTT CAAATGTC CATATGTC CATATATC CATATGTC CATATGTC CATATGTC	TTGCCAGGA TTGCCAGGA TTGCCAGGA TTGCCAGGA TTGCCAAGA TTGCCAAGA TTGCCAAGA TTGCCAAGA TTGCCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCI ATGGACCI ATGGGCC ACGGGCAG	AGTGGAT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGCC) AGTGGCC) AGTGGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA	A : A : A : A : A : - : - :	573 570 564 573 573 576 564
sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L	: ATACAAG : TTGCAAG : TTGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ACACCATCG	AGTGCTG AGTTCTA ATGTTCTA AGTGCTG AGTGCTG AAATGCTT GAGCGGTC AGCAGTT AGCAGTT	CGACTGTC CAGATGTT CAGATGTT CAAATGTC CATATGTC CATATATC CATATGTC CATATGTC CATATGTC CATATGTC CACATGCT	TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCCAGGA TGCCAAGA TGCCAAGA TGCCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCI ATGGACCI ATGGGCCA ACGGGCAG ATGGACAG	AGTGGAT(AGTGGAT(AGTGGGT(AGTGGGT(AGTGGGCT(AGTGGGCT(AGTGGGCT(AGTGGGCT(AGTAGGTAGGTAGGTAGGTAGGTAGGTAGGTAGGTAGG	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGAAGTGG CAAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTCAA	A : A : A : A : A : G :	573 570 564 573 573 576 564 570
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a	: ATACAAG : TTGCAAG : TTGCAAG : TTGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ACACCAGTG ACACCATCG ATACCAGCC ACACCAGCC	AAGTGCTG AAGTTCTA ATGTTCTA AGTGCTG AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCAGTT AGGCGCCC	CGACTGTC CAGATGTT CAGATGTC CAAATGTC CATATGTC CATATATC CATATGTC CATATGTC CACATGCT CACATGCT CACATGCT CATATGCC CATATGCC CATATGCC	TT CCCAGGA TT CCCAGGA TT CCCAGGA TT CCCAGGA TT CCCAGGA TT CCCAGGA TT CCCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA	AGTGGAT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGAAGTGG CAAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTCAA GCATGCCGAG GCATGCCGAG	A : A : A : A : A : G : G : G : G : G :	573 570 564 573 573 576 564 570 576 456
Sorghum_b_ Triticum_a Triticum_a Triticum_b_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Oryza_s_Os	: ATACAAG : ATACAAG : ATACAAG : ATACAAG : ATACAAG : ATACAAG : TTGCAAG : TTGCAAG : TTGCAAG : TTGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ACACCAGTG ACACCAGTG ATACCAGCG ACATCAGCG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAGTGCTG GAGCGGTC GAGCGGTT AGGCGCCC AGGCGCCC	CGACTGTC CAGATGTT CAGATGTT CAAATGTC CATATGTC CATATGTC CACATGTC CACATGCT CACATGCT CATATGCC CATATGCC CATATGCC CATATGCC CATATGCC CATATGCC CATATGTC	TT CCCAGGA TT CCCAAGA TT CCCAAGA TT CCCAAGA TT CCCAAGA TT CCCAAGA TT CCCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA	AGTGGAT(AGTGGAT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGCC, AGTGGCC, AGTGGCC, AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCCA AGTGGCT(AGTGGCCA AGTGGCT(AGTGGCTCA AGTGGCTCA AGGGGGTT(AGGGGGTTCA AGGGGGTT(AGGGGGTTCA AGGGGGTT(AGGGGGTTCA AGGGGGTT(AGGGGGTTCA AGGGGGTTCA AGGGGGTT(AGGGGGTTCA AGGGGGTTCA AGGGGGTT(AGGGGGTTCA AGGGGTTCA AGGGGGTTCA AGGGGTTCA AGGGGTT	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAGAGTGG CAAGTGG CAAGTGG CTAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCCGAA TGCATGCCGAA	A : A : A : A : A : A : B : B : B : B :	573 570 564 573 573 576 564 570 576 456 573
Sorghum_b_ Triticum_a Triticum_a Triticum_b_ Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Oryza_s_Os Zea_m_ZMM8	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ACACCATCG ATACCAGCG ATACCAGCG AAACCAGCG AAACCAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCCC AGGCGCCC AGGTGCTC AGGTGCTC	CGACTGTC CAGATGTT CAGATGTC CAAATGTC CATATGTC CATATGTC CACATGTC CACATGCT CACATGCC CACATGCC CATATGCC CATATGCC CATATGTC CATATGTC CATATGTC CATATGTC CATATGTC CATATGTC CACATGCT CACACTCC	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA THECCAAGA THECCAAGA THECCAAGA THECCAAGA THECCAAGA THECCAAGA THECCAAGA THECCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA	AGTGGAT(AGTGGAT(AGTGGGT(AGTGGGT(AGTGGGT(AGTGGCC) AGTGGCC(AGTGGCC) AGTGGCC(AGTGGCC(AGTGGCC(AGTGGCC(AGTGGCC(AGTGGCC(AGTGGCC(AGTGGCC(AGTGGGCC(AGTGGGCC(AGTGGGGCC(AGTGGGCC(AGTGGGCCC(AGTGGCCC(AGTGCCC(AGTGGCCC(AGTGCCC(AGTGGCCC(AGTGCCC(AGTGCCCC(AGTGCCC(AGTGCCCC(AGTGCCCC(AGTGCCCC(AGTGCCCC(AGTGCCCC(AGTGCCCC(AGTGCCCC(AGTGCCCCC(AGTGCCCCC(AGTGCCCCCC(AGTGCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAGAGTGG CAAGTGG CAAGTGG CTAGCAC CTAGCAC	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTCAA GCATGCCGAC GCATGCCGAC TGTTCTTGAT	A : A : A : A : A : A : A : B : B : B :	573 570 564 573 576 576 576 456 573 570
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_S_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Oryza_S_Os Zea_m_ZMM8 Zea_m_ZMM1	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ACACCACGG ATACCAGTG ATACCAGCC ATACCAGCC ACATCAGCG ACACCAGGG AAACCAGTG AAACCAGTG AAACCAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCCC AGGCGCTC AGGTGCTC AGGTGCTC AGGTGCTC	CACTGTC CAGATGTT CAGATGTT CAAATGTC CATATGTC CATGTCT CCCCGTGTCTC CGTGTCTC	TI GCCAGGA TI GCCAGGA TI GCCAGGA TI GCCAGGA TI GCCAGGA TI GCCAAGA	ACGGGTGT ATGGACCA ATGGACCT ATGGACCT ATGGACCA ATGGACA AAGGGCAC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAGAGTGG CAAGTGG CAGGGGG CTAGCAC CTAGCAC CTAGCAC	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTCAA GCATGCCGAA GCATGCCGAA GCATGTCGAA GCATGTCGAA GCATGTCGAA GCATGTCGAA GCATGTTGAAGTTGGA GAATGTTGAA	A : A : A : A : A : B : B : B : B : B :	573 570 564 573 576 576 576 456 573 570 573
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG ATACCAGCG ACATCAGCG AAACAAGAGG AAACAAGGG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCCC AGGCGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC	CGACTGTC CAGATGTT CAGATGTT CAAATGTC CATATGTC CACATGTC CACATGTC CACATCTC CACATCTC CACATCTC CACATCTC CACATCTC CACATCTC CATATGTC CACATCTC CATATGTC CACATCTC CATATGTC CACATCTC CATATTAGC CATATTAGC CATATTAGC CATATTAGC CATATTAGC	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA AAGGGCAC	AGTGGAT (AGTGGAT (AGTGGGT (AGTGGGT (AGTGGCC (AGTGGCG (AGTGGCG (AGTGGCGC (AGTGGCGC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG ATGCTAG CAGAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA TGAAGCTCAA GCATGCCGAC GCATGCCGAC GCATGCCGAC GCATGTCGAT GCATGCTGAT TGATGCTGAT TAATGTTGAT		573 570 564 573 576 576 576 456 573 570 573 576
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG ACACCATCG ACACCAGCG ACACCAGCG ACACCAGGG AAACAAGGG AAACAAGGG AAACAAGTG AGATCAGGG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC	CGACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGGTCTC CATGTCTC CATGTCTC CATGTAGC CAGGAGAT CAGGAGAT CAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA THECCAGGAGGA THECCAGGAGGA THECCAGGAGGA THECCAGGAGGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA AGGGCAC AAGGGCAC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCCGAA GCATGCCGAA GCATGCTGAA TGTTCTTGAA TAATGTTGAA TCCGCAGGAA	A : A : A : A : A : A : B : B : B : B :	573 570 564 573 576 576 576 456 573 570 573 576 576
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG ACACCATCG ACACCAGCG ACACCAGCG ACACCAGGG AAACAAGGG AAACAAGGG AAACAAGTG AGATCAGGG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC	CGACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGGTCTC CATGTCTC CATGTCTC CATGTAGC CAGGAGAT CAGGAGAT CAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA THECCAGGAGGA THECCAGGAGGA THECCAGGAGGA THECCAGGAGGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA AGGGCAC AAGGGCAC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCCGAA GCATGCCGAA GCATGCTGAA TGTTCTTGAA TAATGTTGAA TCCGCAGGAA	A : A : A : A : A : A : B : B : B : B :	573 570 564 573 576 576 576 456 573 570 573 576 576
Sorghum_b_ Triticum_a Triticum_a Triticum_b_ Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMACAAG : TMACAAG : TMACAAG : TMACAAG : TMACAAG : TMACAAG : CMGCAAG : CMGCAAG : CMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG ATACCAGCG AAACCAGCG AAACCAGGG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAGGG AAACAGGG AAACAGGG AAACAGTG AAACAGGG AAACAGGGAGATCCAGGG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCTC AGGCGCTC AGGTGATC AGGTGATC AGGCGCTC AGGTGATC AGGCGCTC AGGCACACACACACACACACACACACACACACACACAC	CGACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATGTC CAGAGAT CAGCAGAT CAGC	THECCAGGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACACA ATGGACACA ATGGACACA ATGGACACA ATGGACACA ATGGACACA ATGGACACA AGGGCACA AGGGCACA AGGGCACA ACGGCGTGACACA ACGGCGTGACACACACACACACACACACACACACACACAC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCCC AGTGGCCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGAAGTGG CAAGTGG CAAGTGG CTAGCAC CTAGCAC CAGAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCCGAA GCATGCCGAA TGTTCTTGAI TAATGTTGAI TAATGTTGAI TCCGCAGGAA TCCGCAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 564 573 576 576 576 456 570 570 576 576 576
Sorghum_b_ Triticum_a Triticum_a Triticum_b Lolium_p L Oryza_s_Os Triticum_a Lolium_b Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_m Lolium_p L	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGGAGG : CMGGGCG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG ATACCAGCG AAACAGAGGG AAACAAGAGGG AAACAAGGG AAACAAGGG AAACAAGGG AAACAAGGG AAACAAGGG AAACAAGGG AAACAAGTG AAGATCCAGGG AGATCCAGG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCCC AGGTGATC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGCCCCC	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATGTC CAGAGAT CAGAGAT CAGCAGAT CAGCAGAT CAGCAGATC CAGCAGATC	THECCAGGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACAA AGGGCACAAAAAAAAAA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCCC AGCCCC AGCCCCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGAAGTGG CAAGTGG CAAGTGG CTAGCAC CTAGCAC CAGTGG CAGTGG CAGTGG CAGTGG CAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGTCTTGATGTTGGT GAATGTTGAT TAATGTTGAT TAATGTTGAT TCCGCAGGAA TCCGCAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 564 573 576 576 576 456 570 576 576 576 576 576
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_S_OS Triticum_a Lolium_p_L Triticum_a Oryza_S_OS Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_m Lolium_p_L Zea_m 31	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGGCGC : CMGGACG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCC ACATCAGCG ACATCAGCG AAACCAGTG AAACCAGTG AAACCAGTG AAACCAGTG AAACCAGTG AAACCAGTG AAACCAGTG AGATCGAGG AGATCGAGG AGATCGAGG AGATCGAGG AGATCGAGG AGATGGAGG AGATGGAGG AGATGGAGG	AAGTGCTG AAGTTCTA AAGTGCTG AAATGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCCC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGTGCTC AGGCGCTC AGGCGCTC AGGCGCCC AGGCGCC	CGACTGTC CAGATGTT CAGATGTC CATATGTC CATGTTTC CAGGAGAT CAGCAGAT CAG	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA THECCAGGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA AAGGGCAC AAGGGCAC AAGGGCAC AAGGGCAC AAGGGCAC AAGGCAC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCCC AGTGGCCC AGTGCCCC AGCCCCC AGCCCCC AGCCCCC AGCCCCC AGCCCCC AGTGCCCC AGCCCCC AGCCCCC AGCCCCC AGCCCCC AGTGCCCC AGTGCCCC AGCCCCC AGCCCCC AGCCCCC AGCCCCC AGTGCCCC AGCCCCC AGCCCCC AGCCCCC AGCCCCC AGCCCCC AGTGCCCC AGCCCCC AGCCCC AGCCCC AGCCCC AGCCCCC AGCCCC AGCCC AGCCCC AGCCC AGCC AGCCC AGCCC AGCCC AGCCC AGCC AGCCC AGCCC AGCC AGCC AGCCC AGCCC AGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGAGG CCAGAGG CCAGAGG CCAGAGG CCAGGC CCAGGC CCAGGC ACCGCC ACCCCC ATGACCC	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTGAA GCATGCCGAA GCATGCTGAA TGTTCTTGAA TGATGTTGAA TAATGTTGAA TCCGCAGGAA TCCGCAGGAA TCCGCAGGAA TCCACAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 564 573 576 576 576 456 573 576 576 576 576 576
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGGAAG : CMGGAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCATCG ACACCAGCG ACACCAGCG AAACAGTG AAACAAGTG AAACAAGTG AGATCCAGG AGATCGAGG AGATCGAGG AGATTGAGG AGTTTGAGG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGTGCTC AGGCCCC AGGCCCCCA AGCCCCCCA	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CACGTCTC CATATGTC CAGGTCTC CAGGTCTC CAGGTCTC CAGGAGAT CAGCAGCC CAGTTAGC CAGCAGCC CAGTTTGGC CAGTTTGGC CAGTTTAGC	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA THECCAGGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA AAGGGCAC AAGGCAC AAGGCAC AAGGCAC AAGGCAC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCG AGTGGCG AGTGGCCC AGTGGCCC AGTGCCCC AGTGCCC AGTGCC AGTGC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGAGG CCAGAGG CCAGA-GGG CCAGGG CCAGGGG CCAGGGG CCAGGGG CCAGGGG CCAGGGGG CCAGGGGGGGG	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTGAA GCATGCCGAA GCATGTCGAA GCATGTTGAA TGATGTTGAA TAATGTTGAA TCCGCAGGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 564 573 576 576 576 456 573 576 576 576 576 576 576
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_b Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGGACG : CMGGACG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ACACCATCG ACACCACCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATCGAGG AGTTGAGG AGTTGAGG AGTTGAGG AGTTGAGG ACAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCTC AGGTGCTC AGGTGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGCCACAG AGCCACAG AGCCCCCA	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CACGTCTC CATGTTAGC CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGCC CAGTTAGC CAGCAGCC CAGTTAGC CAGCAGCC CAGTTAGC CAGTTAGC CAGCAGCC CAGTTAGC CAGCAGCC CAGTTAGC CAGCTTAGC CAGCTTAGC CAGTTAGC CAGCTTAGC CAGCT CAGC	THE COCAGGA THE CO	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA AAGGGCAC AAGGGCAC ACGGCGTG ACGGCGTG ACGGCGTG ACGGCATG ACGGCATG ACGGCATG	AGTGGAT AGTGGAT AGTGGGT AGTGGCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG ACACGCC ACACGCC ACACGCC ATGACCC	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCCGAA TGTTCTTGATGTTGGT GAATGTTGAT TAATGTTGAT TCCGCAGGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 5764 573 5764 5776 5766 5776 5776 5776 5776 5776
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_b Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGGACG : CMGGACG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ACACCATCG ACACCACCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATCGAGG AGTTGAGG AGTTGAGG AGTTGAGG AGTTGAGG ACAGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCTC AGGTGCTC AGGTGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGCCACAG AGCCACAG AGCCCCCA	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CACGTCTC CATGTTAGC CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGCC CAGTTAGC CAGCAGCC CAGTTAGC CAGCAGCC CAGTTAGC CAGTTAGC CAGCAGCC CAGTTAGC CAGCAGCC CAGTTAGC CAGCTTAGC CAGCTTAGC CAGTTAGC CAGCTTAGC CAGCT CAGC	THE COCAGGA THE CO	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA AAGGGCAC AAGGGCAC ACGGCGTG ACGGCGTG ACGGCGTG ACGGCATG ACGGCATG ACGGCATG	AGTGGAT AGTGGAT AGTGGGT AGTGGCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG ACACGCC ACACGCC ACACGCC ATGACCC	GCATGGTGAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCCGAA TGTTCTTGATGTTGGT GAATGTTGAT TAATGTTGAT TCCGCAGGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 5764 573 5764 5776 5766 5776 5776 5776 5776 5776
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_b Corghum_b_C Zea_m_m31 Zea_m_m24 Sorghum_b Oryza_s_Os	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGGAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAGGG AAACAGTG AGATCGAGG AGTTTGAGG AGTTTGAGG ACAGTTGAGG AGTTTGAGG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCCCA AGCCCCCG ACCCCCCA	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATGTTC CAGAGATC CAGCAGAT CAG	THECCAGGA THECCA	ACGGCTGT ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AGGGCACA AGGGCACAAAGGCACAAAAGGCACAAAAAAAA	AGTGGAT AGTGGAT AGTGGGT AGTGGCC AGTGCCC AGTGCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCC AGTCCC AGTCC AGTCCC AGTCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGAAGTGG CAAGTGG CAAGTGG CTAGCAC CAGAGTGG CAGGGC ACACGCC ACACGCC ACACGCC ATGACCC STAGCCC ATGACCC	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGTTCTTGAA TCCGCAGGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 570 573 576 576 576 576 576 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_b_ Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Criticum_b Criticum_b Lolium_pL Zea_m_m31 Zea_m_m24 Sorghum_b Oryza_s_Os Elaeis_g_A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGGCG : CMGGCGC	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG ATACCAGCG AAACAAGTG AAACAAGGG AAACAAGGG AAACAAGGG AAACAGGG AAACAGGG AGATTGAGG AGTTTGAGG AGTTTGAGG AGTTTGAGG AGTTGAGG AGTTTGAGG AGTTGAGG	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGCCCCCA AGCCCCCCA AGCCCCCA AGCCCCCA	CACTGTCC CAGATGTTC CAGATGTTC CATATGTCC CAGATGTCC CAGAGTCTCC CAGAGTCTCC CAGCAGTCCC CAGTTTAGCC CAGTTAGCC CAGTTAGCC CAGTTAGCC CAGTTAGCC CAGCTTAGCC CAGCTTCCC CAGCTTAGCC CAGCTTCCC CAGCTTCCC CAGCTTCCC CAGCTTCCC CAGCTTCCC CAGCTTCCC CAGCTTCCC CAGCTCCC CAGCTCC CAGCTCCC CAGCTCC CAGCTC CAGCTCC CAGCTCC CAGCTC CAGCT	THECCAGGA THECCA	ACGGCTGT ATGGACCA ATGGACCA ATGGACCA ATGGACACA ATGGACACA ATGGACACA ATGGACACA AAGGCACA AAGGCATGACACA AAGGCATGACACA AAGGCATGACACACACACACACACACACACACACACACAC	AGTGGAT AGTGGAT AGTGGGT AGTGGCC AGTGGCCC AGTGCCC AGTTCCC AGTTCCA	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGACAGTGG CCAGTGG CAGTGG CAGTG CAGTGG CAGTG CAGTGG CAGT	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGATGTTGAT TCCGCAGGAA TCCACAGGAA	A : : : : : : : : : : : : : : : : : : :	573 570 570 573 576 576 576 576 576 576 576 576 576 576
Sorghum_b_ Triticum_a Triticum_a Triticum_b_ Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Lolium_b_a Triticum_b_a Triticum_m Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b_O Oryza_s_O Elaeis_g_A Elaeis_g_A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : CMGCAAG : CMGCAGC : CMGCACG : CMGCACG : CMGCACG : TMACAGG : TMACAGG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGTG ATACCAGCG ATACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATTGAGG AGATTGAGG AGATCGAGG AGATTGAGG AGATGAGC AAGAGCTC AAGCAGCTC AAGCACTTT	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCTC AGGTGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATGTC CAGAGTCTC CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGC CAGTTAGC CAGTTGGTC CAGTTC CAGTTGGTC CAGTTGT CAGTTGT CAGTTGT CAGTTGT CAGTTGT CAGTTGT CAG	THECCAGGA THECCA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACACA ATGGACACA ATGGACACA ATGGACACA ATGGACACA ATGGACACA AGGGCACA AGGCATGACACA AGGCATGACACACA AGGCATGACACA AGGCATGACACA AGGCATGACACACA AGGCATGACACACA AGGCATGACACACA AGGCATGACACACACA AGGCATGACACACACACA AGGCATGACACACACACACACACACACACACACACACACA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCG AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGCCC AGTGCCT AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCC AGTGCCC AGTGCC AGTGC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGAAGTGG CAAGTGG CAAGTGG CTAGCAC CTAGCAC CAAGTGG ACACGCC ACACGCC ATGACCC CAAGTGG CTAGCCC CTAGCCC CAAGTGG CCAATGACCC CCAATGACCC CCAATGACCC CCAATTGCCCCAATTGCCCC	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGTCGAA TGATGCTGAA TCCGCAGGAA TCCGCAGGAA TCCACAGGAA TAATCGTGCT		573 570 5764 577 5764 577 5764 577 577 577 577 577 577 577 577 577 57
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Colium_p_L Zea_m_m24 Sorghum_b Oryza_s_Os Elaeis_g_A Asparagus_	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGGAGG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCATCG ACACCAGCG ACACCAGGG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATGGAGG AGTTGAGG AGTTTAGGG AGTTAGAGT AGTTGAGG AGTTTAGGG AGTTAGAGT AGTTGAGG AGTTAGAGT AGTTGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGGTTAGAGG AGGTAGTT	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGTGATC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCCCCA AGCCCCCA	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATTC CAGATTAGC CAGATTA	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AGGGCACA ACGGCGTGA ACGGCGTGA ACGGCGTGACAA ACGGCATGACAA ACGGCATGACAAA ACGGCATGACAAA ACGGCATGACAAA ACGGCATGACAAA ACGGCATGACAAAA ACGGCATGACAAAAAAAAAA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGCCC AGTGCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCC AGTGCCC AGTGCCC AGTGCC AGT	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAAGTGG CTAGCAC CCAAGTGG CTAGCAC CTAGCA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGATGTTGAT TAATGTTGAT TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TAATCGTTGT	A	573 570 570 570 577 576 577 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_b_ Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Lolium_b_a Triticum_b_a Triticum_m Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b_O Oryza_s_O Elaeis_g_A Elaeis_g_A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGGAGG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCATCG ACACCAGCG ACACCAGGG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATGGAGG AGTTGAGG AGTTTAGGG AGTTAGAGT AGTTGAGG AGTTTAGGG AGTTAGAGT AGTTGAGG AGTTAGAGT AGTTGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGTTAGAGG AGGTTAGAGG AGGTAGTT	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGTGATC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCCCCA AGCCCCCA	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATTC CAGATTAGC CAGATTA	THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAGGA THECCAAGA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AGGGCACA ACGGCGTGA ACGGCGTGA ACGGCGTGACAA ACGGCATGACAA ACGGCATGACAAA ACGGCATGACAAA ACGGCATGACAAA ACGGCATGACAAA ACGGCATGACAAAA ACGGCATGACAAAAAAAAAA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGCCC AGTGCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCC AGTGCCC AGTGCCC AGTGCC AGT	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAAGTGG CTAGCAC CCAAGTGG CTAGCAC CTAGCA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGATGTTGAT TAATGTTGAT TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TAATCGTTGT	A	573 570 570 570 577 576 577 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Corghum_b Corghum_b Oryza_s_Os Elaeis_g_A Asparagus_A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGGAGG : CMGGGGG : CMGGGGG : CMGGGGGG : CMGGGGGGG : CMGGACG : CMGGACG : CMGGACG : CMGGACG : TMGCACG : TMGCACG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ACACCATCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATTGAGG AGTTGAGG AGTTAGAGA AGCAGTT AAACAAGTG AGTTAGAGA AGCAGTT AAACAAGTG AGTTAGAGA AGCAGTT AAACAAGTG AAACAAGTG AGTTAGAGA AGCCGATT AACCCGATA	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCCC AGGTGCTC AGGCGCCC AGGCGCCC AGGCGCCC AGGCGCCC AGCCCCCA AGCCCCCC AGCCCCCC AGCCCCCC AGCCCCCC AGCCCCCC AGCCCCCC AGCCCCCC	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATTTAGC CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGTTTAGC CAGTTGTC CAGTTGTC CAGTTGTC CAGTTGTC CAGTTGTC CAGTTGTC CAGTTGTC CAGTTGTT CAGGTTTTC CAGTTTTC CAGTTTC CAGTTTTC CAGTTTT CAGTTT CAGTTT CAGTT C	THECCAGGA THECCAGAA THECCAGAGA THECCAAGGA THECAAGGA THECCAAGGA THECCAAGA THECCAAGGA THECCAAGA THECCAAGGA THECCAAGGA THECCAAGGA THECCAAGGA THECCAAGGA THECCAAG	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ACGGCAC ACGGCGTG ACGGCGGG ACGGCG ACGGCGGGG ACGGCGGGG ACGGCGGGGGG ACGGCGGGGGGG ACGGCGGGGGGGG	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCCC AGTGCCC AGTGCC AGTCC AGTGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAAGTGG CCAAGTGG CAAGTGG CAAGTGG ACACGCC ACACGCC ACACGCC ACACGCC ACACGCC CTAGCCC CTAGTGC CTAGTTG CTGATTG CTGATTG CTGATTG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCTGAA TAATGTTGAA TCCCCAAGGAA TCCCCAAGGAA TCCCCAAGGAA TAATCGTGTCT TAATCATCT TAATCATCT TAATCATCT TCAATGCTCAA	A	573 570 570 570 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_b_ Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_b Lolium_p_L Zea_m_m31 Zea_m_m31 Zea_m_m34 Sorghum_b Oryza_s_Os Elaeis_g_A Asparagus_ Asparagus_A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGGAAG : CMGAAG : CMGAAG : TMACAAG : TMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG ACACCACCG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGTTGAGG AGGTGGAGG AAGCAGTTT AACCCGTTA AACCCGTTA AACCCGATA	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCCC AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGTCTC CATGTTAGC CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGTTAGC CAGTTAGT CAGCATTATC CAACTATC CA	THE CCCAGGA THE CC	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA AAGGGCAC ACGGCGTG	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGCCC AGTGCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCC AGTGCCC AGTGCC AGTCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGC AGTGCC AGTGC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGC A	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CAAGTGG CTGACCC CAAGTGG CTGACCC CAAGTTGG CTGATTG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCTGAA TGAATGTTGAA TCCGCAGGAA TCCACAGGAA TCCCCAAGAA TAATCGTCCAA TAATCACTCCAAA CGATCCTCGA		573 570 570 570 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_b_ Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_c Triticum_s Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b Oryza_s_Os Elaeis_g_A Elaeis_g_A Asparagus_ Asparagus_ Acorus_a_A Amborella_	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGGAG : CMGGAG : CMGGAG : CMGGAG : CMGGAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGTG ATACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AGATCAGGG AGTTTGAGG AGTTGAGG AGTTGAGG AGTTGAGG AGTTTAGG AGATCGATG AGATCGATG AACAGTTGAGG AGTTTAGGG AGGAGCTC AAGCCGTTA ACCCGTTA ACCCGTTA	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGTGGTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCCA ACCCCCCCA ACCCCCCCC	CACTGTC CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATGTTC CAGAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGTTAGC CAGTTTAGC CAGATTATC CAGATTATC CAGATTTAGC CAGATTATC CAGATTAGC CAACTTTGC CAACTTGC CAACTTC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTC CAACTTGC CAACTTC CAAC	THECCA GGA THECCA GGA THECCA GGA THECCA GGA THECCA GGA THECCA GGA THECCA AGA THECA AGA THECCA AGA THECA AGA THECCA AGA TH	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACAG ATGGACAG ATGGACAG ATGGACAG ATGGACAG AAGGGCACA AAGGGCACA AAGGGCACA AAGGCACA AAGGCACA AAGGCATG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ATGGTGCTCA ATGGCTCA ATGGCTCA ATGGCTCA ATGGCTCA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCC AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGCCC AGTGCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCC AGTGCCC AGTGCC AGTCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGC AGTGCC AGTGC AGTGCC AGTGC AGTGCC A	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGACAGTGG CTAGCAC CAGAGTGG CTAGCAC CTAGTGG CTAGCAC CTAGTGG CTTATTGG CTTATTGATTG CTTATTGATTAAAA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGATGTGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TAATCGTGCT TAATCATCT CAATGCTCAA TAATCATCAA TAATCATCAA TAATCATCAA CCACAGGAA TCCACAAGAA TAATCATCAA TAATCATCAA TAATCATCAA CCACAGGAA ACGCCAGAAC TCCACAGGAA TCCACAAGAA TCCACAAGAA TAATCATCT CAATGCTCAAA CCGCAAGAC TCCACAGCAA CCGCAAGAC TCCCCAAGC TCCCCAACC TCCCCAACC TCCCCAACC TCCCCAACC TCCCCAACC TCCCCAACC TCCCCAACC TCCCCAACC TCCCCCAACC TCCCCAACC TCCCCCAACC TCCCCAACC TCCCCCAACC TCCCCCACC TCCCCCACC TCCCCCCC TCCCCCCCC		573 570 570 573 576 576 576 576 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_E Lolium_p_L Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Zea_m_ZMM1 Sorghum_b_ Triticum_m Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b_ Oryza_s_0 Elaeis_g_A Asparagus_ Asparagus_ Acorus_a_A Amborella_ Nuphar_a A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGCAGG : CMGCACG : CMGCACG : CMGCACG : CMGCACG : TMGCACG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGTG ATACCAGTG AAACAGTG AAACAGTG AAACAGTG AAACAAGTG AAACAAGTG AAACAAGTG AGATCCAGG AGATGGAGG AGTTTGAGG AGTTTGAGG AGTTTGAGG AGATCGACG AGGTCAGC AACAAGTT ACCCGTTA AACCAGTTAAACG AATAAATG AATATAATG GAGGAGCACT GAGGAGCACAT AACCAGACCAT AACCAGTTA	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCAGTT AGGCGCTC AGGTGATC AGGCGCTC AGGTGATC AGCCCCA AGCCCCCA AGCCCCCA AGCCCCCC ATCCCCTC GACCCTC AACCCCTC AACCCCTC AACCCCTC AACCCCTC AACCCCTC AACCCCTC AACCCCTC	CACTGTC CAGATGTT CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGTGTCT CAGTGTCT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCTGTC CAGTTAGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAGCTGTC CAACTTGC CAACTTC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTGC CAACTTC CAACTT	TI GCCAGGA TI GCGAACA TI GCGAACA TI GCGAACA TI GCGAACA TI GCGAAGGA TI GCGAAGA TI GCGAAGGA TI GCGAAGGA TI GCGAAGGA TI GCGAAGGA TI GCGAAGA TI GCGAAGGA TI GCGAAGGA TI GCGAAGA TI GCGAAGGA TI GCGAAGGA TI GCGAAGA TI GCGAAGGA TI GCGAAGA TI	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAG ATGGACAG ATGGACAG ATGGACAG ATGGACAG ATGGACAG AAGGGCACA AAGGGCACA AAGGGCACA AAGGCACA AATGGTGCTCA ATGGTCCA ATGGTCCA ATGGTCCA ATGGCACA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCC AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCC AGTGGCC AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGCCC AGTGCC AGTGCCC AGTGCC AGTCC AGTGCC AGTGC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTGCC AGTCC AGTGCC AGTCC AGTGCC A	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGACAGTGG CTAGCAC CTAGCAC CTAGCAC CAGACTGG CTAGCAC CAGACTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CCGATTGACCC CAAATTG CCGATTG CTGATTG CTTATGA AGTATAGA AGTATAGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGATGCTGAA TCCGCAGGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCCCAAGAA TCCCCAAGAC TCCCCACAC TCCCCCACAC TCCCCCACAC TCCCCCACAC TCCCCCCACAC TCCCCCCCC		573 570 570 570 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Ariticum_b Lolium_p_L Zea_m_m24 Sorghum_b Oryza_s_Os Elaeis_g_A Elaeis_g_A Asparagus_ Acorus_a_A Amborella_Nuphar_a_A Magnolia_g	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGGAGG : TMGCAGG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCACCG ACATCAGCG AAACAGTG AAACAGTG AAACAGTG AGATCCAGG AGATCCAGG AGATCGAGG AGGAGCT AAACAGTGGAGAAGCT AAACAGCACAT AAACTGGACAT AAACTGGACAT	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCCC AGGTGATC AGGCGCCC AGGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTT CAGATGTT CAGATGTT CATATGTC CAGATTTC CAGAGTCT CAGAGTT CAGAGTT CAGAGTT CAGAGTT CAGACTATC CAACTTC CAACTTC CAGACTGTC CAGCTGTC CACCTGTC CACCTGTC CACCTGTC CACCTGTC CACCTGTC CACCTGT CACCTG CACCTGT	THECCAGGA THECCA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AAGGGCACA AAGGGCACA AAGGGCATG ACGGCGTGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGCATGA AAGGCACAA ATGGCACAA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCC AGTGGCT AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGCCC AGTGCC AGTGCCC AGTGCC AGTGCCC AGTGCC AGTGC AGTGCC AG	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGAGG CTAGCAC CTAGTTG CTTATTATGG CTTATTATAG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCCGAC GCATGCCGAC GCATGCCGAC TGTTCTTGAT TCCGCAGGAC TCCACAGGAC TCCACAGGAC TCACACAGGAC TAATCGTCGA CCAATCGTCGA CCAATCGTCGA CCGATCCTCGAAGAC TCACTCGCAAGAC TCACTCGCAAGAC TCACTCGCAAGAC TCGCCAAGAC TCGCCAAGAC TCGCCAAGAC TCGCCAACC		573 576 576 577 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_E Lolium_p_L Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Zea_m_ZMM1 Sorghum_b_ Triticum_m Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b_ Oryza_s_0 Elaeis_g_A Asparagus_ Asparagus_ Acorus_a_A Amborella_ Nuphar_a A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGGAGG : TMGCAGG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCACCG ACATCAGCG AAACAGTG AAACAGTG AAACAGTG AGATCCAGG AGATCCAGG AGATCGAGG AGGAGCT AAACAGTGGAGAAGCT AAACAGCACAT AAACTGGACAT AAACTGGACAT	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCCC AGGTGATC AGGCGCCC AGGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTT CAGATGTT CAGATGTT CATATGTC CAGATTTC CAGAGTCT CAGAGTT CAGAGTT CAGAGTT CAGAGTT CAGACTATC CAACTTC CAACTTC CAGACTGTC CAGCTGTC CACCTGTC CACCTGTC CACCTGTC CACCTGTC CACCTGTC CACCTGT CACCTG CACCTGT	THECCAGGA THECCA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AAGGGCACA AAGGGCACA AAGGGCATG ACGGCGTGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGGCATGA AAGGCATGA AAGGCACAA ATGGCACAA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCC AGTGGCT AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGCCC AGTGCC AGTGCCC AGTGCC AGTGCCC AGTGCC AGTGC AGTGCC AG	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGAGG CTAGCAC CTAGTTG CTTATTATGG CTTATTATAG	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCCGAC GCATGCCGAC GCATGCCGAC TGTTCTTGAT TCCGCAGGAC TCCACAGGAC TCCACAGGAC TCACACAGGAC TAATCGTCGA CCAATCGTCGA CCAATCGTCGA CCGATCCTCGAAGAC TCACTCGCAAGAC TCACTCGCAAGAC TCACTCGCAAGAC TCGCCAAGAC TCGCCAAGAC TCGCCAAGAC TCGCCAACC		573 576 576 577 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Lolium_p_L Zea_m_M24 Sorghum_b Oryza_s_Os Elaeis_g_A Elaeis_g_A Asparagus_ Acorus_a_A Amborella_ Nuphar_a_A Magnolia_g Oryza_s_Os	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGGACG : CMGGACG : CMGGACG : CMGGACG : CMGGACG : TMGCACG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCATCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATGGAGG AGATGAGG AGATAGAGG AAGCAGCT AACCAGTT AACCGATA AATATAATG AGAGGAGCT GAGGAGCAT AAAGTGGAGCAT AAAGTGGTG AAAGTGGTG	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AAGCGCTC AGGTGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CACTGTC CAGATGTT CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATTTAGC CAGCTCTC CAGCTGTC CAGCTGTC CAGTTTAGC CAGTTGGT CAGCTGTC CAGTTGGC CAGTTGGC CAGTTGC CAGTTGC CAGCTGTC CAGCTGT CAGCTGT CAGCTGT CAGCTGT CAGCTGT CAGCT CAGCTGT CAGCT C	THE CCCA GGA THE CCCA AGA THE CCCA AGA CHECCA GGA GGA GGA CHECCA GGA AT GCCA AGA AT GCCA CAA AT CACA AT GCCA CAA AT GCCA CAA AT GCCA CAA AT GCCA CAA AT CACA AT	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ATGGTGCT ATGGTGCT ATGGCTCA ATGGCTCA ATGGCTCA ATGGCTCA ACGGCACA ACGCACA ACGGCACA AC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCC AGTGGCCC AGTGCCC AGTCCCC AGTCCC AGTCCCC AGTCCCC AGTCCCC AGTCCCC AGTCCCC AGTCCCC AGTCCCC AGTCCC AGTCCCC AGTCCC AGTCC AGTC AGT	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGGC- CAAGTGG CTAGCAC CAAGTGG CTAGCAC CAAGTGG CTAGCAC CAAGTGG CTAGCAC CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CTAGCAC CTGAGCC CAGATTG CTGATTG CTTATAGA CTGAAGT	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCTGAA TGAATGTTGAA TAATGTTGAA TCCCCAAGGAA TCACACAGGAA TAATCATCT TAATCATCT CAATGCTCAA CCGATCCAAGCAC TCACAGCAACCAA CCACAGCAACCAACCAACCAACCAACC		573 570 570 570 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_B_L Oryza_S_OS Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_a Triticum_a Triticum_b Triticum_B Triticum_B Triticum_B Lolium_p_L Zea_m_m31 Zea_m_m31 Zea_m_m32 Zea_m_m34 Zea_m_m34 Zea_m_m34 Sorghum_b Oryza_S_OS Elaeis_g_A Elaeis_g_A Asparagus_A Asparagus_A Asparagus_A Amborella_Nuphar_a_A Magnolia_OS Oryza_S_OS Oryza_S_OS	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGGAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGGAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ACACCACCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGGAGCATTI AACCCGTTA AACCAGTG AACCAGTT AACCAGTA AACCAGACC AGGAGCAACC AGGAGCAACC	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTTT CAGATGTTT CAGATGTTT CATATGTC CAGTCTC CAGTGTCT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGT CAGCTGTC CAGTTTAGC CAGTTTAGC CAGTTTAGC CAGTTTATC CAGCTTTC CAGCTGTC CAGCTGTC CAGCTGTC CAGCTGTC CAGCAGTT CAGCAAGTT CAGCAAGT	THE CCCAGGA THE CC	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACA ATGGACA ATGGACA ATGGACA ATGGACA AAGGGCAC ACGGCGTG ACGGCGCG	AGTGGAT AGTGGAT AGTGGAT AGTGGGT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCC AGTGCCT AGTGCCT AGTGCAT AGTGCCT AGTGCAT AGGTGCAT AGGTGCAT AGGTGCAT AGGTGCAT AGGTGCAT AGGTGCAT AGGTGCAT AGGTGCAT AGGTGCAT AGGTGCAGC AGGTCAGC AGGTCAGC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CAAGTGG CAAGTGG CTAGCAC CACACCC ACACGCC ACACGCC ACACGCC CAAATTG CCAAATTG CCAATTG CTTATAGA CTTATAAA ACTATAGA CTTATAA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA GCATGCTGAA TGTTCTTGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCCCCAAGCAA CCACCAACCAA CCACCAACCAA CCACCAACCA		573 575 5764 5776 5776 5776 5776 5776 5776
Sorghum_b_ Triticum_a Triticum_a Triticum_B_L Oryza_S_OS Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_a Triticum_	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGGAGG : CMGGAGG : CMGGAGG : CMGGAGG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGGAAG : TMGGAAG : TMGGAAG : TMGGAAG : TMGGAAG : CMGGAGG : CMGGAGG : TMGGAAG : TMGGAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGCG AAACCAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAGTG AAACAGTG AAACAGTG AGATTGAGG AGATTGAGG AGTTTGAGG AGTTTGAGG AGTTGAGG AGTTTGAGG AGTTGAGG AGTTGAGG AGTTGAGG AGGAGCT AAACTGTTA AACTGTTA AAATGTGTG AAAGCAACC AGGAGAACC AAGGAAACC	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGTGGTGT AGGCGCTC AGGTGATC AGGCGCTC AGGCGCCC AGGTGATC AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCTC ACCCCCA ACCTTCTT ACCCCCCA ACCTTCTT ACCCCCCA ACCTTCTT ACCGCGGG ACCCTTCT ACCCCCA ACCTTCTT ACCGCGGG ACCCTCT ACCCCCA ACCTTCTT ACCGCGGG ACCCTTCT ACCGCGGG ACCCTTCT ACCGCGG ACCCTTCT ACCGCGGG ACCCTTCT ACCGCGGA ACCCTTCT ACCGCGGA ACCCTTCT ACCCCCA ACCCTTCT ACCCCCA ACCCCTCT ACCCCCA ACCCCTCT ACCCCCA ACCCCTC	CGACTGTC CAGATGTTT CAGATGTTT CAGATGTTT CATATGTC CAGATGTTC CAGAGAT CAGAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGTC CAGTTAGC CAGCTGTC CAGCTGTC CAGCTGTC CAGCTGTC CAGCAGATC CAGCAGATC CAGCTGTC CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGAGT CAGCAGAGT CAGCAGAGAGT CAGCAGAGT CAGACAGAGT CAGAGAGT CAGAGAGT CAGACAGAGT CAGAGAGT CAGAGAGAGT CAGAGAGAGT CAGAGAGT CAGAGAGAGT CAGAGAGAGT CAGAGAGAGT CAGAGAGAGT CAGAGAGAGT CAGAGAGAGAGT CAGAGAGAGAGT CAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG	THE COCAGGA THE CO	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACAG ATGGACAG ATGGACAG ATGGACAG ATGGACAG AGGGCACA AGGGCACA AGGGCACA AGGGCACA AGGCATG ATGGTGT ATGGTCCA ATGGCTCA ATGGCACAA ATGGCACAA ACTACGAC ACTACAGC	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCC AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGGCA AGTGCCC AGCCCC AGCCC AGCCC AGCCCC AGCCC AGCC AGCCC AGCCC AGCC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG ATGCTAG CCAGAAGTGG CAGAGTGG CAGGTGG CTAGCAC CAGAGTGG CTAGCAC CAGAGTGG CTGATTG CTGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCTGAA GCATGCCGAA TGATGTTGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA TCCACAGGAA TCACACAGCAC TGGCCAAGCA TGGCCAAGCA TGGCCAAGCA TGGCCAAGCA TCGCCAAGCA		573 570 570 577 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_B_L Oryza_s_OS Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_m Lolium_pL Zea_m_ZMM1 Sorghum_b Triticum_m Lolium_pL Zea_m_m31 Zea_m_m24 Sorghum_b Oryza_s_OS Elaeis_g_A Elaeis_g_A Asparagus_Acorus_a_A Asparagus_Acorus_a_A Magnolia_g Oryza_s_OS Oryza_s_OS Oryza_s_OS Oryza_s_OS	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : CMGCAAG : TMGCACG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ATACCAGTG ATACCAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AGATCAGG AGATGAGG AAGCACTC AACCAGTA AACCAGTT AACCGGTT AACCGGTT AACCGGTT AACCGGTT AACGGAGCT CAAGGAACC AAGGAACC AAAGAGCAACC AAGGAACC AAAGCAACC	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGTGGTC AGGTGGTC AGGCGCTC AGGTGATC AGCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCTC ACCCCTC ACCCCTT ACCCCCTC ACCCCTT ACCCCCA ACCCTT ACCCCCA ACCCTT ACCCCCA ACCCTT ACCCCCA ACCCCTT ACCCCCA ACCCCTT ACCCCCA ACCCTT ACCCCCA ACCCTT ACCCCCA ACCCCCA ACCCCCA ACCCCTT ACCCCCA ACCCCTT ACCCCCA ACCCCTT ACCCCCA ACCCCA ACCCTT ACCCCCA ACCCCT ACCCCA ACCCCT ACCCCCA ACCCCT ACCCCCA ACCCCCA ACCCCCA ACCCCCA ACCCCCA ACCCCT ACCCCCA ACCCCCC	CGACTGTC CAGATGTT CAGATGTT CAGATGTT CAGATGTC CATATGTC CAGATGTTC CAGATGTTC CAGAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGAT CAGCAGTT CAGCTTC CAGTTAGC CAGTTAGC CAGTTAGC CAGTTAGC CAGTTAGC CAGTTAGC CAGTTAGC CAGTTAGC CAGCTGTC CAGCTGTC CAGCTGTC CAGCTGTC CAGCTGTC CAGCTGTC CAGCTAGC CAGCTGTC CAGCTAGC CAGCTGTC CAGCAAGT CAACAAGT CAACAACAAGT CAACAACAACAAGT CAACAACAACAACAACAACAACAACAACAA	THECCAGGA THECCA	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AGGGCAA AAGGGCAA AAGGGCAA ACGGCGTG ATGGTGT ATGGTCA ATG	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGGT AGTGGCC AGTGGCCC AGTGCCC AGCCCC AGCCC AGCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCC A	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGACAGTGG CTAGCAC CCAGACCAAGTGG CTAGCAC CCAGACCC CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CAAGTGG CTAGCAC CAAGTGG CTAGCAC CAAGTGG CTAGACCC CAAGTTG CCAATTG CCAATTG CTATTATAA CTAAGTGT CCAGCCA CAAGTCA CCAAGTCA CCAAGTCA CCAAGTCA CCAAATTAAA CTAAGT CCAGCCA CCAAGCCA CCAAGTCA CCAAATTCA CCAAGTCA CCAAATCA CCAACCA CCAAATCA CCAAATCA CCAACCA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCGAA TGATGTGAA TCCGCAGGAA TCCACAGGAA TCCACAGCA TCCCCACAGCA CCACACAC TCCCCACAGCA TCCCCACAC CCCACACAC TCCCCACAC TCCCCACAC TCCCCACAC TCCCCACAC TCCCCACAC TCCCCACAC TCCCCACAC TCCCCACCAC TCCCACCAC TCCCCACCAC TCCCCCACCAC TCCCCACCAC TCCCCCCCACCAC TCCCCCCCC		573 575 5764 577 577 577 577 577 577 577 577 577 57
Sorghum_b_ Triticum_a Triticum_a Triticum_a Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_s Lolium_p_L Zea_m_m24 Sorghum_b Oryza_s_Os Elaeis_g_A Elaeis_g_A Elaeis_g_A Asparagus_ Acorus_a_A Amborella_ Nuphar_a_A Magnolia_g Oryza_s_Os Oryza_s_Os Oryza_s_Os Asparagus_ Asparagus_A Amagnolia_g Oryza_s_Os Asparagus_A Asparagus_A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGGAGG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGGAGG	AACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCATCG ACACCAGCG ACACCAGGG AAACAAGTG AAACAAGTG AGATCGAGG AGAGCACC AACCAGAGC AACCAGAGC AACCAGCAC AAGCAACC AAGCAACC CGACCCAAC	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCCC AGGTGGTC AGGCGCCC AGGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTTT CAGATGTTT CAGATGTTT CATATGTC CAGTGTTC CAGTGTTC CAGTGTTAGC CAGTGTTAGC CAGTGTCC CAGTGTTC CAGTGTCC CAGCTGTC CAGCAGTCC CAGCAGTCC CAGCAGTCC CAGCAGTCC CAGCAGTCC CAGCAGTCC CAGCAGGTCC CAACAAGTI CAGGAGGGTCC CAACAAGTI CAGGAGGGTCC CAGCAGGTCC CAGCAGGTCC CAACAAGTI CAGGAGGGTCC CAGCAGGTCC CAGCAGGTCC CAACAAGTI CAGGAGGGTCC CAGCAGGTCC CAGCTGCC CAGCAGGTCC CAGCAGGTCC CAGCAGGTCC CAGCAGGTCC CAGCAGGTCC CAGCTGTCC CAGCAGGTCC CA	THE CCCA GGA THE CCCA AGA CHECCA A	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AAGGGCACA AAGGGCACA AAGGGCATA AAGGGCACA AAGGGCATA AAGGCATA AAGGCACAA AAGGACAAA AAGTATACAAAT AAGTATACAAAT AAGTATACAAAT CCTATGGA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGGT AGTGGC AGTGGCC AGTGCCC AGTGCCC AGTGCCC AGTTCCC AGTCCC AGTCCC AGTCCC AGCCCC AGCCC AGCCCC AGCCC AGCCC AGCCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC ACCC AGCCC AGCC AGCCC AGCC AGCCC AGCC AGC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGAGG CTAGCAC CTAGC	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGTTCTTGAT TAATGTTGAT TAATCGTGGAA TCACAGGAA TCACAGCAA TCACAGAA TCACACAA TCACACACA		573 573 576 577 577 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_B_L Oryza_s_OS Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_m Lolium_pL Zea_m_ZMM1 Sorghum_b Triticum_m Lolium_pL Zea_m_m31 Zea_m_m24 Sorghum_b Oryza_s_OS Elaeis_g_A Elaeis_g_A Asparagus_Acorus_a_A Asparagus_Acorus_a_A Magnolia_g Oryza_s_OS Oryza_s_OS Oryza_s_OS Oryza_s_OS	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGGAGG : TMGCAAG : TMGCAAG : TMGCAAG : TMGCAAG : TMGGAGG	AACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AACTAGTG ATACCAGTG ACACCATCG ACACCAGCG ACACCAGGG AAACAAGTG AAACAAGTG AGATCGAGG AGAGCACC AACCAGAGC AACCAGAGC AACCAGCAC AAGCAACC AAGCAACC CGACCCAAC	AAGTGCTG AAGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCCC AGGTGGTC AGGCGCCC AGGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTTT CAGATGTTT CAGATGTTT CATATGTC CAGTGTTC CAGTGTTC CAGTGTTAGC CAGTGTTAGC CAGTGTCC CAGTGTTC CAGTGTCC CAGCTGTC CAGCTGTC CAGCAGGTC CAGCAGGTC CAGCAGGTC CAGCAGGTC CAGCAGGTC CAGCAGGTC CAGCAGGTC CAGCAGGTC CAACAAGT CAACAA	THE CCCA GGA THE CCCA AGA CHECCA A	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAA ATGGACAA ATGGACAA ATGGACAA AAGGGCACA AAGGGCACA AAGGGCATA AAGGGCACA AAGGGCATA AAGGCATA AAGGCACAA AAGGACAAA AAGTATACAAAT AAGTATACAAAT AAGTATACAAAT CCTATGGA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGGT AGTGGC AGTGGCC AGTGCCC AGTGCCC AGTGCCC AGTTCCC AGTCCC AGTCCC AGTCCC AGCCCC AGCCC AGCCCC AGCCC AGCCC AGCCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC AGCCC ACCC AGCCC AGCC AGCCC AGCC AGCCC AGCC AGC	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGAGG CTAGCAC CTAGC	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCCGAA GCATGCCGAA TGTTCTTGAT TAATGTTGAT TAATCGTGGAA TCACAGGAA TCACAGCAA TCACAGAA TCACACAA TCACACACA		573 573 576 577 577 577 577 577 577 577 577 577
Sorghum_b_ Triticum_a Triticum_a Triticum_s Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b_Oryza_s_Os Elaeis_g_A Asparagus_A Asparagus_A Asparagus_A Asparagus_A Amborella_ Nuphar_a_A Magnolia_p Oryza_s_Os Asparagus_A Asparagus_A Amborella_ Nuphar_a_A Magnolia_p Acorus_a_A	: AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : AMACAAG : TMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGCAAG : CMGCACG : CMGCACG : CMGCACG : CMGCACG : TMGCAAG	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ATACCAGTG ACACCACCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATCGAGG AGTTGAGG AGTTGAGG ACCATTA ACCAGTT AACCAGTT AACCAGTT AGTGAGG AGTTGAGG AAGCAGCT AACCAGTT AACCCGTTA AACCCGTTA AACCCGATC AAAGTAGCT AAAGTAGCT AAAGTAGCT AAAGTAGCT AAAGTAGCT AAAGTAGCACC AGGACCAAC AAGCAACC	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGTGGTC AGGCGCTC AGGCGCTC AGGCGCCC AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTT CAGATGTT CAGATGTT CAGATGTT CATATGTC CAGATTAGC CAGAGAT CAGCAGAT CAGCAGAGT CAACAAGT CAGCAGAGT CAGCAGGT CA	THE GCC A GGA THE GCC A GGC TH	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAC ATGGACAC ATGGACAC ATGGACAC ATGGACAC AAGGGCAC ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCGTG ACGGCACA ACGGCATC ATGGTGCT ATGGTCCA ACGGCACA ACGCACACACACACACACACACACACA	AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGGCC AGTGCCC AGGCCC AGGCC AGCC AGC AG	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGAAGTGG CCAGGC CTAGCAC CCAGGCC ACACGCC ACACGCC ACACGCC ACACGCC CAAATTG CCTAGTG CCACCC CAAACCC CAAAACCC CAAAACC CAAAACC CAAAACCC CAAAACC CAAACC	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTGAA GCATGCCGAA GCATGCTGAA TGAATGTTGAA TAATGTTGAA TCCGCAGGAA TCCACAGGAA TCACACAGAA TCACACACACAC TCACACAGAA TCACACACAC TCACACACAC TCCACACAC TCCACAC TCCACACAC TCCACAC TCC		573 575 5764 577 577 577 577 577 577 577 577 577 57
Sorghum_b_ Triticum_a Triticum_a Triticum_B_L Triticum_B_L Triticum_a Lolium_p_L Triticum_a Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Triticum_b Arriticum_b Corghum_b Oryza_S_OS Elaeis_g_A Asparagus_Acorus_a_A Amborella_Nuphar_a_A Magnolia_D Oryza_S_OS Asparagus_Acorus_a_OS Asparagus_Acorus_a_A Amagnolia_B	. AMACAAG . AMACAAG . AMACAAG . AMACAAG . AMACAAG . AMACAAG . TMGCAAG . TMGCAAG . TMGCAAG . TMGCAAG . TMGCAAG . TMGCAAG . CMGCAAG . TMGCAAG . TMGC	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ACACCACCG ACACCACCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATCGAGG ACGTTTGAGG ACGTTTGAGG ACGTTGAGG ACGTTGAGG ACGTTTAACG AGGTGGAGG AAGCAGTC AGGCATTT AACCGTTA AACCAGTT AACCAGTG AACCAGTG AACCAGTC AGGCAACC AGGAGCACC AGGAGCACC AGGAGCACC AAGCAACC AAGCAACC AAGCAACC AAGCAACC AAGGAACC CAGGAACC CAGGAAGCA C	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCCC AGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCTC ACCCCCA ACCCCTC ACCCCCA ACCCCTT CACCCCTC ACCCCCA ACCCCTT CACCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTTT CAGATGTTT CAGATGTTT CAGATGTC CATATGTC CAGTCTC CAGTCTC CAGTGTTAGC CAGCAGAT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGGT C	THE COCAGGA THE CO	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAG ATGGACAG ATGGACAG ATGGACAG ATGGACAG ACGGCGTG ACGCCTACAAT ACTACGAG ACTACAAT ACTACAAT	AGTGGAT AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGCCC AGCCCC AGCCC AGCC AGC AG	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTGAA GCATGCTGAA GCATGCGAA GCATGCTGAA TGTTCTTGAA TCCGCAGGAA TCCACAGGAA TCCACAGGAA TAATCATCAA TAATCATCAA TCCACAGAA TAATCATCAA TCCACAGAA CCACACAA CCACACAA ACCACAA ACCACACA ACCACAA ACCACAA ACCACAA ACCACAA ACCACAA ACCACAA ACCACAA ACCACACA ACCACAC ACCAC ACCACAC ACCAC AC		573 575 5764 577 577 577 577 577 577 577 577 577 57
Sorghum_b_ Triticum_a Triticum_a Triticum_s Lolium_p_L Oryza_s_Os Triticum_a Lolium_p_L Triticum_a Oryza_s_Os Zea_m_ZMM8 Zea_m_ZMM1 Sorghum_b_ Triticum_a Triticum_a Triticum_a Triticum_a Triticum_b Lolium_p_L Zea_m_m31 Zea_m_m24 Sorghum_b_Oryza_s_Os Elaeis_g_A Asparagus_A Asparagus_A Asparagus_A Asparagus_A Amborella_ Nuphar_a_A Magnolia_p Oryza_s_Os Asparagus_A Asparagus_A Amborella_ Nuphar_a_A Magnolia_p Acorus_a_A	. AMACAAG . AMACAAG . AMACAAG . AMACAAG . AMACAAG . AMACAAG . TMGCAAG . TMGCAAG . TMGCAAG . TMGCAAG . TMGCAAG . TMGCAAG . CMGCAAG . TMGCAAG . TMGC	AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG AAACTAGTG ACACCACCG ACACCACCG ACACCAGCG AAACAAGTG AAACAAGTG AAACAAGTG AAACAAGTG AGATCGAGG AGATCGAGG AGATCGAGG ACGTTTGAGG ACGTTTGAGG ACGTTGAGG ACGTTGAGG ACGTTTAACG AGGTGGAGG ACGTTTAACG AGGTGGAGG AACCAGTT AACCAGTTA AACCAGTTA AACCAGTTA AACCAGTA AACCAGTC AAGCAACC AAGCAACC AGGAGCACC AAGCAACC AAGCAACC AAGCAACC AAGCAACC AAGCAACC AAGGAACC CAGGAAGCA C	AAGTGCTG AAGTTCTA ATGTTCTA ATGTTCTA AAGTGCTG AAATGCTT GAGCGGTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCTC AGGCGCCC AGCCCCA AGCCCCCA AGCCCCCA AGCCCCCA AGCCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCTC ACCCCCA ACCCCTC ACCCCCA ACCCCTT CACCCCTC ACCCCCA ACCCCTT CACCCCCA ACCCCCCA ACCCCCCA ACCCCCCA ACCCCCC	CGACTGTC CAGATGTTT CAGATGTTT CAGATGTTT CAGATGTC CATATGTC CAGTCTC CAGTCTC CAGTGTTAGC CAGCAGAT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGAGT CAGCAGGT C	THE COCAGGA THE CO	ACGGGTGT ATGGACCA ATGGACCA ATGGACCA ATGGACCA ATGGACAG ATGGACAG ATGGACAG ATGGACAG ATGGACAG ACGGCGTG ACGCCTACAAT ACTACGAG ACTACAAT ACTACAAT	AGTGGAT AGTGGAT AGTGGAT AGTGGGT AGTGGGT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCT AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGGCG AGTGCCC AGCCCC AGCCC AGCC AGC AG	CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CTAGTGG CCAGA	GCATGGTGAA CCATGCTCAA CCATGCTCAA CCATGCTCAA ACAGGCTCAA TGAAGCTCAA GCATGCTGAA GCATGCCGAA GCATGCTGAA TGAATGTTGAA TAATGTTGAA TCCGCAGGAA TCCACAGGAA TCACACAGAA TCACACACACAC TCACACAGAA TCACACACAC TCACACACAC TCCACACAC TCCACAC TCCACACAC TCCACAC TCC		573 575 5764 577 577 577 577 577 577 577 577 577 57

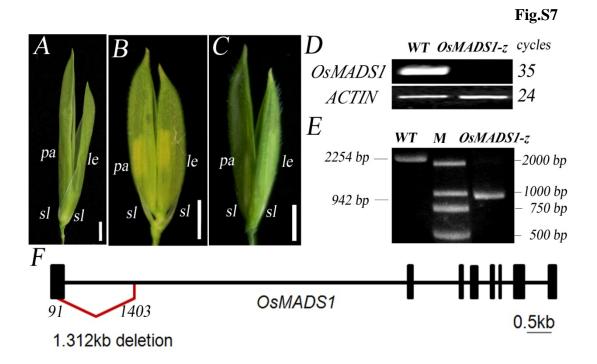


Supplemental Figure 5. Sequence alignent of the OsMADS34 and its homologs.

Black dark and grey boxex indicate the similar nucleotides.



Supplemental Figure 6. OsMADS34 has no transactivational activity, forms homodimer and has no interaction with OsMADS1 in yeast cells.



Supplemental Figure 7. Analysis and identification of the osmads1-z mutant

A-C are the allelic test between the *nsr* and *osmads1-z*; A: spikelet of *nsr*; B: spikelet of *osmads1-z*; C: spikelet of F1 progeny of *nsr* and *osmads1-z*. D: RT-PCR analysis of *OsMADS1* in wild-type and *osmads1-z*, no detectable transcript of *OsMADS1* was observed in the *osmads1-z* spikelet at stage In7; E: Identification of the deleted *OsMADS1* fragment in *osmads1-z* with smaller size compared with wild type, M indicates molecular marker.

Bar: 2 mm in A-C.