

RICHARD C. CRONN, RANDALL L. SMALL, TAMARA HASELKORN, AND JONATHAN F. WENDEL. 2002.
 Rapid diversification of the cotton genus (*Gossypium*: Malvaceae) revealed by
 analysis of sixteen nuclear and chloroplast genes. *American Journal of Botany*
 89(4): 707-725

#NEXUS

[Cronn et al., "Rapid diversification of the cotton genus (*Gossypium*: Malvaceae)
 revealed by analysis of sixteen nuclear and chloroplast genes]

[PAUP/NEXUS Data set of 12 combined nuclear loci. Taxon abbreviations are
 summarized in Materials and Methods and Table 1.
 Gene Order = A1751 1-858; AdhA 859-1811; G1262 1812-2745; CesA1b 2746-3922;
 CesA1 3923-5008; AdhC 5009-5948; A1341 5949-6629; A1713 6630-7224;
 G1121 7225-7972; G1134 7973-8519; ITS 8520-9214; FAD2 9215-10988.
 Poorly aligned regions from FAD2 need to be removed prior to analysis:]
 these include positions 10150-10230 and 10744-10802 of the alignment, and
 are defined in the "CHARSET" block at the end of the file]

BEGIN DATA;
 DIMENSIONS NTAX=9 NCHAR=10988;
 FORMAT DATATYPE=DNA MISSING=? GAP=- INTERLEAVE ;OPTIONS MSTAXA=UNCERTAIN ;

MATRIX

```
[
  10          20          30          40
50          60          70]
[
.          .          .          .
.]
A_genome   T??TCCGCC GTGGCTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
B_genome   TGATTCCGCC GTGGCTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
C_genome   ?????CCGCC GTGGCTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
D_genome   TGATTCCGCC GTGGCTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
E_genome   TGATTCCGCC GTGGCTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
F_genome   TGATTCCGCC GTGGCTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
G_genome   TGATTCCGCC GTGGCTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
Gossyp.kirkii TGATCCGCC GTGGTTGATG GCGTTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]
Kokia.drynar TGATTCCGCC GTGGCTGATG GTATTGATGT GATTCGTTG AGTGTTGGTG
GTGCTGTGGT GCCTTATTAT [70]

[
          80          90          100          110
120        130        140]
[
.          .          .          .
.]
A_genome   CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
TGTGTCGGCC TCTGCTGGCA [140]
B_genome   CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
TGTGTCGGCC TCTGCTGGCA [140]
C_genome   CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
TGTGTCGGCC TCTGCTGGCA [140]
```

D_genome CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
 TGTGTCGGCC TCTGCTGGCA [140]
 E_genome CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
 TGTGTCGGCC TCTGCTGGCA [140]
 F_genome CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
 TGTGTCGGCC TCTGCTGGCA [140]
 G_genome CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
 TGTGTCGGCC TCTGCTGGCA [140]
 Gossyp.kirkii CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGAGA AAGGGATTTT
 TGTGTCGGCC TCTGCTGGCA [140]
 Kokia.drynar CTTGACGCCA TTGCGATTGG TGCTTACGGT GCTGCTGGGA AAGGGATTTT
 TGTGTCGGCC TCTGCTGGCA [140]

[150 160 170 180
 190 200 210]

[.
]

A_genome ATGGAGGTCC TGGTGGACTG ACTGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACCGTTGGTG CTGGGACGAT [210]
 B_genome ATGGAGGTCC TGGTGGACTG ACTGTTACCA ATGTGGCTCC GTGGGTGGCT
 ACCGTTGGCG CTGGGACGAT [210]
 C_genome ATGGAGGTCC TGGTGGACTG ACTGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACCGTTGGTG CTGGGACGAT [210]
 D_genome ATGGAGGTCC TGGTGGACTG ACTGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACCGTTGGTG CTGGGACGAT [210]
 E_genome ATGGAGGTCC TGGTGGACTG ACCGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACCGTTGGTG CTGGGACGAT [210]
 F_genome ATGGAGGTCC TGGTGGACTG ACTGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACCGTTGGTG CTGGGACGAT [210]
 G_genome ATGGAGGTCC TGGTGGACTG ACTGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACCGTTGGTG CTGGGACGAT [210]
 Gossyp.kirkii ATGGAGGTCC TGGTGGACTT ACTGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACCGTTGGTG CTGGGACGAT [210]
 Kokia.drynar ATGGAGGTCC TGCTGGACTG ACTGTTACCA ATGTGGCTCC ATGGGTGGCT
 ACTGTTGGTG CTGGGACGAT [210]

[220 230 240 250
 260 270 280]

[.
]

A_genome TGATCGGGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTGGTGA
 CTGGAGCCGG GGTGTACAAT [280]
 B_genome TGATCGGGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTTGTGA
 CTGGAGCCGG GGTGTACAAT [280]
 C_genome TGATCGGGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTTGTGA
 CTGGAGCCGG GGTGTACAAT [280]
 D_genome TGATCGGGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTTGTGA
 CTGGAGCCGG GGTTTACAAT [280]
 E_genome TGATCGGGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAATTGTGA
 CTGGAGCCGG GGTGTACAAT [280]
 F_genome TGATCGGGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTTGTGA
 CTGGAGCCGG GGTGTACAAT [280]
 G_genome TGATCGGGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTTGTGA
 CTGGAGCCGG GGTGTACAAT [280]
 Gossyp.kirkii TGATCGTGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTTGTGA
 CTGGAGCCGG GGTGTACAAT [280]
 Kokia.drynar TGATCGTGAT TTTCTGCTG ATGTTAAGCT TGGAAATGGG AAAGTTGTGA

CTGGAGCCGG GGTGTACAAT [280]

[290 300 310 320
330 340 350]

[.]
A_genome GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]
B_genome GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]
C_genome GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]
D_genome GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GGTGGGTATT [350]
E_genome GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]
F_genome GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]
G_genome GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]
Gossyp.kirkii GGGCGGGGCT TGTCTCCGGG TCGGATGTAC CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]
Kokia.drynar GGGCGGGGCT TGTCTCCGGG TCGGATGTAT CCGTTGGTTT ATGCCGGATC
CGGTGGTGGT GATGGGTATT [350]

[360 370 380 390
400 410 420]

[.]
A_genome CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT CGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]
B_genome CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT CGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]
C_genome CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT CGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]
D_genome CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT TGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]
E_genome CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT CGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]
F_genome CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT TGTGAAAGGC
AAAATTGTTT TGTGTGATAG [420]
G_genome CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG GTCCCGACTT CGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]
Gossyp.kirkii CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT CGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]
Kokia.drynar CTTCTTCTTT GTGTTTGAA GGTTCCTTTGG ATCCCGACTT CGTGAAAGGC
AAAATCGTTT TGTGTGATAG [420]

[430 440 450 460
470 480 490]

[.]
A_genome AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GGATTGGAAT GATTTTGGCT [490]
B_genome AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GGGTTGGAAT GATTTTGGCT [490]

C_genome AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GGGTTGGAAT GATTTTGGCT [490]
D_genome AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GGGTTGGAAT GATTTTGGCT [490]
E_genome AGGTGTTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GGGTTGGAAT GATTTTGGCT [490]
F_genome AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GGGTTGGAAT GATTTTGGCT [490]
G_genome AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GGGTTGGAAT GATTTTGGCT [490]
Gossyp.kirkii AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTAAAG AAAGCTGGAG
GAGTAGGAAT GATTTTGGCT [490]
Kokia.drynar AGGGATTAAT TCCAGGGCTG CCAAAGGGGA AGTTGTGAAG AAAGCTGGAG
GGGTTGGAAT GATTTTGGCT [490]

[500 510 520 530
540 550 560]

[.]
A_genome AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
B_genome AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
C_genome AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
D_genome AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
E_genome AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
F_genome AATGGGGTTT TCGACGGTGA GGCCTAGTT GTCGA?TGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
G_genome AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
Gossyp.kirkii AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]
Kokia.drynar AATGGGGTTT TCGACGGTGA AGGCCTAGTT GTCGATTGCC ATGTGTTGCC
AGCTACTGCT GTTGGTGCAT [560]

[570 580 590 600
610 620 630]

[.]
A_genome CAAATGCAGA TGAGATTAGG CAATACATTG ATTCCGCATC GAAGTCCAAA
TCATCAGCCA CTGCCACTAT [630]
B_genome CAAATGCAGA TGAGATTAGG CAATACATTG ATTCCGCATC GAAGTCCAAA
TCATCAGCCA CTGCCACTAT [630]
C_genome CAAATGCAGA TGAGATTAGG CAATACATTG ATTCCGCATC GAAGTCCAAA
TCATCAGCCA CTGCCACTAT [630]
D_genome CAAATGCAGA TGAGATTAGA CAATACATTG ATTCCGCATC GAAGTCCAAA
TCATCAGCCA CTGCCACTAT [630]
E_genome CAAATGCAGA TGAGATTAGG CAATACATTG ATTCCGCATC GAAGTCCAAA
TCATCAGCCA CTGCCACTAT [630]
F_genome CAAATGCAGA TGAGATTAGG CAATACATTG ATTCCGCATC GAAGTCCAAA
TCATCAGCCA CTGCCACTAT [630]
G_genome CAAATGCAGA TGAGATTAGG CAATACATTG ATTCCGCATC GAAGTCCAAA
TCATCAGCCA CTGCCACTAT [630]
Gossyp.kirkii CAAATGCAGG TGAGATTAGG CAATACATTG ATTCCGCATC TAAGTCCAAA

TCATCAGCCA CTGCCACTAT [630]
 Kokia.drynar CAAATGCAGA TGAGATTAGG CAATACACTG ATTCCGCAAC TAAGTCCAAA
 TCATCAGCCA CTGCCACTAT [630]

[640 650 660 670
 680 690 700]

[.]
 A_genome TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCG GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]
 B_genome TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]
 C_genome TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]
 D_genome TCTCTTTAAA GGGACTCGGT TAGGTGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]
 E_genome TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGGGGGCCT [700]
 F_genome TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]
 G_genome TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]
 Gossyp.kirkii TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]
 Kokia.drynar TCTCTTTAAA GGGACTCGGT TAGGGGTGAG GCCAGCTCCT GTTGTGGCCT
 CATTTCAGC TCGAGGGCCT [700]

[710 720 730 740
 750 760 770]

[.]
 A_genome AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 B_genome AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 C_genome AATCCCGAGA CTCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 D_genome AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 E_genome AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 F_genome AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 G_genome AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 Gossyp.kirkii AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATGTGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]
 Kokia.drynar AATCCCGAGA CCCAGAAAT TTTAAAGCCT GATATGATTG CTCCTGGATT
 GAACATCCTT GCTGCCTGGC [770]

[780 790 800 810
 820 830 840]

[.]
 A_genome CTGATAAAGT TGGTCCTGCT GGGATTCCAT CTGATAACCG AAGGACAGA?
 ?????????? ?????????? [840]
 B_genome CTGATAAGGT TGGTCCTGCT GGGATTCCAT CAGATAACCG AAGGACAGAG

TTTAATATTC TTTCAGGCAC [840]
 C_genome CTGATAAAGT TGGTCCTGCT GGGATTCCAT CAGATAACCG AAGAACAG??
 ?????????? ?????????? [840]
 D_genome CTGATAAAGT TGGTCCTGCT GGGATTCCAT CAGATAACCG AAGGACA???
 ?????????? ?????????? [840]
 E_genome CTGATAAAGT TGGTCCTGCC GGGATTCCAT CAGATAACCG AAGGACAGAG
 TTTAATATTC TTTCAGGCAC [840]
 F_genome CTGATAAAGT TGGTCCTGCT GGGATTCCAT CAGATAACCG AAGGACAGAG
 TTTAATATTC TTTCAGGCAC [840]
 G_genome CTGATAAAGT TGGTCCTGCT GGGATTCCAT CAGATAACCG AAGAACAGAG
 TTTAATATTC TTTCAGGCAC [840]
 Gossyp.kirkii CTGATAAAGT TGGTCCTGCT GGGATTCCAT CAGATAACCG AAGGACAGAG
 TTTAATATTC TTTCAGGCAC [840]
 Kokia.drynar CTGATAAAGT TGGTCCTGCT GGGATTCCAT CAGATAACCG AAGGACAGAG
 TTTAATATTC TTTCAGGCAC [840]

[850 860 870 880
 890 900 910]

[
 . .]
 A_genome ?????????? ??????????TG TAAGGTATTA CTGCACGATA AAATGAATAT
 TACAACATTT A-TTTTCTAC [909]
 B_genome TTCAATGGCT TGCCCTCATG TAAGGTATTA CTGTACGATA TAATGAATAT
 TACAACATTT A-TTTTCAAC [909]
 C_genome ?????????? ??????????TG TAAGGTATTA CTGTACGATA TAATGAATAT
 TACAACATTT A-TTTTCTAC [909]
 D_genome ?????????? ??????????TG TAAGGTATTA CTGTTCGATA TAATGAATAT
 TACAACATTT A-TTTTCTGC [909]
 E_genome TTCAATGGCT TGCCCTCATG TAAGGTATTA ATGTACGATA TAATGAATAT
 TACAACATTT TGTTTTCTAC [910]
 F_genome TTCAATGGCT TGCCCTCATG TAAGGTATTA CTGTACGATA TAATGAATAT
 TACAAAATTT A-TTTTCTAC [909]
 G_genome TTCAATGGCT TGCCCTCATG TAAGGTATTA CTGTACGATA TAATGAATAT
 TACAACATTT A-TTTTCTAC [909]
 Gossyp.kirkii TTCAATGGCT TGCCCTCATG TAAGGTATGA CTGTACGATA TAATGGATAT
 TACAACACTT A-TTTTCTAC [909]
 Kokia.drynar TTCAATGGCT TGCCCTCATG TAAGGTATGA CTGTACGATA TAATGGATAT
 TACAACACTT A-TTTTCTAC [909]

[920 930 940 950
 960 970 980]

[
 . .]
 A_genome AAGTATTTGT CACTGTTTTT CTTTAATTTG GCAGGGTTAC ACTCCTCTGT
 TTCCTCGTAT ACTTGGTCAT [979]
 B_genome AAGTATTTGT CACTGTTTTT CTTTAATTTG GCAGGGTTAC ACTCCTCTGT
 TTCCTCGTAT ACTTGGTCAT [979]
 C_genome AAGTATTTGT CACTGTTTTT CTTTAATTTG GCAGGGTTAC ACTCCTCTGT
 TTCCTCGAAT ACTTGGTCAT [979]
 D_genome AAGTATT-GT CACTGCTTTC CTTTAACTTG GCAGGGTTAC ACTCCTCTGT
 TTCCTCGTAT ACTTGGTCAT [978]
 E_genome AAGTATTTGT CAGTGTTTTT ATTTAATTTG TCAGGGTTAC ACTCCTCTGT
 TTCCTCGAAT ACTTGGTCAT [980]
 F_genome AAGTATTTGT CACTGTTTTT CTTTAATTTG GCAGGGTTAC ACTCCTCTGT
 TTCCTCGTAT ACTTGGTCAT [979]
 G_genome AAGTATTTGT CACTGTTTTT CTTTAATTTG GCAGGGTTAC ACTCCTCTGT
 TTCCTCGAAT ACTTGGTCAT [979]

Gossyp.kirkii AAGGATT-GT CACTGTTTTT CTTTAATTTG GCAGGGTTAC ACTCCTCTGT
TTCCTCGTAT ACTTGGTCAT [978]
Kokia.drynar AAGGATT-GT CACTGTTTTT CTTTAATTTG GCAGGGTTAC ACTCCTCTGT
TTCCTCGTAT ACTTGGTCAT [978]

[990 1000 1010 1020
1030 1040 1050]
[.
. .]

A_genome GAAGCCTCAG GGTATGAAAG TTAAAACCAT TTTATTTTTT TATATATTTT
TCTGTATCAA TATAATCTTA [1049]
B_genome GAAGCCTCAG GGTATGAAAG TTAAA-CCAT TTTATTTTTT TATATATTTT
TCTGTATCAA TATAATCTTA [1048]
C_genome GAAGCCTCAG GGTATGAAAG TTAAA-CCAT TTTATTTTTT TATATATTTT
TCTGTATCAA TATAATCTTA [1048]
D_genome GAAGCCTCAG GGTATGAAAG TTAAA-CCAT TTTATTTTTT -ATATATTCT
TCTGTATCAA TTTAATCTTA [1046]
E_genome GAAGCCTCAG GGTATGAAAG TTAAA-CCTT TTT-TTTTTT AATATATTTT
TCTGTATCAA TATAATCTTA [1048]
F_genome GAAGCCTCAG GGTATGAAAG TTAAA-CCAT TTTACTTTTT TATATATTTT
TCTGTATCAA TATAATCTTA [1048]
G_genome GAAGCCTCAG GGTATGAAAG TTAAA-CCAT TTTATTTTTT TATATATTTT
TCTGTATCAA TATAATCTTA [1048]
Gossyp.kirkii GAAGCCTCAG GGTATGGAAG TTAAA-CCAT TTTATTTTTT TATGTATTTT
TCTGTATCAA AATAATCTTA [1047]
Kokia.drynar GAAGCCTCAG GGTATGGAAG TTAAA-CCAT TTTATTTTTT -ATGTATTTT
TCTGTATCAA AATAATCTTA [1046]

[1060 1070 1080 1090
1100 1110 1120]
[.
. .]

A_genome CAATTATAAT TGTAGGATCG TGGAGAGTGT GGGTGAGGGT GTGAATGATT
TGAAACCTGG GGATCATGTG [1119]
B_genome CAATTATAAT TATAGGATCG TGGAGAGTGT GGGTGAGGGT GTGAATGATT
TGAAACCTGG GGATCATGTG [1118]
C_genome CAATTATAAT TATAGGATCG TGGAGAGTGT GGGTGAGGGT GTGAATGATT
TGAAACCTGG GGATCATGTG [1118]
D_genome CAATTATAAT TATAGGATCG TGGAGAGTGC GGGTGAGGGT GTGAATGATT
TGAAACCTGG AGATCATGTG [1116]
E_genome CAATTATAAT TATAGGATCG TGGAGAGTGT GGGTGAGGGC GTGAATGATT
TGAAACCTGG GGATCATGTG [1118]
F_genome CAATTATAAT TATAGGATCG TGGAGAGTGT GGGTGAGGGT GTGGATGATT
TGAAACCTGG GGATCATGTG [1118]
G_genome CAATTATAAT TATAGGATCG TGGAGAGTGT GGGTGAGGGT GTGAATGATT
TGAAACCTGG GGATCATGTG [1118]
Gossyp.kirkii CGATTATAAT TATAGGATCG TGGAGAGTGT GGGTGAGGGT GTGAATGATT
TGAAACCTGG AGATCATGTG [1117]
Kokia.drynar CGATTATAAT CATAGGATCG TGGAGAGTGT GGGTGAGGGT GTGGATGATT
TGAAACCTGG AGATCATGTG [1116]

[1130 1140 1150 1160
1170 1180 1190]
[.
. .]

A_genome CTTCTATCT TCACCGGAGA ATGCAAAGAA TGTCGCCACT GTCTGTCAGA
AGAAAGCAAT AACATGTGCG [1189]

B_genome CTCCCTATCT TCACCGGGGA ATGCAAAGAA TGTCGCCACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1188]
 C_genome CTCCCTATCT TCACCGGAGA ATGCAAAGAA TGTCGCCACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1188]
 D_genome CTCCCTATCT TCACCGGAGA ATGCAAAGAA TGTCGCCACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1186]
 E_genome CTCCCTATCT TCACCGGAGA ATGCAAAGAA TGTCGCCACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1188]
 F_genome CTCCCTATCT TCACCGGAGA ATGCAAAGAA TGTCGCCACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1188]
 G_genome CTCCCTATCT TCACCGGAGA ATGCAAAGAA TGTCGCCACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1188]
 Gossyp.kirkii CTCCCTATCT TCACCGGAGA ATGCAAAGAA TGTCGCTACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1187]
 Kokia.drynar CTCCAATCT TCACCGGAGA ATGCAAAGAA TGTCGCTACT GTCTGTCAGA
 AGAAAGCAAT AACATGTGCG [1186]

[1200 1210 1220 1230
 1240 1250 1260]

[.
]

A_genome AACTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1259]
 B_genome AACTGCTTAG GATCAACTGT GACCGA?GTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1258]
 C_genome AACTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1258]
 D_genome AACTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1256]
 E_genome AACTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1258]
 F_genome AACTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1258]
 G_genome AACTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1258]
 Gossyp.kirkii AGCTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGGAAA
 ACCAGATTTT CCATCAACGG [1257]
 Kokia.drynar AGCTGCTTAG GATCAACTGC GACCGAGGTG TTATGCTTGC TGATGGAAAA
 ACCAGATTTT CCATCAACGG [1256]

[1270 1280 1290 1300
 1310 1320 1330]

[.
]

A_genome CAAGCCTATC TACCACTTTG TTGGAACCTC GACTTTT TAGC CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1329]
 B_genome CAAGCCCATC TACCACTTTG TTGGAACCTC GACTTTT TAGC CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1328]
 C_genome CAAGCCTATC TACCACTTTG TTGGAACCTC GACTTTT TAGC CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1328]
 D_genome CAAGCCTATC TACCACTTTG TTGGAACCTC GACTTTT TAGC CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1326]
 E_genome CAAGCCTATC TACCACTTTG TTGGAACCTC GACTTTT TAGC CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1328]
 F_genome CAAGCCTATC TACCACTTTG TTGGAACCTC GACTTTT TAGC CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1328]
 G_genome CAAGCCTATC TACCACTTTG TTGGAACCTC GACTTTT TAGC CAATATACTG

TCGTCCATGT TGGCCAGGTT [1328]
 Gossyp.kirkii CAAGCCTATC TATCACTTTG TTGGAACCTC GACTTTTACG CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1327]
 Kokia.drynar CAAGCCTATC TACCACTTTG TTGGAACCTC GACTTTTACG CAATATACTG
 TCGTCCATGT TGGCCAGGTT [1326]

[1340 1350 1360 1370
 1380 1390 1400]

[.]
 A_genome GCCAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1399]
 B_genome GCCAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1398]
 C_genome GCCAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACGGGTTTTG [1398]
 D_genome GCCAAGATCA GTCCAACCGC CCCTCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1396]
 E_genome GCTAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1398]
 F_genome GCCAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1398]
 G_genome GCCAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1398]
 Gossyp.kirkii GCCAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1397]
 Kokia.drynar GCCAAGATCA GTCCAACCGC CCCGCTTGAT AAAGTCTGTC CCATTAGCTG
 TGGGATATGT ACAGGTTTTG [1396]

[1410 1420 1430 1440
 1450 1460 1470]

[.]
 A_genome GGGCCACTGT GAATGTTGCC AAACCCAAAA AGGGTCAAAC TGTTGCACTT
 TTTGGACTGG GTGCCGTTGG [1469]
 B_genome GGGCCACTGT GAATGTTGCT AAACCCAAAA AGGGTCAAAC TGTTGCAGTT
 TTTGGACTGG GTGCCGTTGG [1468]
 C_genome GGGCCACTGT GAATGTTGCT AAACCCAAAA AGGGTCAAAC TGTTGCAGTT
 TTTGGACTGG GTGCCGTTGG [1468]
 D_genome GGGCCACTGT GAATGTTGCT AAACCCAAAA AGGGTCAAAC TGTTGCAGTT
 TTTGGACTGG GTGCCGTTGG [1466]
 E_genome GGGCCACTGT GAATGTTGCT AAACCCAAAA AAGGTCAAAC TGTTGCAGTT
 TTTGGACTGG GTGCCGTTGG [1468]
 F_genome GGGCCACTGT GAATGTTGCT AAACCCAAAA AGGGTCAAAC TGTTGCAGTT
 TTTGGACTGG GTGCCGTTGG [1468]
 G_genome GGGCCACTGT GAATGTTGCT AAACCCAAAA AGGGTCAAAC TGTTGCAGTT
 TTTGGACTGG GTGCCGTTGG [1468]
 Gossyp.kirkii GGGCCACTGT GAATGTTGCT AAACCCAAAA AGGGTCAAAC TGTTGCAATT
 TTTGGACTGG GTGCCGTTGG [1467]
 Kokia.drynar GGGCCACTGT GAATGTTGCT AAACCCAAAA AGGGTCAAAC AGTCACAGTT
 TTTGGACTGG GTGCCGTTGG [1466]

[1480 1490 1500 1510
 1520 1530 1540]

[.]
 A_genome TCTTGCCGTG AGTTTATTCT TGTTTCACCT ATGGTTTTTC TCT?GGCTAT

TTGGTAAATG TGTTTGATTG [1539]
 B_genome TCTTGCCGTG AGTTTATTCT TGTTTCACCT ATAGTTTTTTC TCTAGGCTAT
 TTGGTAAATG TGTTTGATTG [1538]
 C_genome TCTTGCCGTG AGTTTATTCT TGTTTCACCT ATGGTTTTTTC TCTTGGCTAT
 TTGGTAAATG TGTTTGATTG [1538]
 D_genome TCTTGCCGTG AGTTTATTCT TGTTTCACCT ATGGTTTTTTC TCTAGGCTAT
 TTGGTAAATG TGTTTGATTG [1536]
 E_genome TCTTGCCGTG AGTTTATTCT TGTTTCACCT ATGGTTTTTTC TCTAGCCTAT
 TTGGTAAATG TGTTTGATTG [1538]
 F_genome TCTTGCCGTG AGTTTATTCT TGTTTCACCT ATGGTTTTTTC TCTAGGCTAT
 TTGGTAAATG TGTTTGATTG [1538]
 G_genome TCTTGCCGTG AGTTTATTCT TGTTTCACTT ATTGTTTTTTC TCTAGGCTAT
 TTGGTAAATG TGTTTGATTG [1538]
 Gossyp.kirkii TCTTGCCGTG AGTTTATTCT TGTTCCATCT ATGGTTTTTTC TCTAGGCTAT
 TTCGTAAATG TGTTTGATTG [1537]
 Kokia.drynar TCTTGCCGTG AGTTTATTCT TGTTCCACCT ATGGTTTTTTC TCTAGGCTAT
 TTGGTAAATG TGTTTGATTG [1536]

[1550 1560 1570 1580
 1590 1600 1610]

[.
]
 A_genome ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1609]
 B_genome ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1608]
 C_genome ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1608]
 D_genome ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1606]
 E_genome ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1608]
 F_genome ACTTTTATCC ATACAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1608]
 G_genome ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1608]
 Gossyp.kirkii ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1607]
 Kokia.drynar ACTTTTATCC ATATAAATTA GGCCGCTGAA GGTGCAAGGG TTTGTGGGGC
 TTCTCGGATC ATCGCTGTTG [1606]

[1620 1630 1640 1650
 1660 1670 1680]

[.
]
 A_genome ATGTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATAG CATCATTT--
 -----ATAT GATTTGTCGT [1671]
 B_genome ATGTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATAG CATCATTTAT
 ATCATTATAT GATTTGTCGT [1678]
 C_genome ATGTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATAG CATCATTT--
 -----ATAT GATTTGTCGT [1670]
 D_genome ATGTGAACCC CAGAAGATTT GAAGAAGGTA CCTTCTCATAG CATCATTT--
 -----ATAT GATTTGTCGT [1668]
 E_genome ATGTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATAG CATCATTT--
 -----ATAT GATTTGTCGT [1670]
 F_genome ATGTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATAG CATCATTTAT
 ATCATTATAT GATTTGTCGT [1678]

G_genome ATGTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATAG CATCATTT--
 -----ATAT GATTTGTTAT [1670]
 Gossyp.kirkii ATTTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATAG CATCATTTTAT
 CTGATT---- -ATTTGTCGT [1672]
 Kokia.drynar ATTTGAACCC CAGAAGATTT GAAGAAGGTA CCTATCATGG CATCATTTTGT
 CTGATT---- -ATTTGTCGT [1671]

[1690 1700 1710 1720
 1730 1740 1750]
 [.
]

A_genome TGTTCCTCAC TAAAAATACT AATATATTGA TCATATTTCT TTGCCTTCC-
 ACCAGCTAAG AGGTTTGGGA [1740]
 B_genome TGTTCCTCAC TAAAAATACT AATATACTGA TCATATTTCT TTGCCTGCC-
 ACCAGCTAAG AGGTTTGGGA [1747]
 C_genome TGTTCCTCAC TAAAAATACT AATATATTGA TCATATTTCT TTGCCTTCC-
 ACCAGCTAAG AGGTTTGGGA [1739]
 D_genome TGTTCCTCAC TAAAAATACT AATATATGGA TCATATTTCT TTGCCTGCCC
 ACCAGCTAAG AGGTTTGGGG [1738]
 E_genome TGTTCCTCAC TAAAAATACT AATATATTGA TCATATTTCT TTGCCTGCC-
 ACCAGCTAAG AGGTTTGGGA [1739]
 F_genome TGTTCCTCAC TAAAAATACT AATATACTGA TCATATTTCT TTGCCTGCC-
 ACCAGCTAAG AGGTTTGGGA [1747]
 G_genome TGTTCCTCAC TAAAAATACT AATATATTGA TCATATTTCT TTGCCTGCC-
 ACCAGCTAAG AGGTTTGGGA [1739]
 Gossyp.kirkii TGTTCCTCAC TAAAAATACT AATATATTGA TCCTATTTCT TTGCCTGCC-
 ACCAGCCAAG AGGTTTGGGA [1741]
 Kokia.drynar TGTTCCTCAC ACTAAATACT AATATACTGA TCCTATTTCT TTGCCTGCC-
 ACCAGCCAAG AGGTTTGGGA [1740]

[1760 1770 1780 1790
 1800 1810 1820]
 [.
]

A_genome TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGTTTCTT [1810]
 B_genome TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAAGTG
 ATTGTGGAGA TCAGTTTCTT [1817]
 C_genome TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGTTTCTT [1809]
 D_genome TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGTTTCTT [1808]
 E_genome TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGTTTCTT [1809]
 F_genome TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGTTTCTT [1817]
 G_genome TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGATTCTT [1809]
 Gossyp.kirkii TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGTTTCTT [1811]
 Kokia.drynar TTACAGAATT TGTGAATCCA AAAGACTACG ACAAGCCTGT TCAAGAGGTG
 ATTGTGGAGA TCAGTTTCTT [1810]

[1830 1840 1850 1860
 1870 1880 1890]
 [.
]

A_genome	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTA	TCTCATCCCC
CTCCTTCCTT	CCGTAGGCTT	[1880]			
B_genome	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTA	TCTCATCCCC
CTCCTTCCTT	CCGTAGGCTT	[1887]			
C_genome	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTA	TCTCATCCCC
CTCCTTCCTT	CCGTAGGCTT	[1879]			
D_genome	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTG	TCTCATCCCC
CTCCTTCCTT	CCGTAGGCTT	[1878]			
E_genome	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCATTA	TCTCATCCCC
CTCCTTCCTT	CCATAGGCTT	[1879]			
F_genome	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTA	TCTCATCCCC
CTCCTTCCTT	CCGTAGGCTT	[1887]			
G_genome	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTA	TCTCATCCCC
CTCCTTCCTT	CCGTAGGCTT	[1879]			
Gossyp.kirkii	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTA	TCTCATCCCC
CTCCTTCCTT	CCGTAGGCTT	[1881]			
Kokia.drynar	CGCTACGCCG	TTGCCTAATA	TCGAAAGTCC	GAAACCAGTA	TCTCGTCCCC
CTCCTTCCTT	CCGTAGGCTT	[1880]			

[		1900	1910	1920	1930
1940	1950	1960]			
[.	.	.	.
.

A_genome	CTCTGTCTAA	ATTCCCCAGA	ATGGAAGCAT	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1950]			
B_genome	CTCTCTCTAA	ATTCCCCAGA	ATGGAAGCAT	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1957]			
C_genome	CTCTCTCTAA	ATTCCCCAGA	ATGGAAGCAT	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1949]			
D_genome	CTCTCTCTAA	ATTCCCCAGA	ATGGAAGCAT	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1948]			
E_genome	CTCTCTCTAA	ATTCCCCAGA	ATGGAAGCAT	GGTTTGATAG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1949]			
F_genome	CTCTCTCTAA	ATTCCCCAGA	ATGGAAGCAT	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1957]			
G_genome	CTCTCTCTAA	ATTCCCCAGA	ATGGAAGCAT	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1949]			
Gossyp.kirkii	CTCTCTTTAA	ATACCCCAGA	GTGGAAGCAT	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1951]			
Kokia.drynar	CTCTCTTTAA	ATTCCCCAGA	GTGGAAGCAC	GGTTTGATGG	GTAGCCTCTC
GGCTATAGCT	TTTGGAGCTG	[1950]			

[		1970	1980	1990	2000
2010	2020	2030]			
[.	.	.	.
.

A_genome	TTCAACCTGT	TTATGCTTTA	ACCATTGGTG	GAATGATTTT	AGCCTTTTTT
GCAAAAAGTC	ACCAAGAAAT	[2020]			
B_genome	TTCAACCTGT	TTATGCTTTA	ACCATTGGTG	GAATGATTTT	AGCCTTTTTT
GCAAAAAGTC	ACCAAGAAAT	[2027]			
C_genome	TTCAACCTGT	TTATGCTTTA	ACCATTGGTG	GAATGATTTT	AGCCTTTTTT
GCAAAAAGTC	ACCAAGAAAT	[2019]			
D_genome	TTCAACCTGT	TTATGCTTTA	ACCATTGGTG	GAATGATTTT	AGCCTTTTTT
GCAAAAAGTC	ACCAAGAAAT	[2018]			
E_genome	TTCAACCTGT	TTATGCTTTA	ACTATTGGTG	GAATGATTTT	AGCCTTTTTT
GCAAAAAGTC	ACCAAGAAAT	[2019]			
F_genome	TTCAACCTGT	TTATGCTTTA	ACCATTGGTG	GAATGATTTT	AGCCTTTTTT

GCAAAAAGTC ACCAAGAAAT [2027]
 G_genome TTCAACCTGT TTATGCTTTA ACCATTGGTG GAATGATTTT AGCCTTTTTT
 GCAAAAAGTC ACCAAGAAAT [2019]
 Gossyp.kirkii TTCAACCTGT TTATGCTTTA ACCATTGGTG GTATGATTTT AGCCTTTTTT
 GCAAAAAGTC ACCAAGAAAT [2021]
 Kokia.drynar TTCAACCTGT TTATGCTTTA ACCATTGGTG GAATGATTTT AGCCTTTTTT
 GCAAAAAGTC ACCAAGAAAT [2020]

[2040 2050 2060 2070
 2080 2090 2100]

[
 . .]
 A_genome GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTTTCTTTG CTCACATTGC
 TCTCTGTCAT TCTCAATCTT [2090]
 B_genome GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTTTCTTTG CTCACATTGC
 TCTCTGTCAT TCTCAATCTT [2097]
 C_genome GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTTTCTTTG CTCACATTGC
 TCTCTGTCAT TCTCAATCTT [2089]
 D_genome GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTTTCTTTG CTCACATTGC
 TCTCTGTCAT TCTCAATCTT [2088]
 E_genome GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTTTCTTTG CTCACATTGC
 TCTCTGTCAT TCTCAATCTT [2089]
 F_genome GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTTTCTTTG CTCACATTGC
 TCTCTGTCAT TCTCAATCTT [2097]
 G_genome GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTTTCTTTG CTCACATTGC
 TCTCTGTCAT TCTCAATCTT [2089]
 Gossyp.kirkii GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTCTCTTTA CTCACATTGC
 TCTCCGTCAT TCTCAATCTG [2091]
 Kokia.drynar GCAGGCTCGA ATACGCACAT ACGCTTTCAT ATTCTCTTTA CTCACATTGC
 TCTCCGTCAT TCTCAATCTG [2090]

[2110 2120 2130 2140
 2150 2160 2170]

[
 . .]
 A_genome ATTCAGCAAT ATAATTTTGC TTACATGGGC GAGCGGTTAA CCAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2160]
 B_genome ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CCAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2167]
 C_genome ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CCAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2159]
 D_genome ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CCAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2158]
 E_genome ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CCAGAAGAAT
 CCGAAGTCGA ATGCTGGAAA [2159]
 F_genome ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CCAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2167]
 G_genome ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CCAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2159]
 Gossyp.kirkii ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CTAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2161]
 Kokia.drynar ATTCAGCATT ATAATTTTGC TTACATGGGC GAGCGGTTAA CTAGGAGAAT
 CCGAAGTCGA ATGCTGGAAA [2160]

[2180 2190 2200 2210
 2220 2230 2240]

[
]

```

.]
A_genome      AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTACA
GGAGCTTTAT GCTCGAGTTT [2230]
B_genome      AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTACT
GGAGCTTTAT GCTCGAGTTT [2237]
C_genome      AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTACT
GGAGCTTTAT GCTCGAGTTT [2229]
D_genome      AATTATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTACT
GGAGCTTTAT GCTCGAGTCT [2228]
E_genome      AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTACT
GGAGCTTTAT GCTCGAGTTT [2229]
F_genome      AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAATTCTACT
GGAGCTTTAT GCTCGAGTTT [2237]
G_genome      AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTACT
GGAGCTTTAT GCTCGAGTTT [2229]
Gossyp.kirkii AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTAGT
GGAGCTTTAT GCTCGAGCTT [2231]
Kokia.drynar  AAATATTGTC CTTCGAAGCC GCTTGGTTTG ATGAAGAAAA AAACTCTAGT
GGAGCTTTAT GCTCGAGCTT [2230]

```

```

[           2250           2260           2270           2280
2290       2300       2310]
[
.
```

```

.]
A_genome      GAGCAATCAG GCTTCGATGG TTAAGACACT CGTCGCAGAC CGAATCTCGT
TATTAGTTCA AACCATTCT [2300]
B_genome      GAGCAATCAG GCTTCGATGG TTAAGACACT CGTCGCAGAC CGAATCTCGT
TGTTAGTTCA AACCATTCT [2307]
C_genome      GAGCAATCAG GCTTCGATGG TTAAGACACT CGTCGCAGAC CGAATCTCTT
TGTTAGTTCA AACCATTCT [2299]
D_genome      GAGCAATCAG GCTTCGATGG TTAAGACACA CGTCGCAGAC CGAATCTCAT
TGTTAGTTCA AACCATTCT [2298]
E_genome      GAGCAATCAG GCTTCGATGG TTAAGACACT CGTCGCAGAC CGAATCTCAT
TGCTAGTTCA AACCATTCT [2299]
F_genome      GAGCAATCAG GCTTCGATGG TTAAGACACT CGTCGCAGAC CGAATCTCGT
TGTTAGTTCA AACCATTCT [2307]
G_genome      GAGCAATCAG GCTTCGATGG TTAAGACACT CGTCGCAGAC CGAATCTCTT
TGTTAGTTCA AACCATTCT [2299]
Gossyp.kirkii GAGCAATCAG GCTTCGATGG TTAAGACACT CGTTGCAGAC CGAATCTCGT
TGTTAGTTCA AACCATTCT [2301]
Kokia.drynar  GAGCAATCAG GCTTCGATGG TTAAGACACT CGTTGCAGAC CGAATCTCAT
TGTTAGTTCA AACCACATCT [2300]

```

```

[           2320           2330           2340           2350
2360       2370       2380]
[
.
```

```

.]
A_genome      GCTGTTACCA TCGCGATGAT TATCGGGCTA GTCGTGGCTT GGAAGTTAGC
AATAGTGATG ATTGCAGTCC [2370]
B_genome      GCTGTTACCA TCGCAATGAT TATCGGGCTA GTCGTGGCTT GGAAGTTAGC
AATAGTGATG ATTGCAGTCC [2377]
C_genome      GCTGTTACCA TCGCGATGAT TATCGGGCTA GTCGTGGCTT GGAAGTTAGC
AATAGTGATG ATTGCAGTCC [2369]
D_genome      GCTGTTACCA TCGCGATGAT TATCGGGCTA GTCGTGGCTT GGAAGTTAGC
AATAGTGATG ATTGCAGTCC [2368]
E_genome      GCTGTTACCC TCGCGATGAT TATCGGGCTA GTCGTGGCTT GGAAGTTAGC
AATAGTGATG ATTGCAGTCC [2369]

```

F_genome GCTGTTACCA TCGCGATGAT TATCGGGCTA GTCGTGGCTT GGAAGTTAGC
 AATAGTGATG ATTGCAGTCC [2377]
 G_genome GCTGTTACCA TCGCGATGAT TATCGGGCTA GTCGTGGCTT GGAAGTTAGC
 AATAGTGATG ATTGCAGTCC [2369]
 Gossyp.kirkii GCTGTTACCA TCGCGATGAT TATCGGGCTA GTTGTGGCTT GGAAGTTAGC
 AATAGTGATG ATTGCAGTGC [2371]
 Kokia.drynar GCTGTTACCA TCGCGATGAT TATCGGGCTA GTTGTGGCTT GGAAGTTAGC
 AATAGTGATG ATTGCAGTGC [2370]

[2390 2400 2410 2420
 2430 2440 2450]
 [.]

A_genome AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTTT GCTTTCTAGC
 GTCTCAACTA ATTTTCGTCAA [2440]
 B_genome AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTTT GCTTTCTAGC
 ATCTCAACTA ATTTTCGTCAA [2447]
 C_genome AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTTT GCTTTCTAGC
 ATTTCAACTA ATTTTCGTCAA [2439]
 D_genome AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTTT GCTTTCTAGC
 ATTTCAACTA ATTTTCGTCAA [2438]
 E_genome AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTTT GCTTTCTAGC
 ATTTCAACTA ATTTTCGTCAA [2439]
 F_genome AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTTT GCTTTCTAGC
 ATCTCAACTA ATTTTCGTCAA [2447]
 G_genome AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTTT GCTTTCTAGC
 ATTTCAACTA ATTTTCGTCAA [2439]
 Gossyp.kirkii AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTAT GCTTTCTAGC
 ATTTCAACTA ATTTTCATCAA [2441]
 Kokia.drynar AACCTCTCGC AATTATGTGT TTCTACACAC GAAAAGTTAT GCTGTCTAGC
 ATTTCAACTA ATTTTCGTCAA [2440]

[2460 2470 2480 2490
 2500 2510 2520]
 [.]

A_genome GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC TTCATTTGGG [2510]
 B_genome GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC TTCATTTGGG [2517]
 C_genome GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC TTCATTTGGG [2509]
 D_genome GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC CTCATTTGGG [2508]
 E_genome GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC TTCATTTGGG [2509]
 F_genome GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC TTCATTTGGG [2517]
 G_genome GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC TTCATTTGGG [2509]
 Gossyp.kirkii GGCACAAAAT CAAAGTACTC AAACAGCAGT GGAAGCTGTG TATAATCATA
 GAATTGTAAC TTCATTTGGG [2511]
 Kokia.drynar GGCACAAAAT CAAAGTACTC AAATAGCAGT GGAAGCTGTG TATAATCACA
 GAATTGTAAC TTCATTTGGC [2510]

[2530 2540 2550 2560
 2570 2580 2590]

```
[
.
.]
A_genome      AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCAAG
GAAAGAGGCT  AGGAAAAAAT [2580]
B_genome      AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCAAG
GAAAGAGGCT  AGGAAAAAAT [2587]
C_genome      AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCAAG
GAAAGAGGCT  AGGAAAAAAT [2579]
D_genome      AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCAAG
GAAAGAGGCT  AGGAAAATAT [2578]
E_genome      AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCAAG
GAAAGAGGCT  AGGAAAAAAT [2579]
F_genome      AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCAAG
GAAAGAGGCT  AGGAAAAAAT [2587]
G_genome      AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCAAG
GAAAGAGGCT  AGGAAAAAAT [2579]
Gossyp.kirkii AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCGAG
GAAAGAGGCT  AGGAAAAAAT [2581]
Kokia.drynar  AGCCTAGGTA AGGTTCTTCA ACTTTTCGAT GAGGCTCAAG AGGAACCGAG
GAAAGAGGCT  AGGAAAAAAT [2580]
```

```
[
2640          2650          2660          2670          2680          2690          2700
2640          2650          2660]
```

```
[
.
.]
A_genome      CATGGCTAGC GGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2650]
B_genome      CATGGCTGGC GGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2657]
C_genome      CATGGCTAGC GGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2649]
D_genome      CATGGCTAGC GGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2648]
E_genome      CATGGCTAGC GGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2649]
F_genome      CATGGCTAGC GGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2657]
G_genome      CATGGCTAGC GGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2649]
Gossyp.kirkii CATGGCTAGC AGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2651]
Kokia.drynar  CGTGGCTAGC AGGGATTGGT ATGGGGTCAG CTCAAAGCCT AACATTTATG
TCATGGGCTT  TAGATTTTTG [2650]
```

```
[
2710          2720          2730          2740          2750          2760          2770
2710          2720          2730]
```

```
[
.
.]
A_genome      GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCTGC? ??????????
??????????  ?????????? [2689]
B_genome      GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCAGCA GGGGATGTGT
TTAAGACATT  CTTTATCTTG [2727]
C_genome      GTATGGAGGT GCATTGGTTC AAAAGGGAGA GATATCAGC? ??????????
??????????  ?????????? [2688]
D_genome      GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCAGC? ??????????
??????????  ?????????? [2687]
E_genome      GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCAGCA GGGGATGTGT
```


TTAAGACATT CTTTATCTTG [2719]
 F_genome GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCAGCA GGGGATGTGT
 TTAAGACATT CTTTATCTTG [2727]
 G_genome GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCAGCA GGGGATGTGT
 TTAAGACATT CTTTATCTTG [2719]
 Gossyp.kirkii GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCAGCA GGGGATGTGT
 TTAAGACCTT CTTTATCTTG [2721]
 Kokia.drynar GTATGGAGGT ACATTGGTTC AAAAGGGAGA GATATCAGCA GGGGATGTGT
 TTAAGACCTT CTTTATCTTG [2720]

[2740 2750 2760 2770
 2780 2790 2800]

[
 . .]
 A_genome ?????????? ?????CATGT TGGTTTGAAT GGCAATGGAG AACCCCTTCGT
 GGCTTGCCAT GATTGCAATT [2744]
 B_genome GTGAGCACCG GAAAGCATGT TGGTTTGAAT GGCAATGGAG AACCCCTTCGT
 GGCTTGCCAT GATTGCAATT [2797]
 C_genome ?????????? ?????CATGT TGGTTTGAAT GTCAATGGAG AGCCCTTCGT
 GGCTTGCCAT GATTGCAATT [2743]
 D_genome ?????????? ?????CATGT TGGTTTGAAT GGTAATGGAG AACCCCTTCGT
 GGCTTGCCAT GATTGCAATT [2742]
 E_genome GTGAGCACCG GAAAGCATGT TGGTTTGAAT GGCAATGGAG AACCCCTTCGT
 GGCTTGCCAT GATTGCAATT [2789]
 F_genome GTGAGCACCG GAAAGCATGT TGGTTTGAAT GGCAATGGAG AACCCCTTCGT
 GGCTTGCCAT GATTGCAATT [2797]
 G_genome GTGAGCACCG GAAAGCATGT TGGTTTGAAT GGCAATGGAG AACCCCTTCGT
 GGCTTGCCAT GATTGCAATT [2789]
 Gossyp.kirkii GTGAGCACCG GAAAGCATGT TGGTTTGAAT GGCAATGGAG AACCCCTTCGC
 GTTTGGCCAT GATTGCAATT [2791]
 Kokia.drynar GTGAGCACAG GAAAGCATGT TGGTTTGAAT GGCAATGGAG AACTCTTCGT
 GGCTTGCCAT GATTGCAATT [2790]

[2810 2820 2830 2840
 2850 2860 2870]

[
 . .]
 A_genome TCCCCATTTG CAAAACCTTGT TTCGACTATG AGCTTAAGGA AGGTCGAAAA
 GCTTCTTTGC GTTGCGGTAA [2814]
 B_genome TCCCCATTTG CAAAACCTTGT TTCGACTATG AACTTAAGGA AGGTCGAAAA
 GCTTGTTTGC GATGCGGTAA [2867]
 C_genome TCCCCATTTG CAAAACCTTGT TTCGACTATG AACTTAAGGA AGGTCGAAAA
 GCTTGTTTGC GTTGCGGTAA [2813]
 D_genome TCCCCATTTG CAAAACCTTGT TTCGACTATG AACTTAAGGA AGGTCGAAAA
 GCTTGTTTGC GTTGCGGTAA [2812]
 E_genome TCCCCATTTG CAAAACCTTGC TTCGACTATG AACTTAAGGA AGGTCGAAAA
 GCTAGTTTGC TTTGCGGTAA [2859]
 F_genome TCCCCATTTG CAAAACCTTGT TTCGACTATG AACTTAAGGA AGGTCGAAAA
 GCTTGTTTGC GTTGCGGTAA [2867]
 G_genome TCCCCATTTG CAAAACCTTGT TTCGACTATG AATTTAAGGA AGGTCGAAAA
 GCTTGTTTGC GTTGCGGTAA [2859]
 Gossyp.kirkii TCCCCATTTG CAAAACCTTGT TTGGACTATG AACTTAAGGA AGGTCGAAAA
 GCTTGCTTGC GTTGCGGTAA [2861]
 Kokia.drynar TCCCCATTTG CAAAACCTTGT TTCGACTCGG AACTTAAGGA AGGTCGAAAA
 GCTTGCTTGC GTTGCGGTAA [2860]

[2880 2890 2900 2910

```

2920          2930          2940]
[
.          .]
A_genome      TCCATACGAT GGCATGTTTC TATTTGCTCC TTTGTAAATC TTTAGATTCT
TGAGTTGGGA   TCAGTCATAT [2884]
B_genome      TCCATATGAT GGTATGTTTC TATTTGCTCC TTTGTAAATC TTTAGATTCT
TGAGTTGGGA   TCAGTCATAT [2937]
C_genome      TCCATACGAT GGTATGTTTC TATTTGCTCC TTTGTAAATC TTTAGATTCT
TGAGTTGGGA   TCAGTCATAT [2883]
D_genome      TCCATACGAT GGTATGTTTC TATTTGCTCC TTTGTAAATC TTTAGATTCT
TGAGTTGGAA   TCAGTCATAT [2882]
E_genome      TCCATACGAT GGTATGTTTC TATTTGCTAC TTTGTAAATC ATTAGATTCT
TGAGTTGGGA   TCTGTCATAT [2929]
F_genome      TCCATACGAT GGTATGTTTC TATTTGCTCC TTTGTAAATC TTTAGATTCT
TGAGTTGGGA   TCAGTCATAT [2937]
G_genome      TCCATACGAT GGTATGTTTC TATTTGCTCT TTTGTAAATC TTTAGATTCT
CGGGTTGGGA   TCAGTCATAT [2929]
Gossyp.kirkii TCCATACGAT GGTATGTTTC TATTTGCTCC TTTGTAGATC TTTAGATTCT
TGAGTTGGGT   TCAGTCATAT [2931]
Kokia.drynar  TCCATACGGG GGTATGTTTC TATTTGCTCC TTTGTAAATC TTTAGATTCT
TGAGTTGGGA   TCAGTCATAT [2930]

[          2950          2960          2970          2980
2990          3000          3010]
[
.          .]
A_genome      CCCAAAAATG TACATATTAA CTTCATTGT TTTTCCAAT GCTTGTTTAA
TTTCCCTGGA   TTCTTTGCCA [2954]
B_genome      CCCAAAA-TG TACATATTAA CTTCATTGT TTTTCCAAT GCTTGTTTAA
TTTCCCTGGA   TTCTTTGCCA [3006]
C_genome      CCCAAAA-TG TACATATTAA CTTCATTGT TTTTCCAAT GCTTGTTTAA
TTTCCCTGGA   TTCTTTGCCA [2952]
D_genome      CCCAAAA-TA TACATATTAA CTTCATTGT TTTTCCAAT GCTTGTTTAA
TTTCCCTGGA   TTCTTTGCCA [2951]
E_genome      CCCAAAA-TG TACATATTAA CTTCATTGT TTTTCCAAT GCTTGTTTAA
TTTCCCTGGA   TTCTTTGCCA [2998]
F_genome      CCCAAAA-TG TACATATTAA CTTCATTGT TTTTCCAAT GCTTGTTTAA
TTTCCCTGGA   TTCTTTGCCA [3006]
G_genome      CCCAAAA-TG TACATATTAA CTTCATTGT TTTTCCAAT GCTTGTTTAA
TTTCCCTGGA   TTCTTTGCCA [2998]
Gossyp.kirkii CCCAAAA-TA TACATAATAA CTTCATTGT TTTTACCAAT -----
----- [2970]
Kokia.drynar  CCCAAAA-TA TACATAATAA CTTCATTGT TTTTACCAAT -----
----- [2969]

[          3020          3030          3040          3050
3060          3070          3080]
[
.          .]
A_genome      TTTACATAAC TGAATTAATA TTTTAAGCTG ATGGCTCAAC TCCTCAGAGA
ACCTACTGGA   TGATGCGGAA [3024]
B_genome      TTTACATAAC TGAATTAATA TTTTAAGCTG ATGGCTCAAC TCCTCAGAGA
ACCTGCTGGA   TGATGCGGAA [3076]
C_genome      TTTACATAAC TGAATTAATA TTTTAAACTG ATAGCTCAAC TCCTCAGAGA
ACCTGCTGGA   TGATGCGGAA [3022]
D_genome      TTTACATAAC TGAATTAATA TTTTAAA?TG ATGGCTCAAC TCCTCAGAGA
ACCTGCTGGA   TGATGCGGAA [3021]

```

E_genome TTTACATAAC TGAATTAATA TTTTAAACTG ATGGCTCAAC TCCTCAGAGA
 ACCTGCTGGA TGATGCGGAA [3068]
 F_genome TTTACATAAC TGAATTAATA TTTTAAGCTG ATGGCTCAAC TCCTCAGAGA
 ATCTGCTGGA TGATGTGGAA [3076]
 G_genome TTTACATAAC TGAATTAATA TTTTAAACTG ATGGCTCAAC TCCTCAGAGA
 ACCTGCTGGA TGATGCGGAA [3068]
 Gossyp.kirkii -----A TTTTAAACTG ATGGCTCAAC TCCTCAGAGA
 ACCTGCTGGA TGACGCGGAA [3021]
 Kokia.drynar -----A TTTTGAAGCTG ATGGCTCAAC TCCTCAGAGA
 ACCTGCTGGA TGACGCGGAA [3020]

[3090 3100 3110 3120
 3130 3140 3150]

[.
]
 A_genome AAGGCATCTG GTGATCGATC CACAATGGCC GCACACATGG GCAAGTCTCA
 GGTATTTCCCT ATATTCCAGG [3094]
 B_genome AAGGCATCTG GTGATCGATC CACAATGGCC GCACACATGG ACAAGTCTCA
 GGTATTTCCCT ATATTCCAGG [3146]
 C_genome AAGGCATCTG GTGACCGATC CACAATGGCC GCACACATGG ACAAGTCTCA
 GGTATTTCCCT ATATTCCAGG [3092]
 D_genome AAGGCATCTG GTGATCGATC CACAATAGAC GCACACCTGG ACAAGTCTCA
 GGTATTTCCCT ATATTCCAGG [3091]
 E_genome AAGGCATCTG GTGATCGATC CACAATGGCC GCACACATGG ACAAGTCTCA
 GGTATTTCCCT ATATTCCAGG [3138]
 F_genome AAGGCATCTG GTGATCGATC CACAATGGCC GCACACATGG ACAAGTCTCA
 GGTATTTCCCT ATATTCCAGG [3146]
 G_genome AAGTCATCTG GTGATCGATC CACAATGGCC GCACACATGG ACAAGTCTCA
 GGTATTTCCCT ATAGTCCAGG [3138]
 Gossyp.kirkii AAGGCATCTG GTGATCGATC CACAATGGCT GCACACATGG CCAAGTCTCA
 GGTATTTCCCT ATATTCCAGG [3091]
 Kokia.drynar AAGGCATCTG GTGATCGATC CACAATGGCT GCACACATGG ACAAGTCTCA
 CGTATTTCCCT ATATTCCAGG [3090]

[3160 3170 3180 3190
 3200 3210 3220]

[.
]
 A_genome TCCAACCTCA TTTTAAAGT- TGGTATAATT TGTAACGTTT GACATTTCCCT
 TGGTACTTTA GTGTTACGAT [3163]
 B_genome TCCAACCTCA TTTTAAAGT- TAGTATAATT TGTAACGTTT GACATTTCCCT
 ATGTACTTTA GTGTTACGAT [3215]
 C_genome TCCAACCTCA TTTTAAAATA TATTATAATT TGTAACGTTT GACATTTCCCT
 AGGTACTTTA GTGTTACGAT [3162]
 D_genome TCCAACCTCA TTTTAAAGT- TAGTATAATT TGTAACGTTT TACATTTCCCT
 AGGTACTTCA GTGTTACGAT [3160]
 E_genome TCCAACCTCA TTTTCAAGT- TAGTATAAAT TGTAACGTTT GACATTTCCCT
 AGGTACTTTA GTGTTACGAT [3207]
 F_genome TCCAACCTCA TTTTAAAGT- TAGTATAATT TGTAACGTTT GACATTTCCCT
 AGGTACTTTA GTGTTACGAT [3215]
 G_genome TCCAACCTCA TTTTAAAGA- TCGTATAATT TGTAACGTTT GACATTTACT
 AGGTTCTTTA GTGTTACGAT [3207]
 Gossyp.kirkii TCCAACCTCA TTTTAAAGT- TAGTATAATT AGTAACGTTT GACATTTCCCT
 AGGTACTTTA GTGTTACGAT [3160]
 Kokia.drynar TCCAACCTCA TTTTAAAGT- TAGTATAATT AGTAACGTTT GACCTTTCCCT
 AGGTACTTTA GTATTACGAT [3159]

```

[           3230           3240           3250           3260
3270           3280           3290]
[
.           .]
A_genome      ACTGAGAGCT CATTCACTT GGTTTATTAC AGGATGCTGG AATTCATGCA
AGACATATCA   GCAGTGTGTC [3233]
B_genome      ACTCAGAGCT CATTCACTT GGTTTATTAT AGGATGCTGG AATTCATGCA
AGACATATCA   GCAGTGTGTC [3285]
C_genome      ACTGAGAGCT CATTCACTT GGTTTATTAC AGGATGCTGG AATTCATGCA
AGACATATCA   GAAGTGTGTC [3232]
D_genome      ACTGAGAGCT CATTCACTT GGTTTATTAC AGGATGCTGG AATTCATGCA
AGACATATCA   GCAGTGTGTC [3230]
E_genome      ACTGAGAGCT CATTCACTT GGTTTATTAC AGGATGCTGG AACTCATGCA
AGACATATCA   GCAGTGTGTC [3277]
F_genome      ACTGAGAGCT CATTCACTT GGTTTATTAC AGGATGCTGG AATTCATGCA
AGACATATCA   GCAGTGTGTC [3285]
G_genome      ACTGAGAGCT CATTCACTT GGTTTATTAC AGGATGCTGG AATTCATGCA
AGACATATCA   GCAGTGTGTC [3277]
Gossyp.kirkii ACTGAGACCT TAT---TCAT GGTTTATTAC AGGATGCTGG AATTCATGCA
AGACATATCA   GCAGTGTGTC [3227]
Kokia.drynar  ACTGAGACCT CAT---TCAT GGTTTATTAC AGGATGCTGG AATTCATGCA
AGACATATCA   GCAGTGTGTC [3226]

[           3300           3310           3320           3330
3340           3350           3360]
[
.           .]
A_genome      TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTTCA TAATCTTAAA
AGAAAAGTCC   AATTCTAGTT [3303]
B_genome      TCGCCTTGAT AGTGGTATGT AACATTATTA GTTTCTTTTA TAGTCTTAAA
AGAAAAGTCC   AATTCTAGTT [3355]
C_genome      TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTTCA TAATCTTAAA
AGAAAAGTCC   AATTCTAGTT [3302]
D_genome      TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTTCA TAATCTTAAA
AGAAAAGTCC   AATTCTAGTT [3300]
E_genome      TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTTCA TAATCTTGAA
AGAAAAGCCC   AATTCTAGTT [3347]
F_genome      TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTTCA TAATCTTAAA
AGAAAAGTCC   AATTCTAGTT [3355]
G_genome      TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTTCA TAATCTTAAA
AGAAAAGACC   AATTCTAGTT [3347]
Gossyp.kirkii TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTCCA TAATCTTAAA
AGTAAAGTCC   AATTCTAGTT [3297]
Kokia.drynar  TACGCTTGAT AGTGGTATGT AACATTATTA GTTTCTTCCA TAATCTTAAA
AG-AAAG-CC   AATTCTAG-T [3293]

[           3370           3380           3390           3400
3410           3420           3430]
[
.           .]
A_genome      GTCTTGCTC ATCCTTTGTT TTAATGAAGA AATGACCGAA GACAATGGGA
ACTTAATTTA   GAAGAATAGG [3373]
B_genome      GTCTTGCTC ATCCTATGTT TTAATGAAGA AATGACCGAA GACAATGGGA
ACCCAATTTG   GAAGAACAGG [3425]
C_genome      GTCTTGCTC ATCCTATGTT TTAATGAAGA AATGACCGAA GACAATGGGA
ACCCAATTTG   GAAGAACAGG [3372]
D_genome      GTCTTGCTC ACCCTATGTT TTAATGAAGA AATGACCGAA GACAATGGGA

```

ACCCAATTTG GAAGAACAGG [3370]
 E_genome GTCTTGTCTC ATCTTATGTT TTAATGAAGA AATGACCGAA GAAAATGGGA
 ACCCAATTTG GAAGAACAGG [3417]
 F_genome GTCTTGTCTC ATCCTATGTT TTAATGAAGA AATGACCGAA GACAATGGGA
 ACCCAATTTG GAAGAACAGG [3425]
 G_genome GTCTTGTCTC ATCCTATGTT TTAATGAAGA AATGACCGAA GACAATGGGA
 ACCCAATTTG GAAGAACAGG [3417]
 Gossyp.kirkii GTCTTGGCTC ATCCTATGCT TTAATGAAGA AATGACCGAA GACAATGGGA
 ACCCAATTTG GAAGAACAGG [3367]
 Kokia.drynar GTCTTGTCTC ATCCTATGTT TTAATGAAGA AATGACCGAA GACAATGGGA
 ACCCAATTTG GAAGAATAGG [3363]

[3440 3450 3460 3470
 3480 3490 3500]

[.]
 A_genome GTGGAAAGTT GGAAAGAAAA GAAGAATAAG AAAAAAAGA CTTCGATCAA
 GGTGGAAATA GAGGCTCAAG [3443]
 B_genome GTGGAAAGTT GGAAAGAAAA GAAGAATAAG AAAAAAAGA CTTCGATCAA
 GGTGGAAATA GAGGCTCAAG [3495]
 C_genome GTGGAAAGTT GGAAAGAAAA GAAGAATAAG AAAAAAAGA CTTCGATCAA
 GGTGGAAATA GAGGATCAAG [3442]
 D_genome GTGGAAAGTT GGAAAGAAAA GAAGAATAAG AAAAAAAGA CTTCGATCAA
 GGTGGAAATA GAGGCTCAAG [3440]
 E_genome GTGGAAAGTT GGAAAGAAAA GAAGAATAAG AAAAAAAGA CTTCGATCGA
 GGTGGAAATA AAGGCTCAAG [3487]
 F_genome GTGGAAAGTT GGAAAGAAAA GAAGAATAAG AAAAAAAGA CTTCGATCAA
 GGTGGAAATA GAGGCTCAAG [3495]
 G_genome GTGGAAAGTT GGAAAGAAA? ?A?TATT??? AATAATAAGA CTTCAATCAA
 GGTGGAAATA GAGGCTCAAG [3487]
 Gossyp.kirkii GTGGAAAGTT GGAAAGAAAA GAAGAATAAG AAGAAAAAGA CTTCGATCAA
 GGTGGAAATA GAGGCTCAAG [3437]
 Kokia.drynar GTGGAGAGTT GGAAAGAAAA GAAGAATAAG AAGAAAAAGA CTTCGATCAA
 GGTGGAAATA GAGGCTCAAG [3433]

[3510 3520 3530 3540
 3550 3560 3570]

[.]
 A_genome TTCCGCCTGA GCAACTCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 TCTTACCTGA ACCCTGTTGT [3513]
 B_genome TTCCGCCTGA GCAACTCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 CCTTACCTGA ACTCTGTTGT [3565]
 C_genome TTCCGCCTGA GCAACTCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 CCTTACCTGA ACTCTGTTGT [3512]
 D_genome TTCCGCCTGA GCAACTCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 CCTTCCCTGA ACTCTGTTGT [3510]
 E_genome TTCCGCCTGG GCAACTCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 CCTTACCTGA ACTCTGCTGT [3557]
 F_genome TTCCGCCAGA GCAACTCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 CCTTACCTGA ACTCTGTTGT [3565]
 G_genome TTCCGCATGA GCAATCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 CCTTACCTGA ACTCTGTTGT [3557]
 Gossyp.kirkii TTCCGCCTGA GCAACTCATG GAAGATAAAC TGTAAGTTTC AATTACAAAG
 CCTTACCTGA ACTCCGTTGT [3507]
 Kokia.drynar TTCCGGCTGA GCAACTCATG GAAGATAAAC CGTAAGTTTC AATTACAAAG
 CCTTACCTGA ACTCTGTTGT [3503]

```

[
3620          3630          3580          3590          3600          3610
[
.
.]
A_genome      TTATTTATAA TACAAAGCAA ATTAATGAGA AGAGGTCAGT AATGTTTTTTG
TTTATAACAT   TTTGACCAAC [3583]
B_genome      TTATTTATAA TACAAAGCAA ATTAATGAGA AGAAGTCAGT AATGTTTTTTG
TTTATAACAT   TTTGACCAAC [3635]
C_genome      TTAT----AA TACAAAGCAA ATTAATGAGA AGAAGTCAGT AATGTTTTTTG
TTTATAACAT   TTTGACCAAC [3578]
D_genome      TTAT----AA TACAAAGCAA ATTAATGAGA AGAAGTCATT AATGTTTTTTG
TTTATAACAT   TTTGACCAAC [3576]
E_genome      TTAT----AA TACAAAGCAA ATTAATGAGA AGAAGTCAGT AATGTTTTTTG
TTTATAACAT   TTTGACCAAC [3623]
F_genome      TTATTTATAA TACAAAGCAA ATTAATGAGA AGAAGTCAGT AATGTTTTTTG
TTTTATAACAT TT-GACCAAC [3634]
G_genome      TTAT----AA TACAAAGCAA ATTAATGAGA AGAAGTCAGT AATGATTTTTG
TTTATAACAT   TTTGACCAAC [3623]
Gossyp.kirkii TTAT--ATAA TACAAAGCAA ATTA-TGAGA AGAAGTCAGT AATGTTTTTTG
TTTATAACAT   TTTGACCAAC [3574]
Kokia.drynar  TTAT--ATAA TACAAAGCAA ATTA-TGAGA AGAAGTCAGT AATGTTTTTTG
TTTATAACAA   TTTGACCAAC [3570]

[
3690          3700          3650          3660          3670          3680
[
.
.]
A_genome      CACTAATAGC TTTATTGAGC ATGCTTTAAC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3653]
B_genome      CACTAATAGC TTTATTGAGC ATGCTTTAAC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3705]
C_genome      CACTAATAGC TTTATTGAGC ATGCTTTAAC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3648]
D_genome      CACTAATCGC TTTATTGAGC ATGCTTTAAC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3646]
E_genome      CACTAATAGC TTTATTGAGC ATGCTTTAAC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3693]
F_genome      CACTAATAGC TTTATTGAGC ATGCTTTAAC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3704]
G_genome      CATTAAATAGC TTTATTGAGC ATGCTTTAAC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3693]
Gossyp.kirkii CACTAATAGC TTTATTGAGC ACGCTTTAAC CATATATATC AGATTACCAA
TTTAATTTGC   TTAGAATTTA [3644]
Kokia.drynar  CACTAATAGC TTTATTGAGC ACGCTTTACC CATATATATC AGATTACCAA
TTTGATTTGC   TTAGAATTTA [3640]

[
3760          3770          3720          3730          3740          3750
[
.
.]
A_genome      ATGGAAGTAA TGTTCAATTA TGACTGATAT GTAATATTTG CTCTTGCAGA
GCAGCTGATG   CCTTTCAACC [3723]
B_genome      ATGGAAGTAA TGTTCAATTA TGACTGATAT GTAATATTTG CTCTTGCAGA
GCAGCTGATG   CATTTC AACC [3775]
C_genome      ATGGAAGTAA TGTTCAATTA TGACTGATAT GTAATATTTG CTTTTGCAGA
GCAGCTGATG   CTTTTCAACC [3718]

```

D_genome ATGGAAGTAA TGTTCAATTA TGACTGATAT GTAATATTTG CTTTTGCAGA
 GCAGCTGATG CTTTTCAACC [3716]
 E_genome ATGAAAGTAA TGTTCAATTA TGACTGATAT GTAATATTTG CTTTTGCAGA
 GCAGCTGATA CTTTTCAATC [3763]
 F_genome ATGGAAGTAA TGTTCAATTA TGACTGATAT GTAATATTTG CTCTTGCAGA
 GCAGCTGATG CTTTTCAACC [3774]
 G_genome ATGGAAGTAA TGTTCAATTA TGACTGAAAT GTAATATTTG CTTTTGCAGA
 GCAGCTGATG CTTTTCAACC [3763]
 Gossyp.kirkii ATGGAAGTAA TGTTCAATTA TGACTGATAT GATATATTTG CTTTTGCAGA
 GCAGCTGATG CTTTTCAACC [3714]
 Kokia.drynar ATGGAAGTAA TGTTCAATTA TGACTGATAT GATATATTTG CTTTTGCAGA
 GCAGCTGATG CTTTTCAACC [3710]

[3790 3800 3810 3820
 3830 3840 3850]

[.]
 A_genome CCTCTCGACC GTAATTCCAA TTCCGAAAAG TAGACTTGCA CTATATAGAA
 CTGTGATCAT TATGCGGTTG [3793]
 B_genome CCTCTCGACC GTAATTCCAA TTCCGAAAAG CAGACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGTTT [3845]
 C_genome CCTCTCGACC GTAATTCCAA TTCCGAAAAG CAAACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGGTTG [3788]
 D_genome CCTCTCGACC GTAATTCCAA TTCCGAAAAG CAGACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGGTTG [3786]
 E_genome CCTCTCGACC GTAGTTCCAA TTCCGAAAAG CAGACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGGTTG [3833]
 F_genome CCTCTCGACC GTAATTCCAA TTCCGAAAAG CAGACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGGTTG [3844]
 G_genome CCTCTCGACC GTAATTCCAA TTCCGAAAAG CAAACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGGTTG [3833]
 Gossyp.kirkii CCTCTCGACC GTAATTCCAA TTCCGAAAAG CAGACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGGTTG [3784]
 Kokia.drynar CCTCTCGACC GTAATTCCAA TTCCGAAAAG CAGACTTGCA CCATATAGAA
 CTGTGATCAT TATGCGGTTG [3780]

[3860 3870 3880 3890
 3900 3910 3920]

[.]
 A_genome ATCATTTTGG GTCTTTTCTT CCATTACCGA GTAACGAATC CAGTTGACAG
 TGCTTTTGCA CTGTGGCTGA [3863]
 B_genome ATCATTTTGG GTCTTTTCTT CCATTACCGA GTAACGAATC CAGTTGACAG
 TGCTTTTGCT CTGTGGCTGA [3915]
 C_genome ATCATTTTGG GTTTTTTCTT CCATTACCGA GTAACGAATC CAGTTGACAG
 TGCTTTTGCT CTGTGGCTGA [3858]
 D_genome ATCATTTTGG GTCTTTTCTT CCATTACCGA GTAACGAATC CAGTTGACAG
 TGCTTTTGCT CTGTGGCTGA [3856]
 E_genome ATCATTTTGG GTCTTTTCTT CCGTTACCGA GTAACGAATC CAGTTAACAG
 TGCTTTTGCT CTGTGGCTGA [3903]
 F_genome ATCATTTTGG GTCTTTTCTT CCATTACCGA GTAACAAATC CAGTTGACAG
 TGCTTTTGCT CTGTGGCTGA [3914]
 G_genome ATCATTTTGG GTTTTTTCTT CCATTACCGA GTAACGAATC CAGTTGACAG
 TGCCTTTGCT CTGTGGCTGA [3903]
 Gossyp.kirkii ATCATTTTGG GTCTTTTCTT CCATTACCGA GTAACGAATC CAGTTGCCAG
 TGCTTTTGCT CTGTGGCTGA [3854]
 Kokia.drynar ATCATTTTGG GTCTTTTCTT CCATTACCGA GTAACGAATC CAGTTGACAG

TGCTTTTGCT CTGTGGCG?? [3850]

[3930 3940 3950 3960
3970 3980 3990]

[.]

A_genome CTGTGGTTGA ACATGTTGGG TTGAATGTTA ATGGTGAACC CTTTGTGGCT
TGCCATGAAT GTAATTTCCC [3933]
B_genome CTGTGGT?GA ACATGTTGGG TTGAATGTTA ATGGTGAACC CTTTGTGGCT
TGCCATGAAT GTAATTTCCC [3985]
C_genome CTGTGGTTGA ACATGTTGGG TTGAATGTTA ATGGTGAACC CTTTGTGGCT
TGCCATGAAT GTAATTTCCC [3928]
D_genome CTGTGGTTGA ACATGTTGGG TTGAATGTTA ATGGTGAACC TTTTGTGGCT
TGCCATGAAT GTAATTTCCC [3926]
E_genome CTGTGGT?GA ACATGTTGGG TTGAATGTTA ATGGTGAACC CTTTGTGGCT
TGCCATGAAT GTAATTTCCC [3973]
F_genome CTGTGGTTGA ACATGTCGGG TTGAATGTTA ATGGAGAACC CTTTGTGGCT
TGCCATGAAT GTAATTTCCC [3984]
G_genome CTG?GGTAGA ACATGTTGGG TT?AATGTCA ATGGTGAACC CT??G?GGCT
TGCCATGAAT GT??TTTCCC [3973]
Gossyp.kirkii ????????GA ACATGTTGGG TTGAATGTTA ATGGTGAACC CTTTGTGGCT
TGCCATGAAT GTAATTTCCC [3924]
Kokia.drynar ?????????? ???TGTTGGG TTGAATGTTA ATGGTGAACC CTTTGTGGCT
TGCCATGAAT GTAATCTCCC [3920]

[4000 4010 4020 4030
4040 4050 4060]

[.]

A_genome TATTTGTAAG AGTTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GCTTGCGTTG TGGTAGTCCG [4003]
B_genome TATTTGTAAG AGTTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GCTTGCGTTG TGGTA?TCCA [4055]
C_genome TATTTGTAAG AGTTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GCTTGCGTTG TGGTAGTCCA [3998]
D_genome TATTTGTAAG AGCTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GCTTGCGTTG TGGTAGTCCA [3996]
E_genome TATTTGTAAG AGTTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GCTTACGTTG TGGTAGTCCA [4043]
F_genome TATTTGTAAG AGTTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GTTTGCCTTG TGGTAATCCA [4054]
G_genome TATTTGTAAG AGTTGTTTTG AGTATAATCT TAAGGAAGGA CGAAAAGCTT
GCTTGCGTTG TGGTAGTCCA [4043]
Gossyp.kirkii TATTTGTAAG AGTTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GCTTGCGTTG TGGTACCCCA [3994]
Kokia.drynar TATTTGTAAG AGTTGTTTTG AGTATGATCT TAAGGAAGGA CGAAAAGCTT
GCTTGCGTTG TGGTAGCACA [3990]

[4070 4080 4090 4100
4110 4120 4130]

[.]

A_genome TATGATGGTA CATTTCATTT TAATTCTTGA TGCTAGTTTT TTA CTGTTTT
CCATTTGGTT CTTGATAAAT [4073]
B_genome TATGATGGTA CATTTCATTT TAACTCTTGA TACTAGTTTT TTA CTGTTTT
CCATTTGGTT CTTGATAAAT [4125]
C_genome TATGATGGTA CATTTCATTT TAATTCTTGA TGCTAGTTTT TTA CTGTTTT

CCATCTGGTT CTTGATAAAT [4068]
D_genome TATGATGGTA CATTTCATTT TAATTTTTGA TGCTAGTTTT TTACTTGTTT
CCATTTGGTT CTTGATAAAT [4066]
E_genome TATGATGGTA CATTTCATTT TAATTCTTGA TGCTAGTTTT TTACTTGTTT
CCATTTGGTT CTTGATAAAT [4113]
F_genome TATGATGGTA CATTTCATTT TAATTCTTGA TGCTAGTTTT TTACTTGTTT
TCATTAGGTT CTTGATAAAT [4124]
G_genome TATGATGGTA CATTTCATTT TAATTCTTGA TGCTAGTTTT TTACTTGTTT
CCATTTGGTT CTTGATAAAT [4113]
Gossyp.kirkii TATGATGGTA CATTTCATTT TAATTCTTGA TGCTAGTTTT TTACTTGTTT
CCATTTGGTT CTTGATAAAT [4064]
Kokia.drynar TATGATGGTA CATTTCATTT TAATTCTTGA TGCTAGTTTT TTACTTGTTT
CCATTTGGTT CTTGATAAAT [4060]

[4140 4150 4160 4170
4180 4190 4200]

[.]
A_genome CTTTGTTATA A-TCTTGTGT TTGCCAAGTG CTTGTTTGAT TTCCCATGAA
AAAGATAAAG ATAGAGAAGT [4142]
B_genome CTTTGTTATA AATCTTGTGT TTGCCAAGTG CTTGTTTGAT TTCCCATGAA
AAAGATAAAG ATAGAGAAGT [4195]
C_genome CTTTGTTATA AATCTTGTGT TTGCCAAGTG CTTGTTTGAT TTCCCATGAA
AAAGATAAAG ATAGAGAAGT [4138]
D_genome CTTTGTTATA AATCTTGTGA TTGCCAAGTG CTTGCTTGAT TTCCCATGAA
AAAGATAAAG ATAGAGAAGT [4136]
E_genome CTTTGTTATA AATCTTGTGT TTGCCAAATG CTTGTTTGAT TTCCCATGAA
AAAGATAAAG ATAGAGAAGT [4183]
F_genome CTTTGTTATA AATCTTGTGT TTGTCAAGTG CTTGTTTGAT TTCCCATGAA
AAAGATAGAG ATAGAGAAGT [4194]
G_genome CTTTGTTATA AATCTTGTGT TTGCCAAGTG CTTGTTTGAT TTCCCATGAA
AATGATAAAT ATAGAGAAGT [4183]
Gossyp.kirkii CTTTGTTATA AATCTTGTAT TTGCCAAGTG CTTGTTTAAAT TTCCCATGAA
AAAGATAAAG ATAGAGAAGT [4134]
Kokia.drynar CTATGTTATA AATCTTGTAT TTGCCAAGTG CTTGTTTAAAT TTCCCATGAA
AAAGATAAAG ATAGAGAAGT [4130]

[4210 4220 4230 4240
4250 4260 4270]

[.]
A_genome TGTAAACTGA TTGCACGACT GATTATTGTG AACTCCTCAG AAAACCTGTT
GGACGATGTC GAGAAGGCCA [4212]
B_genome TGTAAACTGA TTGCACGACT GATTATTGTG AACTCCTCA? AAAACCTGTT
GGACGATGTC GAAAAGGCCA [4265]
C_genome TGTAAACTGA TTGCACGACT GATTATTGTG AGCTCCTCAG AAAACCTGTT
GGACGATGTC GAGAAGGCCA [4208]
D_genome TGTAAACTGA TTGCACGACT GATTATTGTG AACTCCTCAG AAAACCTGTT
GGACGATGTC GAGAAGGCCA [4206]
E_genome TGTAAACTGA TTGCACGACT GATTATTGTG AATTCCTCAG AAAACCTGTT
GGACGATGTC GAGAAGGCCA [4253]
F_genome TGTAAACTGA TTGCACGACT GATTATTGTG AACTCCTCAG AAAACCTATT
GGACGATGTC GAGAAGGCCA [4264]
G_genome TGTAAACTGA TTGCACGACT GATTATTGTG AACTC---AG AAAACCTGTT
GGAC?ATGTC GAGAAGGCCA [4250]
Gossyp.kirkii TTTAACTGA TTGCACGACT GGTTATTGTG AACTCCTCAG AGAACCTGTT
GGACGATGTC GAGAAGGCCA [4204]

Kokia.drynar TTTAAATTGA TTGCACGACT GGTTATTGTG AACTCCTCAG AGAACCTGTT
GGACGATGTC GAGAAGGCAA [4200]

[4280 4290 4300 4310
4320 4330 4340]

[.
.]
A_genome CCGGCGATCA ATCGACAATG GCTGCACATT TGAGCAAGTC TCAGGTATTG
TTTT-TTGCT GCTTTTAAAA [4281]
B_genome CCGGCGATCA ATCGACAATG GCTGCACATT TGAGCAAGTC TCAGGTATTG
TTTTCTTGCT GCCTTTGAAA [4335]
C_genome CCGGTGATCA ATCGACAATG GCTGCACATT TGAGCAAGTC TCAGGTACTG
ATTT-TTGCT GCCTTTGAAA [4277]
D_genome CCGGCGATCA ATCGACAATG GCTGCACATT TGAACAAGTC TCAGGTATTG
TTTT-TTGCT GCCTTTGAAA [4275]
E_genome CCGGGGATCA ATCGACAATG GCTGCACATT TGAGCAAGTC TCAGGTATTG
TTTTTTTGCT GCCTTTGAAA [4323]
F_genome CCGGCGATCA ATCGACAATG GCTGCACATT TGAGCAAGTC TCAGGTATTG
TTTT-TTGCT GCCTTTGAAA [4333]
G_genome CCGGTGATCA ATCGACAATG GCTGCACATT TGACCAAGTC TCAGGTACTG
TTTT--TGCT GCCTTTGAAA [4318]
Gossyp.kirkii CAGGCGATCA ATCGACAATG GCTGCACAGT TGAGCAAGCC TCAGGTACTG
TTTT-TTGCT GCCTTTGAAA [4273]
Kokia.drynar CAGGCGATCA ATCGACAATG CCTGCACAGT TGAGCAAGTC TCAGGTACTG
TTTT-TTGCT GCCTTTGAAA [4269]

[4350 4360 4370 4380
4390 4400 4410]

[.
.]
A_genome GGTT--CAGT CAAAGCCAGG AGGGATATTG AGAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGATGTTG [4349]
B_genome GGTT--CAGT CAAAGCCAG- AGGGATATTG AGAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGATGTTG [4402]
C_genome CGTT--CAGT CAAAGCCAGG AGGGATATTG AGAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGATATTG [4345]
D_genome GGTT--CAGT CAAAGCCAGG AGGGATATTG AGAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGATGTTG [4343]
E_genome GGTT--CAGT CAAAGCCAGG AGGGATATTG AGAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGATGTTG [4391]
F_genome GGTT--CAGT CAAAGCCAGG AGGGATATTG AGAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGATGTTG [4401]
G_genome ATTT--CAGT CAAAGCCAGG AGGGATATTG AGAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGAT?TTG [4386]
Gossyp.kirkii GGTTTTAGT CAAAGCGAGG AGGGATATTG AAAGCTTTGT GTTTTTCATG
TTGGTTTATA CAGGATGTTG [4343]
Kokia.drynar GGTTTTAGT CAAAGCCGGG AGGGATATTG AAAGCTTTGT GTTATTCATG
TTGGTTTATA CAGGATGTTG [4339]

[4420 4430 4440 4450
4460 4470 4480]

[.
.]
A_genome GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
TAATATAAAT TTCTTTCCAT [4419]
B_genome GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
TAATATAAAT TTCTTTCCAT [4472]

C_genome GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
 TAATATAAAT TTCTTTCCAT [4415]
 D_genome GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
 TAATATAAAT TTCTTTCCAT [4413]
 E_genome GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
 TAATAAAAAT TTCTTTCCAT [4461]
 F_genome GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
 TAATATAAAT TTCTTTCCAT [4471]
 G_genome GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
 TAATATAAAT TTCTTTCCAT [4456]
 Gossyp.kirkii GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
 TAATATAAAT TTCTTTCCAT [44913]
 Kokia.drynar GAATTCATGC AAGACATATC AGCAGTGTGT CTACATTGGA TAGTGGTATG
 TAATATAAAT TTCTTTCCAT [4409]

[4490 4500 4510 4520
 4530 4540 4550]

[.]
 A_genome ATTATTGGTT TCTTTCTTTC AA--TTCCTT CAATTCTGAA AGCTCGAACC
 GTCTCGTAAA ATATCGTAGA [4487]
 B_genome ACTATTGGTT TCTTTCTTTC AATCTTCCTT CAATTCTGAA AGCTCGAATC
 GTCTCGTAAA ATATCGTAGA [4542]
 C_genome ATTATTGGTT TCTTTCTTTC AATCTTCCTT CAATTCTGAA AGCTCGAATC
 GTCTCGTAAA ATATCGTAGA [4485]
 D_genome ATTAATGGTT TCTTTCTTTC AATCTTCCTT CAACTCTGAA AGCTCGAATC
 GTCTCGTAAA ATATCGTAGA [4483]
 E_genome ATTATTGGTT TCTTTCTTTC AATCTTCCTT CAATTCTGAA ATATCGAATC
 GTCTCGTAAA ATATCGTAGA [4531]
 F_genome ATTATTGGTT TCTTTCTTTC AATCTTCCTT CAATTCTGAA AGCTCGAATC
 GTCTCGTAAA ATATCGTAGA [4541]
 G_genome ATTATTGGTT TCTTTCTTTC AATCTTCCTT CAATTCTGAA AGCTCGAATC
 GTCTCGTAAA ATATCGTAGA [4526]
 Gossyp.kirkii ATTAATGATT TCTTTCTTTC AATCTTCCTT CAATTTTCAA CGCTCGAATT
 GTTTTGTAAT ATATCGTAGA [4483]
 Kokia.drynar ATTATTGATT TCTTTCTTTC AATCTTCCTT CAATTCTCAA AGCTCGAATC
 GTCTTGTAAT ATATCGTAGA [4479]

[4560 4570 4580 4590
 4600 4610 4620]

[.]
 A_genome AATGACTGAA GACAATGGGA ATCCGATTTG GAAGAACAGG GTGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4557]
 B_genome AATGACTGAA GACAATGGGA ATCCGATTTG GAAGAACAGG GTGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4612]
 C_genome AATGACTGAA GACAATGGGA ATCCGATTTG GAAGAACAGG GTGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4555]
 D_genome AATGGCTGAA GACAATGGGA ATTCGATTTG GAAGAACAGG GTGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4553]
 E_genome AATGGCTGAA GACAATGGGA ATCCGATTTG GAAGAACAGG GTGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4601]
 F_genome AATGACTGAA GACAATGGGA ATCCGATTTG GAAGAACAGG -TGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4610]
 G_genome AATGACTGAA GACAATGGGA ATCCGATTTG GAAGAACAGG GTGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4596]
 Gossyp.kirkii AATGACTGAA G?CAATGGGA ATCCGATTTG GAAGAACAGG GTGGAAAGTT

GGAAAGAAAA GAAGA?CAAG [4553]
 Kokia.drynar AATGACTGAA GACAATGGGA ATCCGATTTG GAAGAACAGG GTGGAAAGTT
 GGAAAGAAAA GAAGAACAAG [4549]

[4630 4640 4650 4660
 4670 4680 4690]

[.]
 A_genome AAGAAGAAGC CTGCAACAAC TAAGGTTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGAAGATA [4627]
 B_genome AAGAAGAAGC CTGCAACAAC CAAGGTTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGAAGATA [4682]
 C_genome AAGAAGCAGC CTGCAACAAC TAAGGTTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGAAGATA [4625]
 D_genome AAGAAGAAGC CTGCAACAAC TAAGGTTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGAAGATA [4623]
 E_genome AAGAAGAAGC CTGCAACAAC CAAGATTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGACGATA [4671]
 F_genome AAGAAGAAGC CTGCAGCAAA TAAGGTTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGAAGATA [4680]
 G_genome AAGAAGAAGC CTGCAACAAC TAAGGTTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGAAGATA [4666]
 Gossyp.kirkii AAGAAGAAGC CTGCAACAAC TAAGGTTGAA AGAGAGGCTG AAAT?CCACC
 TGAGCAACAA ATGGAAGATA [4623]
 Kokia.drynar AAGAAGAAGC CTGCCCAAC TAAGGTTGAA AGAGAGGCTG AAATCCCACC
 TGAGCAACAA ATGGAAGATA [4619]

[4700 4710 4720 4730
 4740 4750 4760]

[.]
 A_genome AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAATATACAA
 AGC----- -AGATTAATG [4689]
 B_genome AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAGTATACAA
 AGC----- -AGATTAATG [4744]
 C_genome AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAATATACAA
 AGC----- -AGATTAATG [4687]
 D_genome AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAATGTACAA
 AGC----- -AGATTAATG [4685]
 E_genome AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAATCTACAA
 AGC----- -AGATTAATG [4733]
 F_genome AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAATATACAA
 AGC----- -AGATTAATG [4742]
 G_genome AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAATATACAA
 AGC----- -AGATTAATG [4728]
 Gossyp.kirkii AACCGTAAGT ATTTAATTAG AAAAGCCTTG CTTGATTTTG AAATATACAA
 AGCACTGAAG CAGATTAATG [4693]
 Kokia.drynar AACCGTAAGT ATTTAATTAG AAAAGCGTTG CTTGATTTTG AAATATACAA
 AGCCCTGAAG CATATTAATG [4689]

[4770 4780 4790 4800
 4810 4820 4830]

[.]
 A_genome ATAAGAGCCT ATTTAGTAAA ATGATTTTTG TTTATGTTAT GTGTTACTGA
 TATGTAATAT TTGCATCTGC [4759]
 B_genome ATAAGAGCCT ATTTAGTGAA ATGATTTTTG TTTATGTTAT GTGTTACTGA

TATGTAATAT TTGCACCTGC [4814]
 C_genome ATAAGAGCCT ATTTAGTGAA ATGATTTT-G TTTATGTTAT GTGTT?CTGA
 TATGTAATAT TTGCATCTGC [4756]
 D_genome ATAAGAGCCT ATTTAGTGAA ATGATTTTTG TTTATGTTAT GTGTTACTGA
 TATGTAATAT TTGCATCTGC [4755]
 E_genome ATAAGAGCCT ATTTAGTGAA ATGATTTTTG TTTATGTTAT GTGTTACTGA
 TATGTAATAT TTGCATCTGC [4803]
 F_genome ATAAGAGCCT ATTTAGTGAA ATGATTTTTG TATGTGTTAT GTGTTACTGA
 TATGTAATAT TTGCATCTGC [4812]
 G_genome ATAAGAGCCT ATTTAGTGAA ATGATTTTTG TTTATGTTCT GTGTTACTGA
 TATGTAATAT TTGCATCTGC [4798]
 Gossyp.kirkii ATAAGGGT?T ATTTAGTGAA ATGATTTTTG TTTATGTTGT GTGTTACTGA
 TATGTAATAT TTGCATCTGC [4763]
 Kokia.drynar ATAAGGGTCT ATTTAGTGAA ATGATTTTTG TTTATGTTGT GTGTTACTGA
 TATGTAATAT TTGCATCTGC [4759]

[4840 4850 4860 4870
 4880 4890 4900]

[.]
 A_genome AGGGCACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAATCCCGAA
 AAGCAGACTT GCACCATACC [4829]
 B_genome AGGGCACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAATCCCGAA
 AAGCAGACTT GCACCATACC [4884]
 C_genome AGGGCACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAATCCCGAA
 AAGCAGACTT GCACCATACC [4826]
 D_genome AGGGCACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAATCCCGAA
 AAGCAGACTT GCACCATACC [4825]
 E_genome AGGGCACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAATCCCGAA
 AAGCAGACTT GCACCATACC [4873]
 F_genome AGGGCACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAAT?CCGAA
 AAGCAGACTT GCACCATACC [4882]
 G_genome AGGGCACCC? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [4868]
 Gossyp.kirkii AGGGTACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAATCCCGAA
 AAGCAGACTT GCACCATACC [4833]
 Kokia.drynar AGGGTACCGG ATGCTTCCCA GCCCCTCTCG ACTATAATTC CAATCCCGAA
 AAGCAGACTT GCACCATACC [4829]

[4910 4920 4930 4940
 4950 4960 4970]

[.]
 A_genome GAACCGTGAT CATTATGCGA TTGATCATTC TCGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTGA [4899]
 B_genome GAACCGTGAT CATTATGCGA TTGATCATTC TCGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTGA [4954]
 C_genome GAACCGTGAT CATTATGCGA TTGATCATTC TCGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTGA [4896]
 D_genome GAACCGTGAT CATTATGCGA TTGATCATTC TTGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTGA [4895]
 E_genome GAACCGTAAT CATTATGCGA TTGATCATTC TCGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTGA [4943]
 F_genome GAACCGTGAT CATTATGCGA TTGATCATTC TCGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTGA [4952]
 G_genome ?????????? ?????????? ?????????? TCGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTGA [4938]

Gossyp.kirkii GAACCGTGAT CATTTTGC GA TTTGATCATTC TCGGTCTTTT CTTCCATTAT
 CGAGTAACAA ACCCCGTTG? [4903]
 Kokia.drynar GAACCGTGAT CATTTTGC GA TTTGATCATTC TCGGTCTTTT CTTCAATTAT
 CGAGTAACAA ACCCTGTTGA [4899]

[4980 4990 5000 5010
 5020 5030 5040]

[.]
 A_genome CAGTGCTTTT GGACTGTGGC TCACTTCAGT CATATGTGAT CTTGGCACCT
 CAACTTTT TAG CGAATACACT [4969]
 B_genome CAGTGCTTTT GGACTGTGGC TCACTTCAGT CATATGTGAT CTTGGCACCT
 CAACTTTT TAG CGAATACACT [5024]
 C_genome CAGTGCTTTT GGACTGTGGC TCACTTCAGT CATATGTGAT CTTGGCACCT
 CAACTTTT TAG CGAATACACT [4966]
 D_genome CAGTGCTTTT GGACTGTGGC TCACTTCAGT CATATGTGAT CTTGGCACCT
 CAACTTTT TAG CGAATACACT [4965]
 E_genome CAGTGCTTTT GGACTGTGGC TCACTTCAGT CATATGTGA? ??????????
 ?????????? ?????????? [5013]
 F_genome CAGTGCTTTT GGACTGTGGC TCACTTCAGT CATATGGAAT CTTGGCACCT
 CAACTTTT TAG CGAATACACT [5022]
 G_genome CAGTGCTTTT GGACTGTGGC TCACTTCAGT CATATGTGAT CTTGGCACCT
 CAACTTTT TAG CGAATACACT [5008]
 Gossyp.kirkii CAGTGCTTTT GGCCTGTGGC TC?CTTCAGT C?????????T CTTGGCACCT
 CAACTTTT TAG CGAATACACT [4973]
 Kokia.drynar CAGTGCTTTT GGCCTGTGGC ?CACTTCAGT CA?????????T CTCGGCACCT
 CAACTTTT TAG CGAATACACT [4969]

[5050 5060 5070 5080
 5090 5100 5110]

[.]
 A_genome GTTGTCCATG TCGGCCAGGT CGCCAAGATT AATCCAGAGG CTCCACTTGA
 TAAAGTGTGT GTTCTTAGCT [5039]
 B_genome GTTGTCCATG TCGGCCAGGT CGCCAAGATT AATCCAGAGG CTCCACTCGA
 TAAAGTGTGT GTTCTTAGCT [5094]
 C_genome GTTGTCCATG TCGGCCAGAT CGCCAAGATT AATCCAGAGG CTCCACTTGA
 TAAAGTGTGT GTTCTTAGCT [5036]
 D_genome GTTGTCCATG TCGGCCAGGT CGCTAAGATT AATCCAGAGG CTCCACTTGA
 TAAAGTGTGT GTTCTTAGCT [5035]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5083]
 F_genome GTTGTCCATG TCGGCCAAGT CGCCAAGATT AATCCAGAGG CTCCACTTGA
 TAAAGTGTGT GTTCTTAGCT [5092]
 G_genome GTTGTCCATG TCGGCCAGAT CGCCCAGATT AATCCACAGG CTCCACTTGA
 TAAAGTGTGT GTTCTTAGCT [5078]
 Gossyp.kirkii GTTGTCCATG TCGGCCAGGT CGCCAAGATT AATCCAGAGG CTCCACTTGA
 TAAAGTGTGT GTTCTTAGCT [5043]
 Kokia.drynar GTTGTCCATG TCGGCCAGGT CGCCAAGATT AATCCAGAGG CTCCACTTGA
 TAAAGTGTGT GTTCTTAGCT [5039]

[5120 5130 5140 5150
 5160 5170 5180]

[.]
 A_genome GCGGAATGTC GACAGGT-CC GGGCTTCACT ACAACTCGGC TTTTTTTTTT
 CCATTTTGGGA CATATATGAA [5108]

B_genome GTGGAATGTC GACAGGT-CC GGACTTCACT ACAACTCTAC TTTTTTTT-CT
 CCATTTTGGGA TACATATGAA [5162]
 C_genome GCGGAATGTC GACAGGT-CC GGACTTCGC- --AACTCTGC TTTTTTTT-CT
 GCATTTTGGGA TATATATGAA [5101]
 D_genome GCGGAATGTC GACAGGT-CT GGACTTCACT AAAACTTTAC TTTTTTTT--CT
 CCATTTTAGA TATATATAAA [5102]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5153]
 F_genome GCGGAATGTC GACAGGT-CT GGACTTCACT ACAACTCTGC TTTTTTTT-CT
 CCATTTTGGGA TATATATGAA [5160]
 G_genome GCGGAATGTC GACAGGT-CC GAACTTCAC- --AACTCTGC TTTTTTTTCT
 GCATTTTGGGA TATATATGAA [5144]
 Gossyp.kirkii GCGGAATGTC CACAGGTTCC GGACTTCACT ACAACTCTGC TTTTTTTTCT
 TCATTTTCTGA TATA-----G [5108]
 Kokia.drynar GCGGAATGTC CACAGGTTCC GGACTTCACT ACAACGCTGC TTTTTTTTCT
 TCATTTTCAA TATA-----G [5104]

[5190 5200 5210 5220
 5230 5240 5250]

[.]

A_genome CACATGACTT ATAGCTCATC CCTGCTTGCA GGTTTTGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5178]
 B_genome CACATGACTT ATAGCTCATC CCTGCTTGCA GGTTTTGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5232]
 C_genome CACATGACTT ATAGCTCATC CCTGCTTGCA GGTTTTGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5171]
 D_genome CACATGACTT A--GCTCATC TTTGCTTACA GGTTTTGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5170]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5223]
 F_genome CACATGACTT ATAGCTCATC CCTGCTTGCA GGTTTTGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5230]
 G_genome CACATAACTT ATAGCTCATC CCTGCTTGCA GGTTTTGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5214]
 Gossyp.kirkii CTCATCAGTC A----TC--C CCTGCTTGCA GGTTTCGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5172]
 Kokia.drynar CTCATCAGTC A----TC--C CCTGCTTGCA GGTTTTGGTG CCACTGTGAA
 TGTTGCTAAA CCAAAAAAGG [5168]

[5260 5270 5280 5290
 5300 5310 5320]

[.]

A_genome GTGGGTCTGT TGCAGTTTTT GGACTTGGTG CTGTAGGTCT TGCGGTAAGT
 TATTGTTGTT GCTTTTATGT [5248]
 B_genome GTGGGTCTGT TGCAGTTTTT GGACTTGGTG CTGTAGGTCT TGCGGTAAGT
 TATTGTTGTT GCTTTTATGT [5302]
 C_genome GTGGGTCTGT TGCAGTTTTT GGACTTGGTG CTGTAGGTCT TGCGGTAAGT
 TATTGTTGTT GCTTTTATGT [5241]
 D_genome GTGGGTCTGT TGCAGTTTTT GGACTTGGTG CTGTAGGTCT TGCGGTAAGT
 TATTGTTGTT GCTTTTTTGT [5240]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5293]
 F_genome GTGGGTCTGT TGCAGTTTTT GGACTTGGTG CTGTAGGTCT TGCGGTAAGT
 TATTGTTGTT GCTTTTATGT [5300]
 G_genome GTGGGTCTGT TGCAGTTTTT GGACTTGGTG CTGTAGGTCT TGCGGTAAGT

TATTGTTGTT GCTTTTATGT [5284]
 Gossyp.kirkii GTGGGTCTGT TGCAGTTTTC GGA CTGTTGGTG CTGTAGGCCT TGCGGTACGT
 TATTGTTGTT GCTTTTATGT [5242]
 Kokia.drynar GTGGGTCTGT TGCAGTTTTC GGA CTGTTGGTG CTGTAGGCCT TGCGGTACTT
 TATTGTTGTT GCTTTTATGT [5238]

[5330 5340 5350 5360
 5370 5380 5390]
 [.]

A_genome TATTATCCAT CTGGCAACTA TAAAAATTGG AATTGTACTT ATTTCTATTT
 TGTGAAACCT AGGCTGCTGA [5318]
 B_genome TACTATCCAT CTGGCAACTA TAAAAAT-GG AGTTGTACTT ATTTCTATTT
 TATGAAACCT AGGCAGCTGA [5371]
 C_genome TATTATCCAT CTGGCAACTA TAAAAAT-GG AGTTGTACTT ATTTCTATTT
 TGTGAAACCT AGGCTGCTGA [5310]
 D_genome TATTATCCAT TTGGCAACTA TAAAAAT-AG AGTTGTACTT ATTTCTATTT
 TGTGAAACCT AGGCTGCTGA [5309]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5363]
 F_genome TATTATCCAT CTGGCAACTA TAAAAAT--- -GTTGTACTT ATTTCTATTT
 TGTGAAACCT AGGCTGCTGA [5366]
 G_genome TACTATCCAT CTGGCAACTG TAAAAAT-GG AGTTGTACTT ATTTCTATTT
 TGTGAAACCT AGGCTGCTGA [5353]
 Gossyp.kirkii TATTATCCAT CTGGCAACTA TAAAAAT-GG AGTTGTACTT ATTTCTGTTT
 TGTGAAACCT AGGCTGCTGA [5311]
 Kokia.drynar TATTATCCAT CTGGCAACTA TAAAAAT-GG AATTGTACTT ATTTCTGTTT
 TGTGAAACCT AGGCTGCTGA [5307]

[5400 5410 5420 5430
 5440 5450 5460]
 [.]

A_genome AGGAGCAAGA GTTTGTGAGG CTTCTAGGAT CATTGGTATT GATCTAAACC
 CCAACAGATT CGAAGAAGGT [5388]
 B_genome AGGAGCAAGA GTTTGTGAGG CTTCTAGGAT CATTGGTATT GATCTAAACC
 CCAACAGATT CGAAGAAGGT [5441]
 C_genome AGGAGCAAGA GTTTGTGAGG CTTCTAGGAT CATTGGTATT GATCTAAACC CCAACAGATT
 CGAAGAAGGT [5380] `D_genome AGGAGCAAGA GTTTGTGAGG CTTCTAGGAT CA
 TTGGTATT GATCTAAACC CCAACAGATT CGAAGAAGGT [5379]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5433]
 F_genome AGGAGCAAGA GTTTGTGAGG CTTCTAGGAT CATTGGTATT GATCTAAACC
 CCAACAGATT CGAAGAAGGT [5436]
 G_genome AGGAGCAAGA TTTTGTGAGG CTTCTAGGAT CATTGGTATT GATCTAAACC
 CCAACAGATT CGAAGAAGGT [5423]
 Gossyp.kirkii AGGAGCAAGA GTTTGTGAGG CTTCTAGGAT CATTGGTATT GATCTGAACC
 CCAACAGATT CGAAGAAGGT [5381]
 Kokia.drynar AGGAGCAAGA GTTTGTGAGG CTTCTAGGAT CATTGGTATT GATCTGAACC
 CCAACAGATT CGAAGAAGGT [5377]

[5470 5480 5490 5500
 5510 5520 5530]
 [.]

A_genome AGCTTTAGTT TAATTGATAT TTACATTAAA TACTCAA-G ACTGGTTATG
 TTTTAGATTA AACAAAGTTG [5457]

B_genome AGCTT-ATTT TAATTGATAT TTACATTAAA TACTCAAA-G ACTGGTTATG
 TTTTAGATTA AACAAAGTTG [5509]
 C_genome AGCTTTAGTT TAATTGATAT TTACATTAAA TACTCAAA-G ACTGGTTATG
 TTTTAGATTA AACAAAGTTG [5449]
 D_genome AGGTTTATTT TAATTGATAT TTACATTAAA CACTCAAA-G ATTGGTTATG
 TTTTAGATTA AACAAAGTTG [5448]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5503]
 F_genome AGCTTTAGTT TAATTGATAT TTACATTAAA TACTCAAA-G ACTGGTTATG
 TTTTAGATTA AACAAAGTTG [5505]
 G_genome AGCTTTAGTT TAAT-GATAT TTACATTAAA TACTCAAA-G ACTGGTTATG
 TTTTAGATTA AACAAAGTTG [5491]
 Gossyp.kirkii ATCTTTAGTT TAATTGTTCT TTTCATTAAG CACTCAAAAG ACTGGTTATA
 TTCCAGATTA AACAAAGTTG [5451]
 Kokia.drynar ATCTTTAGTT TAATTGTTCT TTTCATTAAG CACTCAAA-G ACTGGTTATG
 TTCCAGATTA AACGAAGTTG [5446]

[5540 5550 5560 5570
 5580 5590 5600]

[.]

A_genome CAAAATTAAT CATTTTTCTT CTTGCAGCCA AGAAATTTGG TTGTACCGAG
 TTTGTGAACC CAAAAGATCA [5527]
 B_genome CAAAATTAAT CATTTTTCTT CTTGCAGCCA AGAAATTTGG TTTTACCGAG
 TTTGTGAACC CAAAAGATCA [5579]
 C_genome CAAAATTAAT CATTTTTCTT CTTGCAGCCA AGAAATTTGG TTGTACCGAG
 TTTGTGAACC CAAAAGATCA [5519]
 D_genome CAAAATTAAT CATTTTTCTT CTTGCAGCCA AGAAATTTGG TTGTACTGAG
 TTTGTGAACC CAAAAGATCA [5518]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5573]
 F_genome CAAAATTAAT CATTTTTCTT CTTGCAGCCA AGAAATTTGG TTGTACCGAG
 TTTGTGAACC CAAAAGATCA [5575]
 G_genome CAAAATTAAT CATTTTTCTT CTTGCAGCTA AGAAATTTGG TTCTACCGAA
 TTTGTGAACC CAAAAGATCA [5561]
 Gossyp.kirkii CAAAATTAAT ---TTTCTT CTTGCAGCCA AGAAATTTGG TTGTACCGAG
 TTTGTGAACC CGAAAGATCA [5517]
 Kokia.drynar CAAAATTAAT AATTTTCTT CTTGCAGCCA AAAAATTTGG TTGTACCGAG
 TTTGTGAACC CGAAAGATCA [5516]

[5610 5620 5630 5640
 5650 5660 5670]

[.]

A_genome TAATAAACCT GTTCAAGAGG TTGGATTCCT TGAAAACCTCA ATCCCATATA
 CCTTACTGAA --CTTTGAGC [5595]
 B_genome TAATAAACCT GTTCAAGAGG TTGGATTCCT TGAAAACCTCA ATCCCATATA
 CCTTACTAAA --CTTTGAGC [5647]
 C_genome TAATAAACCT GTTCAAGAGG TTGGATTCCT TGAAAACCTCA ATCCCATATA
 CCTTACTGAA --CTTTGAGC [5587]
 D_genome CAATAAACCT GTTCAAGAGG TTGGATTCCT TGAAAACCTCA ATCCCATATA
 CCTTACTGAA --CTTTGAGC [5586]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5643]
 F_genome TAATAAACCT GTTCAAGAGG TTGGATTCCT TGAAAACCTCA ATCCCATATA
 CCTTACTGAA --CTTTGAGC [5643]
 G_genome TAATAAACCT GTTCAAGAGG TTGGATTCCT TGAAAACCTCA ATCCCATATA

CCTTAGTGAA --CTTTGAGC [5629]
 Gossyp.kirkii CGATAAACCT GTTCAAGAGG TTGGATTCTT TGAAAACCTCA ATCCCATATA
 CATAACTGAA AACTTTTGAGC [5587]
 Kokia.drynar CAATAAACCT GTTCAGGAGG TTGGATTCTT TGAAAACCTCA ATCCCATATA
 TATAACTGAA AACTTTTGAGC [5586]

[5680 5690 5700 5710
 5720 5730 5740]

[.]
 A_genome ACGTAAAGTC ATTAAAGATT CTGGCATGAC CATTATTTTA GTTAGGTCAT
 CTTACATAAC AAAACTTGCA [5665]
 B_genome ACGTAACGTC ATTAAAGATT CTGGCATGAC CATATATTTTA GTTAGGTCAT
 CTTACATAAT AAAACTTGCA [5717]
 C_genome GCGTAAAGTC ATTAAAGATT CTGGCATGAC CATATATTTTA G----GTCAT
 CTTACATGAT AAAACTTGCA [5653]
 D_genome ATGTAAAATC ATTAAAGATT CTGGCATGAC CATATATTTTA GTTAGGTCAT
 CTTACATAAT AAAACTTGCA [5656]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5713]
 F_genome ACGTAAAGTC ATTAAAGATT CTGGCATGAC CATATATTTTA GTTAGGTCAT
 CTTACATAAT AAAACTTGCA [5713]
 G_genome ACGTAAAGTC ATTAAAGATT CTAGCATGAC CATATATTTTA G----GTCAT
 CTTACATAAT AAAACTTGCA [5695]
 Gossyp.kirkii ACATCAAATC ATTAAAGATT CTGGCATGAC CATACTTA GTTAGGTCAT
 CTTACATAAT AAAACCTGCA [5657]
 Kokia.drynar ACGTCAAATC ATTAAAGATT CTGGCATGAC CATACTTA GTTAGGTCAT
 CTTACATAAT AAAACCTGCA [5656]

[5750 5760 5770 5780
 5790 5800 5810]

[.]
 A_genome TTGTTG---- --CTGAGTTT TCAAGTAGAT AGATAATTTT GTTTCTTGTT
 GTTCTAACAA ATAGGTGATT [5729]
 B_genome TTGTTG---- --CTGAGTTT TCAAGCAGAT AGATAATTTT GTTTCTTGTT
 GTTCTAACAA ATAGGTGATT [5781]
 C_genome TTGTTG---- --CTGAGTTT TCAAGCAGAT AGATAATTTT GTTTCTTGTT
 GTTCTAAGAA ATAGGTGATT [5717]
 D_genome TTGTTGGAGT TGCTGAGTTT TCAAGCAGAT AGATAATTTT GTTTCTTGTC
 GTTCTAAAAA ATAGGTGATT [5726]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5783]
 F_genome TTGTTG---- --CTGAGTTT TCATGTAGAT AGATAATTTT GTTTCTTGTT
 GTTCTAACAA ATAGGTGATT [5777]
 G_genome TTGTTG---- --CTGAGTTT TCAAGCAGAT AGATAATTTT GTTTCTTGTT
 GTTCTAACAA ATAGGTGATT [5759]
 Gossyp.kirkii TTGTTGGAGT TGCTGAGTTT TCAAACAGAC GGATAATTTT GTTACTTGTT
 ATTCTAACAA ATAGGTGATT [5727]
 Kokia.drynar TTGTTGGAGT TTCTGAGTTT TCAAACAGAC AGATAATTTT GTTACATGTT
 GTTCTAACAA ATAGGTGATT [5726]

[5820 5830 5840 5850
 5860 5870 5880]

[.]
 A_genome TCGGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACGGGGAG

CACCCAGGCC ATGGTTTCTG [5799]
 B_genome GCGGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACGGGGAG
 CACCCAGGCC ATGGTTTCTG [5851]
 C_genome GCGGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACGGGGAG
 CACCCAGGCC ATGGTTTCTG [5787]
 D_genome GCGGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACGGGGAG
 CACCCAGGCC ATGGTTTCTG [5796]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [5853]
 F_genome GCGGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACGGGGAG
 CACCCAGGCC ATGGTTTCTG [5847]
 G_genome GCGGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACGGGGAC
 CACCCAGGCC ATGGTTTCTG [5829]
 Gossyp.kirkii GCGGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACAGGGAG
 CATCCAGGCC ATGATTTCTG [5797]
 Kokia.drynar GCAGAGATGA CTGGAGGAGG AGTTGATTGC AGTATTGAAT GTACAGGGAG
 CATCCAGGCC ATGATTTCTG [5796]

[5890 5900 5910 5920
 5930 5940 5950]

[.]
 A_genome CATTTGAATG TGTCCATGAT GTAATTACCA GCACAAACTT CTCCTCATTC
 TTAGACATTT TATTTTAAAC [5869]
 B_genome CATTTGAATG TGTCCATGAT GTAATTACCA GCAC----- --CTTCATTC
 ATAGACATTT TATTTTAAAC [5913]
 C_genome CATTTGAATG TGTCCATGAT GTAATTACCA GCACAAACTT CTCCTCATTC
 ATAGACATTT TATTTTAAAC [5857]
 D_genome CATTTGAATG TGTCCATGAT GTAATTACCA GCACAAACTT CTCCTCATTC
 ATAGACATTT TATTTTAAAC [5866]
 E_genome ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ??????????AC [5923]
 F_genome CATTTGAATG TGTCCATGAT GTAATTACCA GCACAAACTT CTCCTCATTC
 ATAGACATTT TATTTTAAAC [5917]
 G_genome CATTTGAATG TGTCCATGAT GTAATTACCA GCACAAACTT CTCCTCATTC
 ATAGACATTT TATTTTAAAC [5899]
 Gossyp.kirkii CATTTGAATG TGTCCATGAT GTAATTACCA GCACAAACTT CTCCTCATTC
 ATGGACATTT TATTTTAAAC [5867]
 Kokia.drynar CATTTGAATG TGTCCATGAT GTAATTACCA GCACAAACTT CTCCTCATTC
 ATGGACATTT TATTTTAAAC [5866]

[5960 5970 5980 5990
 6000 6010 6020]

[.]
 A_genome TTCAATACGA CGAGGAACCC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATAAGTG ATGAAGGAAT [5939]
 B_genome TTCAATACGA CGAGGAACCC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TCCATAAGTG ATGAAGGAAT [5983]
 C_genome TTCAACACGA CGAGGAACCC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATAAGTG ATGAAGGAAT [5927]
 D_genome TTCAACACGA CGAGGAACCC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATAAGTG ATGAAGGAAT [5936]
 E_genome TTCAACACGA CGAGGAACCC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATAAGTG ATGAAGGAAT [5993]
 F_genome TTCAATACGA CGAGGAACCC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATTAGTG ATGAAGGAAT [5987]

G_genome TTCAACACGA CGAGGAACCC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATAAGTG ATGAAGGAAT [5969]
 Gossyp.kirkii TTCAACACGA CGAGGAAACC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATAAGTG ATGAAGG-AT [5936]
 Kokia.drynar TTCAACACGA CAAGGAAACC ACTCATCCTT CTGCTCTCTG TGCCCAAGCC
 TGCATAAGTG ATGAAGG-AT [5935]

[6030 6040 6050 6060
 6070 6080 6090]
 [.]

A_genome TGCATCAAGG AAACAAAAGG AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCC-GTAAA AACACATCAA [6008]
 B_genome TGCATCAAGG AAACAAAAGA AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCCTGTAAA AACACATCAA [6053]
 C_genome TGCATCAAGG AAACAAAAGG AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCCTGTAAA -CCACATCAA [5996]
 D_genome TGCATCAAGG AAACAAAAGG AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCCTGTAAA AACACATCAA [6006]
 E_genome TACATCAAGG AAACAAAAGG AAAAACAGAT AAGTAGAATA AAGGATTTAA
 GCCCTATAAT AACACATCAA [6063]
 F_genome TGCATCAAGG AAACAAAAGG AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCCTGTAAA AACACATCAA [6057]
 G_genome TGCATCAAGG AAACAAAAGG AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCCTGTAAA -ACACATCAA [6038]
 Gossyp.kirkii AGCATCAAGG AAACAAAAGG AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCCTGTAAA AACACATCAA [6006]
 Kokia.drynar TGCATCAAGG AAACAAAAGG AAAAACAAAT AAGTAGAATA AAGGATTTAA
 GCCCTGTAAA AGCACATCAA [6005]

[6100 6110 6120 6130
 6140 6150 6160]
 [.]

A_genome ATACTGGAAC AATGCAGAAG TTAGCAGTGG TGAACATGTC ACGAACCTT-
 ----- ---CCATAAC [6064]
 B_genome ATACTGGAAC AATGCAGAAG TTAGCAGTGG TGAACATGTC ACAAACCTT-
 ----- ---CCATAAC [6109]
 C_genome ATACTGGAAC AATGCAGAAG TTAGCAGTGG TGAACATGTC ACAAACCTT-
 ----- ---CCATAAC [6052]
 D_genome ATACTGGAAC AATGCAGAAG TTAGCAGTGG TGAGCATGTC ACAAACCTT-
 ----- ---CCATAAC [6062]
 E_genome ATACTGGAAC AATGCAGAAG TTAGCAGTGG TGAGCATGTC ACAAACCTT-
 ----- ---CCATAAC [6119]
 F_genome ATTCTGGAAC AATGCAGAAG TTAGCAGTGG CGAACATGTC ACAAACCTT-
 ----- ---CCATAAC [6113]
 G_genome ATACTGGAAC AATGCAGAAG TTAGCAGTGG TGAACATGTC ACAAACCTT-
 ----- ---CCATAAC [6094]
 Gossyp.kirkii ATACTGGAAC AATGCAGAAG TTAGCAGTGG TGAGCATGTC ACAAACCTT-
 ----- ---CCATAAC [6062]
 Kokia.drynar ATACTGGAAC AATGCAGAAG TTAACAGTGG TGAGCATGTC ACAAACCTTC
 CAATACCTCC CTTCCATAAC [6075]

[6170 6180 6190 6200
 6210 6220 6230]
 [.]

A_genome	CACCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGAAAA	TAAAAGGGAT	[6134]			
B_genome	CACCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTATTTATGA
ACAAGGAAAA	TAAAAGGAAA	[6179]			
C_genome	CACCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGAAAA	TAAAAGGGAA	[6122]			
D_genome	CGCCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGAAAA	TAAAAGGGAA	[6132]			
E_genome	CACCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGTAAA	TAAAAGGGAA	[6189]			
F_genome	CACCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGAAAA	TAAAAGGGAA	[6183]			
G_genome	CACCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGAAAA	TAAAAGGGAA	[6164]			
Gossyp.kirkii	CACCAAACC	CCACCTGGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGAAAA	TAAATGGGAA	[6132]			
Kokia.drynar	CACCAAAGCC	CCACCTAGAC	AATCACATAA	TAAAAGTAAA	TTGTTTATGA
ACAAGGAAAA	TAAAAGGGAA	[6145]			

[		6240	6250	6260	6270
6280	6290	6300]			
[.	.	.	.
.

A_genome	ATCTAAAACC	ATAACACAAT	AATCAACAAT	GACTTACGTG	AAAACATAGC
CATTCATGTC	CACAGCAACT	[6204]			
B_genome	ATCTAAAACC	TTAACACAAT	AATCAACAAT	GACTTACGTG	TAAACATAGC
CATTCGTGTC	CACGGCAACT	[6249]			
C_genome	ATCTAAAACC	TTAACACAAT	AATCAACAAT	GACTTACGTG	TAAACATAGC
CATTCGTGTC	CACAGCAACT	[6192]			
D_genome	ATCTAAAACC	TTACCACAAT	AATCAACAAT	GACTTACGTG	TAAACAAAGC
CATTTGTGTC	CACAGCAACT	[6202]			
E_genome	ATCTAAAACC	TTAACACAAT	AATCAACAAT	GACTTACGTG	TAAACATAGC
CATTCGTGTC	AACAGCAACT	[6259]			
F_genome	ATCTAAAACC	TTAACAAAAT	AATCAACAAT	GACTTACGTG	TAAACATAGC
CATTCGTGTC	CACAGCAACT	[6253]			
G_genome	ATCTAAAACC	TTAACACAAC	AATCAACAAT	GACTTACGTG	TAAACATAGC
CATTCGTGTT	CACAGCAACT	[6234]			
Gossyp.kirkii	ATCTAAAACC	TTACC--AAT	AATCAACAAT	GACTTACGTG	TAAACATAGC
CATTCGTGTC	CACAGCAACT	[6200]			
Kokia.drynar	ATCTAAAACC	TTACC--AAT	AATCAACAAT	GACTTACGTG	TAAACATAGC
CATTCGTGTC	CACAGCAACT	[6213]			

[		6310	6320	6330	6340
6350	6360	6370]			
[.	.	.	.
.

A_genome	GGATGCACAA	ATTAGAAAAG	TAAACAATGA	GATGAAT-GT	TTAAGTAAAA
GAAGAACCAG	GGAGAGGGAA	[6273]			
B_genome	GGATGCACAA	ATTAGAAAAG	TAAACAATGA	GATGAAT-GT	TTAAGTAAAA
GAAGAACCAG	GAATAGGGAA	[6318]			
C_genome	GGATGCACAA	ATTAGAAAAG	TAAACAATGA	GATGAAT-GT	TTAAGTAAAA
GAAGAACCAG	GGATAGGGAA	[6261]			
D_genome	GGATGCACAA	ATTAGAAAAG	TAAACAATGA	GATGAAT-GT	TTAAGTAAAA
GAAGAACCAG	GGATAGGGAA	[6271]			
E_genome	GGATGCACAA	ATTAGAAAAG	TAAACAATGA	GATGAAT-GT	TTAAGTAAAA
GAAGAACCAG	GGATAGGGAA	[6328]			
F_genome	GCATGCACAA	ATTAGAAAAG	TAAACAATGA	GATGAAT-GT	TTAAGTAAAA

GAAGAACCAG GGATAGGGAA [6322]
 G_genome GGATGCACAA ATTGGAAAAG TAAACAATGA GATGAAT-GT TTAAGTAAAA
 GAAGAACCAG GGATAGGGAA [6303]
 Gossyp.kirkii GGATGCACAA ATTAGAAAAG TAAACAATGA GATGAAT-GT TTAAGTAAAA
 GAAGAACTGG GGATAGGGAA [6269]
 Kokia.drynar GGATGCACAA ATTAGAAAAG TAAACAAT-- ---GAATTGT TTAAGTAAAA
 ---GAACTGG GGATAGGGAA [6275]

[6380 6390 6400 6410
 6420 6430 6440]
 [.]

A_genome GGGGATGACC AAAAGATGAA AGAGCAAATG AACATGAAAG AGAGCAGGCA
 TATCATGAAC CTGTATGGTT [6343]
 B_genome GGGGATGACC AAAAGATGAA AGAGCAAATG AACATGAAAG AGAGCAGGCA
 TATCATGAAC CTGTATGGTT [6388]
 C_genome GGGGATGACC AAAAGATGAA AGAGCAAATG AACATGAAAG AGAGCAGGCA
 TATCATGAAC CTGTATGGTT [6331]
 D_genome GGGAACGACC AAAAGATGAA AGAGCAAATG AACATGAAAG AGAGCAGGCA
 TATCATGAAC CTGTATGGTT [6341]
 E_genome GGGGATGACC AAAAGATGAA AGAGCAAATG AACATGAAAG AGAGCAGGCA
 TATCATGAAC CTGTATGGTT [6398]
 F_genome GGAGATGACC AAAAGATGAA AGAGCAAATG AACATGAAAG AGAGCAGGCA
 TATCATAAAC CTGTATGGTT [6392]
 G_genome GGGGATGACC AAAAGATGAA AGAGCAAATG AACATGAAAG AGAGCAGGCA
 TATCATGAAC CTGTATGGTT [6373]
 Gossyp.kirkii GGGGATGACC AAAAGATGAA AGAGCAGATG AACATGAAAG AGAGCAAGCA
 TATCATGAAC CTGTATGGTT [6339]
 Kokia.drynar GGGGATGACC AAAAGATGAA AGAGCAGATG AACATGAAAG AGAGCAAGCA
 TATCATGAAC CTGTATGGTT [6345]

[6450 6460 6470 6480
 6490 6500 6510]
 [.]

A_genome TGTTCCACAG GCAACTTTGA CAATAGTTTC CCCAGAAAGA GTAGCTATAG
 CTCTAGGGCG AGGTTGAGAT [6413]
 B_genome TGTTCCACAG GCAACTTTGA CAATAGTTTC TCCAGAAAGA GTAGCTATAG
 CTCTAGGGCG AGGTTGAGAT [6458]
 C_genome TGTTCCACAG GCAACTTTGA CAATAGTTTC CCCAGAAAGA GTAGCTATAG
 CTCTAGGGCG AGGTTGAGAT [6401]
 D_genome TGTTCCACAG GCAACTTTGA TAATAGTTTC CCCAGAAAGA GTAGCTATAG
 CTCTAGGGCG AGGTTGAGAT [6411]
 E_genome TGTTCCACAG GCAACTTTGA CAATAGTTGC CCCAGAAAGA GTAGCTATAG
 CTCTAGGGCG AGGTTGAGAT [6468]
 F_genome TGTTCCACAG GCAACTTTGA CAATAGTTTC CCCAGAAAGA GTAGCTATAG
 CTCTAAGGCG AGGTTGAGAT [6462]
 G_genome TGTTCCACAG GCAACTTTGA CAATAGTTTC CCCAGAAAGA GTAGCAATAG
 CTCTAGGGCG AGGTTGAGAT [6443]
 Gossyp.kirkii TGTTCCACAG GCAACTTTGA CAATAGTTTC CCCAGAAAGA GTAGCTATAA
 CTCTAGGGCG AGGTTGAGGT [6409]
 Kokia.drynar TGTTCCACAG GCAACTTTGA CAATAGTTTC CCCAGAAAGA GTAGCTATAA
 CTCTAGGGCG AGGTTGAGGT [6415]

[6520 6530 6540 6550
 6560 6570 6580]
 [.]

```

.]
A_genome      TCATAAACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGCGTAT
AGGTATGATG   CAAACACCCG [6483]
B_genome      TCATAAACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGTGTAT
AGGTATGATG   CAAACACCCG [6528]
C_genome      TCATAAACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGCGTAT
AGGTATGATG   CAAACACCCG [6471]
D_genome      TCATAAACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGCGTAT
AGGTATGATG   CAAACACCCG [6481]
E_genome      TCATAAACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGTGTAT
AGGTATGATG   CAAACACCCG [6538]
F_genome      TCATAAACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGCGTAT
AGGTATGATG   CAAACACCCG [6532]
G_genome      TCATAAACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGCGTAT
AGGTATGATG   CAAACACCCG [6513]
Gossyp.kirkii TCATAGACAA GCCTCACCGA GCTATCCTTG GCATTATACT ACAAGCGTGT
AGGTATTATG   CAAACACCCA [6479]
Kokia.drynar  TCATAGACAA GCCTCACCGA GCTATCCTTG GCATTATACT GCAAGGGTGT
AGGTATGATG   CAAACACCCA [6485]

```

```

[           6590           6600           6610           6620
6630       6640       6650]
[

```

```

.]
A_genome      TGGAGAAAAG CAAGTCAATA GCAACTAGGT TAGAGAACTG CTTAACCACT
TCTAGATATC   AAATAACACA [6553]
B_genome      TGGAGAAAAG CAAGTCAATA GCAACTAGGT TAGAGAACTG CTTAACAACCT
TCTAGATATC   AAATAACACA [6598]
C_genome      TGGAGAAAAG CAAGTCAATA GCAAC????? ?????????? ??????CACCT
TCTAGATATC   AAATAACACA [6541]
D_genome      TGGAGAAAAG CAAGTCAATA GCAACTAGAT TAGAGAACTG CTTAACAACCT
TCTAGATATC   AAATAACACA [6551]
E_genome      TAGAGAAAAG CAAGTCAATA GCAACTAGGT TAGAGAACTG CTTAACAACCT
TCTAGATATC   AAATAACACA [6608]
F_genome      TGGAGAAAAG CAAGTCAATA GCAACTAGGT TAGAGAACTG CTTAACAACCT
TCTAGATATC   AAATAACACA [6602]
G_genome      TGGAGAAAAG CAAGTCAATA GCAACTAGGT TAGAGAACTG CTTAACACCT
TCTAGATATC   AAATAACACA [6583]
Gossyp.kirkii TTGAGAAAAG CAAGTCAATA GCAACTAGGT TAGAGAACTG CTTAAAAAAT
TCTAGATATC   AAATAACACA [6549]
Kokia.drynar  TTGTGAAAAG CAAGTCAATA GCAACTACGT TAGAGAACTG CTTAAAAAAT
TCTAGATATC   AAATAACACA [6555]

```

```

[           6660           6670           6680           6690
6700       6710       6720]
[

```

```

.]
A_genome      TATAAAAGTG GTGTAAAATC AAAAACTCAG GATCTAATAA AAGAAATTGT
CTTGATTAAT   TTGAACTTAG [6623]
B_genome      TATAAAAGTG GTGTAAAATA AAAAACTCAG GATCTAAGAA AAGAAATTGT
CTTGATTAAT   TTGAACTTAG [6668]
C_genome      TATAAAAGTG GTATAAAATC AAAAACTCAG GATCTAAGAA AAGAAATTGT
CTTGATTAAT   TTGAACTTAG [6611]
D_genome      TATAAAAGTG GTGTAAAATC AAAAACTCAG GATCTAAGAA AAGAAATTGT
CTTGATTAAT   TTGAACTTAG [6621]
E_genome      TATAAAAGTG GTGTAAAATC AAAAACTCAG GATCTAAGAA AAGAAATTGT
CTTGATTAAT   TTTAACTTAG [6678]

```

F_genome TATAAAAGTG GTGTAAAATC AAAAACTCAG GTTCTAAGAA AAGAAATTGT
 CTTGATTAAT TTGAACCTAG [6672]
 G_genome TATAAAAGTG GTGTAAAATC AAAAACTCAG GATCTAAGAA AAGAAATTGT
 CTTGATTAAT TTGAACCTAG [6653]
 Gossyp.kirkii TATAAAAGTG GTGTAAAATA AAAAACTCAG GAACTAAGAA AAGAAATTGT
 CTTGATCAAT TTGAACCTAG [6619]
 Kokia.drynar TATAAAAGTG GTGTAAAATC AAAAACTCAG GATCTAAGAA AAGAAATTGT
 CTTGATCAAT TTGAACCT-- [6623]

[6730 6740 6750 6760
 6770 6780 6790]
 [.]

A_genome AGGGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACTAAA CGAATGTGGT
 AGTAGGAAAC AAATGCATAT [6693]
 B_genome AGGGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACTAAA CGAATGTGGT
 AGTAGGAAAC AAATGCATAT [6738]
 C_genome AGGGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACTAAG CGAATGTGGT
 AGTACGAAAC AAATGCATAT [6681]
 D_genome AGGGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACTAAA CGAATGTGGT
 AGTAGGAAAC AAATGCATAT [6691]
 E_genome AGGGAGAAAA AAAGGTAAAA GAAATGCAAA AGATACTAAA CGAATGTGGT
 TGTAGGAAAC AAATGCATAT [6748]
 F_genome AGGGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACTAAA CGAATGTGGT
 AGTAGGAAAC AAATGCATAT [6742]
 G_genome AGGGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACTAAG CGAATGTGGT
 AGTAGGAAAC AAATGCATAT [6723]
 Gossyp.kirkii AGGGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACAAAA CAGATGTGGT
 AGTAGGAAAA AAATGAATAT [6689]
 Kokia.drynar --GGAGAAAA TAAGGTAAAA GAAATGCAAA AGATACAAAA CAGATGTGGT
 AGTAGGAAAC AAATGCATAT [6691]

[6800 6810 6820 6830
 6840 6850 6860]
 [.]

A_genome AGAGAAGTAA CAGCAGCAGT ATAAGTTAAA TATGAAGAAC AAATTGATCA
 ATGTAAGAAT GTGCTAAAAA [6763]
 B_genome AAAGAAGTAA CAGCAGCAGC ATAAGTTAAA TATGAAGAAC AATTTGATCA
 ATGTAAGAAT GTGCTAAAAA [6808]
 C_genome AAAGAAGTAA CAGCAGCAGC ATAAGTTAAA TATGAAGAAC AAATTGATCA
 ATGTAAGAAT GTGCTAAAAA [6751]
 D_genome AAAGAAGTAA CACCAGCAGC ATAAGTTAAA TATGAAGAAC AAATTGATCA
 ATGTAAGAAT GTGCTAAAAA [6761]
 E_genome AAAGAAGTAA CAGCAGCAGC ATAAGTTAAA TATGAAGAAC AAATTGATCA
 ATGTAAGAAT GTGCTAAAAA [6818]
 F_genome AAAGAAGTAA CAGCAGCAGC ATAAGTTAAA TATGAAGAAC AAATTGATCC
 ATGTAAGAAT GTGCTAAAAA [6812]
 G_genome AAAGAAGTAA CAGCAGCAGC ATAAGTTAAA TATTAAGAAC AAATTGATCA
 ATGTAAGAAT GTGCTAAAAA [6793]
 Gossyp.kirkii AAAGAAGCAA CAGCAGCAGC ATAAGTTAAA TATGAAGAAC AAATTGATCA
 ATGTAAGAAT GTGCTAAAAA [6759]
 Kokia.drynar AAAGAAGCAA CAGCAGCAGC ATAAGTTAAA TATGAAGAAC AAATTGATCA
 ATGTAAGAAT GTGCTGAAAA [6761]

[6870 6880 6890 6900
 6910 6920 6930]

[. . .]
 A_genome CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCTTCACTT
 AACAAAGGCTC CCTTTATTTG [6833]
 B_genome CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCTTTACTT
 AACAAAGGCTC CCTTTATTTG [6878]
 C_genome CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCTTTACTT
 AACAAAGGCTC CCTTTATTTG [6821]
 D_genome CACAATTTTC ATAAGAGTAG GATAGCTTTT TGCTGTTTTG GCCTTTACTT
 AACAAAGGCTC CCTTTATTTG [6831]
 E_genome CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCTTTACTT
 AACAAAGGCTC CCTTTATTTG [6888]
 F_genome CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCTTCACTT
 AACAAAGGCTC CCTTTATTTG [6882]
 G_genome CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCTTTACTT
 AACAAAGGCTC CCTTTATTTG [6863]
 Gossyp.kirkii CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCTTTACTT
 AACAAAGGCTC CCTTTATTTG [6829]
 Kokia.drynar CACAATTTTT ATAAGAGTAG GATGGCTTTT TGGTGTTTTG GCCATTACTT
 AACAAAGGCTC CCTTTATTTG [6831]

[6940 6950 6960 6970
 6980 6990 7000]

[. . .]
 A_genome AGCCTTTGCT GCTAGCTTTG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 ATTGAAAAGC AAAAACTATA [6903]
 B_genome AGCTTTTGCT GCTAGCTTTG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 ATGGAAAAGC AAAAACTATA [6948]
 C_genome AGCTTTTGCT GCTAGCTTTG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 ATTGAAAAGC AAAAACTATA [6891]
 D_genome AGCTTTTGCT GCTAGCTTAG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 ATTGAAAAGC AAAAACTATA [6901]
 E_genome AGCTTTTGCT GCTAGCTTTG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 ATTGAAAAGC AAAAACTATA [6958]
 F_genome AGCTTTTGCT GCTAGCTTTG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 ATTGAAAAGC AAAAACTATA [6952]
 G_genome AGCTTTTGCT GCTAGCTTTG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 ATTGAAAAGC AAAAACTATA [6933]
 Gossyp.kirkii AACTTTTGCT ACTAGCTCTG TACATCCTCA CATTTTGCAA AAAAGTAAAA
 AGTGAAAAGC AAAAACTATA [6899]
 Kokia.drynar AGCTTTTGCT ACTAGCTCTG TACATCCTCA CATTTTGCAA AAGAGTAAAA
 AGTGAAAAGC AAAAACTATA [6901]

[7010 7020 7030 7040
 7050 7060 7070]

[. . .]
 A_genome TGTCAATAAA ATCAAGCACA TTTCCAAACA ATAGCTCTGA TTCAGGCACA
 ATTATGTGAT GCAATATAAA [6973]
 B_genome TGTCAATAAA ATCAAGCACA TTTCCAAACA ATAGCTCTGA TTCAGGCACA
 ACTATGTGAT GCAATATAAA [7018]
 C_genome TGTCAATAAA ATCGAGCACA TTTCCAAACA ATAGCTCTGA TTCAGGCACA
 ATTATGTGAT GCAATATAAA [6961]
 D_genome TGTCAATAAA ATCGAGCACA TTTCCAAACA ATAGCTCTGA TTCAGGCACA
 ATTATGTGAT GCAATATAAA [6971]
 E_genome TGTCAATAAA ATCGAGCACA TTTCCAAACA ATAGCTCTGA TTCAGGCACA

ATTATGTGAT GCAATATAAC [7028]
 F_genome TGTCATTAAA ATCAAGCACA TTTCCAAACA ATAGCTCTGA TTCAGGCACA
 ATTATGTCAT GCAATATAAA [7022]
 G_genome TGTCATTAAA ATCGAGCACA TTTCCAAACC ATAGCTCTGA TTCAGGCACA
 ATTATGTGAT GTAATATAAA [7003]
 Gossyp.kirkii TGTCATTAAA AACGAACACA TTGCCAAACA ATCACTCTGA TTCAGGCACA
 ATTATGTGAT GCAATATAAA [6969]
 Kokia.drynar TGTCATTAAA ATCGAACACA TTGCCAAACA ATCACTCTGA TTCAGGCACA
 ATTATGTGAT GCAATATAAA [6971]

[7080 7090 7100 7110
 7120 7130 7140]

[
 . .]
 A_genome TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTAT
 AAAATGTTTC TTGTTTTTGT [7041]
 B_genome TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTTCT ACACACTTAT
 AAGATGTTTC TTGTTTTTGT [7088]
 C_genome TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTAT
 AAAATGTTTC TTGTTTTTTT [7029]
 D_genome TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTAT
 AAAATGTTTC TTGTTTTTGT [7039]
 E_genome TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTAT
 AAAATGTTTC TTTTTTTTCT [7096]
 F_genome TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTAT
 AAAATGTTTC TTGTTTTTGT [7090]
 G_genome TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTAT
 AAAATGTTTC TTGTTTTTGT [7071]
 Gossyp.kirkii TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTGT
 AAAATGTTTC TTGTTTTTGC [7037]
 Kokia.drynar TGAAGCTTCT ATTACCTTTA AAATAAAGCT TTTAATTT-- ACACTCTTGT
 AAAATGTTTC TTGTTTTTGC [7039]

[7150 7160 7170 7180
 7190 7200 7210]

[
 . .]
 A_genome ATCCAAATCC CTTTCTTCTT TTT-ATTTAT TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7110]
 B_genome ATCCAAATCC CTTTCTACTT TTT-ATTTA- TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7156]
 C_genome ATCCAAATCC CTTTCTTCTT TTT-ATTTA- TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7097]
 D_genome ATCCAAATCC CTTTCTTCTT TTTA----- TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7104]
 E_genome ATCCAAATCC CTTTCTTCTT T----- TTTTTTTCTT TGCTACTTGC
 AAAGTAGCAA AATCAACAAT [7157]
 F_genome ATCCAAATCC CTTTCTTCTT TTT-ATT--- TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7156]
 G_genome ATCCAAATCC CTTTCTTCTT TTT-ATTTAT TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7140]
 Gossyp.kirkii ATCCAAATCC CTTTCT-CTT T----- TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7097]
 Kokia.drynar ATCCAA??C CTTTCT---- ----ATTT-T TTTTTTTCTT TTTTACTTGC
 AAAGTAGCAA AATCAACAAT [7100]

[7220 7230 7240 7250

```

7260          7270          7280]
[
.
.]
A_genome      CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGAGA GCAATTCGAA
TGGACCTGAG   GATGCAGCAC [7180]
B_genome      CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGAGA GCAATTCGAA
TGGACCTGAG   GATGCAGCAC [7226]
C_genome      CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGAGA GCAATTCGAA
TGGACCTGAG   GATGCAGCAC [7167]
D_genome      CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGAGA GCAATTCGAA
TGGACCTGAG   GATGCAGCAC [7174]
E_genome      CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGAGA GCAATTCGAA
TGGACCTGAG   GATGCAGCAC [7227]
F_genome      CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGAGA GCAATTCGAA
TGGACCTGAG   GATGCAGCAC [7226]
G_genome      CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGAGA GCAATTCGAA
TGGACCTGAG   GATGCAGCAC [7210]
Gossyp.kirkii CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGACA GCAATTCGAA
TGGACCTTAG   GATGCAGCAC [7167]
Kokia.drynar  CAAAAGGGGC TTAAATAACT TTCTATGGGA TAGGATGACA GCAATTCGAA
TGGACCTTAG   GATGCAGCAC [7170]

[          7290          7300          7310          7320
7330          7340          7350]
[
.
.]
A_genome      ATCTTTGACC AAGGGGCAAT CACTATGCTA GAGCAAATGG TATGTCCTTG
CAACTGGATC   TTTCTTGTCG [7250]
B_genome      ATCTTTGACC AAGGGGCAAT CACTATGCTA GAGCAAATGG TATGTCCTTG
TAACTGGATC   TTTCTTGTCG [7296]
C_genome      ATCTTTGACC AAGGGGCAAT CACTATGCTA GAGCAAATGG TATGTCCTTG
CAACTGGATC   TTTCTTATCG [7237]
D_genome      ATCTTTGACC AAGGGGCAAT CACTATGCTA GAGCAAATGG TATGTCCTTG
CAACTGGATC   TTTCTTGTCG [7244]
E_genome      ATCTTTGACC AAGGGGCAAT CACTATGCTA GAGCAAATGG TATGTCCTTG
CAACTGGATC   TTTCTTGTCG [7297]
F_genome      ATCTTTGACC AAGGGGCAAT CACTATGCTA GAGCAAATGG TATGTCCTTG
CAACTGGATC   TTTCTTGTTG [7296]
G_genome      ATCTTTGACC AAGGGGCAAT CACTATGCTA GAGCAAATGG TATGTCCTTG
CAACTGGATC   TTTCTTGTCG [7280]
Gossyp.kirkii ATCTTTGACC AAGGGGCTAT CACTATGCTA GAGCAAATGG TATGTCCTCG
CAACTGGATC   TTTCTTGTCG [7237]
Kokia.drynar  ATCTTTGACC AAGGGGCTAT CACTATGCTA GAGCAAATGG TATGTCCTCG
CAACTGGATC   TTTCTTGTCG [7240]

[          7360          7370          7380          7390
7400          7410          7420]
[
.
.]
A_genome      ATTGGCCCAT TATCTTGATT CTTGAATACT TGTGAATGTT GTGTAAAAAT
TATCCCAACA   AGTATTATTA [7320]
B_genome      ATTGGCCCAT TATCTTGATT CTTGAATACT TGTGAATGTT GTGTAAAAAT
CAACCCAACA   ACTATTATTA [7366]
C_genome      ATTGGCCCAT TATCTTGATT CTTGAATACT TGTGAATTTT GTGTAAAAAT
CAACCCAACA   AATATTATTA [7307]
D_genome      ATTGGCCCAT TATCTTGATT CTTGAATACT TGTGAATGTT GTGTAAAAAT
CAACCCAACA   AATATTATTA [7314]

```

```

E_genome      ATTGGCCCAT TATCTTGATT CTTGAATACT TGTGAATGTT GTGTAAAAAT
CAACCCAACA  AATATTATTA [7367]
F_genome      ATTGGCCCAT TATCTTGATT CTTGAATACT TGTGAATGTA GTGTAAAAAT
TATCCCAGCA  AATATTATTA [7366]
G_genome      ACTGGCCCAT TATCTTGATT CTTGAATACT TGTGAATGTT GTGTAAAAAT
CAACCCAACA  AATATTATTA [7350]
Gossyp.kirkii ATTGGCTCAT TATCTTGATT CTTGAATACT TGTGAATGTT GTGTAAAAAT
CAACCCAACA  AATATTCTCA [7307]
Kokia.drynar  ATTGGCTCAT TATCTTGATT CTTGAATACT TGTGAAT?TT GTGTAAAAAT
CAACCCAACA  AATATTCTCA [7310]

```

```

[           7430           7440           7450           7460
7470       7480       7490]

```

```

[
.
.]

```

```

A_genome      GAAAAAGAAG TTCAGTTTCA TTTACATGGT CAGATAGAAG GTATTCCTAT
TTATGCTGTG  CTTGTGATTT [7390]
B_genome      GAAAAAGAAG TTCATTTTCA TTTACATGGT CAGATAGAAG GTATTCCTAT
TTATGCTGTG  CTTGTGATTT [7436]
C_genome      GAAAAAGAAG TTCATTTTCA TTTACATGGT CAGATAGAAG GTATTCCTAT
TTATGCTGTG  CTTTTGATTT [7377]
D_genome      GAAAAAGAAG TCCATTTTCA TTTACATGGT CAGGTAGAAG TTATTCCTAT
TTATGCCGTG  CTTGTGATTT [7384]
E_genome      GAAAAAG--- TTCATTTTCA TTTACATGGT CAGATAGAAG GTATTCCTAT
TTATGCTGTG  CTTCTGGTTT [7434]
F_genome      GATAAAGAAG TTCATTTTCA TTTACATGGT CAGATAGAAG GTATTCCTAT
TTATGCTGTG  CTTGTGATTT [7436]
G_genome      GAAAAAG--- TTCATTTTCA TTTGCATGGT CAGATAGAAG GTATTCCTAT
TTATGCTGTG  CTTTTGATTT [7417]
Gossyp.kirkii GAAAAAAAAG ----- TTATTCCTAT
TTATGCTGTG  CTTGTGATTT [7347]
Kokia.drynar  GAAAAAAAAG ----- TTATTCCTGT
TTATGCTGTG  CTTGTGATTT [7350]

```

```

[           7500           7510           7520           7530
7540       7550       7560]

```

```

[
.
.]

```

```

A_genome      TAATTATATG TAGAATGAAC TGATAAACAT AGCTGTTTTT TGGTCTTGCC
TACATTTTTG  TTCATCATTG [7460]
B_genome      TAATTATATT TAGAATGAAC TGATAAACAT AGCTGTTTTT TGGTCTTGCC
TACATTTTTG  TTCATCATTG [7506]
C_genome      TAATTATATT TAGAATGAAC TGATAAACAT AGCTGTTTTT TGGTCTTGCC
TACATTTTTG  TTCATCATTG [7447]
D_genome      TAATTATATT TAGAATGAAC TGATAAACAT AGCTGTTTTT TGGTCTTGCC
TACATTTTTG  TTCATCATTG [7454]
E_genome      TAATTATATT TAGAATGAAC TGATAAACAT AGCTGTTTTT TGGTCTTGCC
TACATTTTTT  TTCATCATTG [7504]
F_genome      TAATTATATT TAGAATGAAC TGATAAACAT AGCTGTTTTT TGGTCTTGCC
TACATTTTTG  TTCATCATTG [7506]
G_genome      TAATTATATT TAGAATGAAC TGATAAACGT AGCTGTTTTT TGGTCTTGCC
TACATTTTTG  TTCATCATTG [7487]
Gossyp.kirkii TAATTATATT TAGAATGAAC TGATAAACAT AGTTGTTTTT TTATCTTGCC
TACATTTTTG  TTCATCATTG [7417]
Kokia.drynar  TAATTATATT TAGAATGAAC TGATAAACAT AGCTGTTTTT TTATCTTGCC
TACATTTTTG  TTCATCATTG [7420]

```

```

[           7570           7580           7590           7600
7610           7620           7630]
[
.
.]
A_genome           TTTTGCTCCA TAAGTCATAA CGTATTGCAT TTGGGGACAA ATATCTAAAT
CATTGCTATG ATTTGTTCAA [7530]
B_genome           TTTTGCTCCA TAAGTCATAA TGTATTGCAT TTGGGGACAA ATATCTAAAT
CATTGCTATG ATTTGTTCAA [7576]
C_genome           TTTTGCTCCA TAAGTCATAA TGTATTGCAT TTGGGGACAA ATATCTAAAT
CATTGCTATG ATTTGTTCAA [7517]
D_genome           TTTTGCTCCA TAAGTCATAA TGTCTTGCAT TTGGGGACAA ATATCTAAAT
CATTGCTATG ATTTGTTCAA [7524]
E_genome           TTTTGCTCCA TAAGTCATAA TGTATTGCAT CTGGGGACAA ATATCTAAAT
GATTGCTATG ATTTGTTCAA [7574]
F_genome           TTTTGCTCCA TAAGTCATAA TGTATTGCAT TTGGGGACAA ATATCTAAAT
CATTGCCATG ATTTGTTCAA [7576]
G_genome           TTTTGCTCCA TAAGTCATAA TGTATTGCAT TTGGGGACAA ATATCTAAAT
CATTGCTATG ATTTGTTCAA [7557]
Gossyp.kirkii     TTTTGCTCCA TAAGTCATAA TGTATTGCAT TTGGGGACAA ATATCTAAAT
CATTGCTATG ATTTGTTCAA [7487]
Kokia.drynar      TTTTGCTCCA TAAGTCATAA TGTATTGCAT TTGGGGACAA ATATCTAAAT
CATTGCTATG ATTTGTTCAA [7490]

[           7640           7650           7660           7670
7680           7690           7700]
[
.
.]
A_genome           TTAGTGGTGC TGATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7600]
B_genome           TTAGTGGTGC TGATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7646]
C_genome           TTAGTGGTGC TGATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7587]
D_genome           TTAGTGGTGC TGATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7594]
E_genome           TTAGTGGTGC TGATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7644]
F_genome           TTAGTGGTGC TGATTGCTGT TTTTGTGAGA TAAGACTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7646]
G_genome           TTAGTGGTGC TGATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7627]
Gossyp.kirkii     TTAGTAGTGC TGATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7557]
Kokia.drynar      TTAGTAGTGC TAATTGCTGT TTTTGTGAGA TAAGGCTTCA CATAATTGCC
ATGCATGAAT TATGTGAATA [7560]

[           7710           7720           7730           7740
7750           7760           7770]
[
.
.]
A_genome           CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAATATCG
AGCAGATGAA CAAAACATCA [7670]
B_genome           CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAATATCG
AGCAGATGAA CAAAACATCA [7716]
C_genome           CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAATATTG
AGCAGATGAA CAAAACATCA [7657]
D_genome           CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAACATCG

```

AGCAGATGAA CAAAACATCA [7664]
 E_genome CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAATATCG
 AGCAGATGAA CAAAACATCA [7714]
 F_genome CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAATATCG
 AGCAGATGAA CAAAACATCA [7716]
 G_genome CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAATATCG
 AGCAGATGAA CAAAACATCA [7697]
 Gossyp.kirkii CACCAAAGGC GAGGGCTTCT CTGAGGGATT TGATGCACAT CTAAATATCG
 AGCAGATGAA CAAAACATCA [7627]
 Kokia.drynar CACCAAAGGC GAGGGCTTCT CCGAGGGATT TGATGCACAT CTAAATATCG
 AGCAGATGAA CAAAACATCA [7630]

[7780 7790 7800 7810
 7820 7830 7840]

[.
]
 A_genome GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7740]
 B_genome GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7786]
 C_genome GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7727]
 D_genome GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7734]
 E_genome GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7784]
 F_genome GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7786]
 G_genome GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7767]
 Gossyp.kirkii GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7697]
 Kokia.drynar GTTGAGCTAT TCCAAATGTA TGATGATCAC AGGAAGAAAG GAATTAATGT
 TTCAACAGAA AAGGAGTTCA [7700]

[7850 7860 7870 7880
 7890 7900 7910]

[.
]
 A_genome GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCGGG GTATAAAGTA
 AGTCGATACA AATGTTGAAT [7810]
 B_genome GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCGGG GTATAAAGTA
 AGTCGATACA AATGTTGAAT [7856]
 C_genome GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCGGG GTATAAAGTA
 AGTCGATACA AATGTTGAAT [7797]
 D_genome GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCGGG GTATAAAGTA
 AGTCGATACA AATGTTGAAT [7804]
 E_genome GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCGGG GTATAAAGTA
 AGTCGATACA AATGTTGAAT [7854]
 F_genome GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCGGG GTATAAAGTA
 AGTCGATACA AATGTTGAAT [7856]
 G_genome GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCGGG GTATAAAGTA
 AGTCGATACA AATGTTGAAT [7837]
 Gossyp.kirkii GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCAGG GTATAAAGTA
 AGTCAATACA AATGTCTGAAT [7767]
 Kokia.drynar GAGGTTATTA TGCACTTCTC AAACCTTGACA AGCATCCAGG GTATAAAGTA
 AGTCGATACA AATGTCTGAAT [7770]

```

[           7920           7930           7940           7950
7960           7970           7980]
[
.
.]
A_genome      CAATTATTCA AACTTCATCA ACTTTA-TTT TGAAAATAAG CACTCCCCAC
TAGGTTGAAC   CTGGGTTTTA [7879]
B_genome      CAATTATTCA AACTTCATCA ACTTTATTTT TGAAAATAAG CACTCCCCAC
TAGGTTGAAC   CTGGGTTTTA [7926]
C_genome      CAATTATTCA AACTTCATCA ACTTTATTTT TGAAAATAAG CACTCCCCAC
TAGGTTGAAC   CTGGGTTTTA [7867]
D_genome      CAATTATTCA AACTTCATCA ACTTTATTTT TGAAAATAAG CACTCCCCAC
TAGGTTGAAC   CTGGGTTTTA [7874]
E_genome      CAATTATTCA AACTTCATCA ACTTTATTTT TGAAAATAAG CACTCCCCAC
TAGGTTGAAC   CTGGGTTTTA [7924]
F_genome      CAATTATTCA AACTTCATCA ACTTTATTTT TGAAAATAAG CACTCCCCAC
TAGGTTGAAC   CTGGGTTTTA [7926]
G_genome      CAATTATTCA AACTTCATCA ACTTTATTTT TGAAAATAAG CACTCCCCAC
TAGGTTGAAC   CTGGGTTTTA [7907]
Gossyp.kirkii AAATTATTCA AACTTCATCA ACTTTATCTT TGAAAAT??? ???????????
??????????? ???GGTTTTA [7837]
Kokia.drynar  AAATTATTCA AACTTCATCA ACTTTATCTT TGAAAAT??? ????????????
??????????? ???GGTTTTA [7840]

[           7990           8000           8010           8020
8030           8040           8050]
[
.
.]
A_genome      CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGT AGATGCTGAG
CCTATGGCAA  AACCTTCCTC [7949]
B_genome      CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGT AGATGCTGAG
CCTATGGCAA  AACCTTCCTC [7996]
C_genome      CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGT AGATGCTGAG
CCTATGGCAA  AACCTTCCTC [7937]
D_genome      CAGCTATTGC CATTAGGAAA ATTGTGAATA CAGAAATGGT AGATGCTGAG
CCTATGGCAA  AACCTTCCTC [7944]
E_genome      CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGT AGATGCTGAG
CCTATGGCAA  AACCTTCCTC [7994]
F_genome      CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGA AGATGCTGAG
CCTATGGCAA  AACCTTCCTC [7996]
G_genome      CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGT AGATGCTGAG
CCTATGGCAA  AACCTTCCTC [7977]
Gossyp.kirkii CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGT AGATGCTGAG
CCAATGGCAA  AACCTTCCCC [7907]
Kokia.drynar  CAGCTATTGC CATTAGGAAA ATTGTGAAGA CAGAAATGGT AGATGCTGAG
CCTATGGCAA  AACCTTCCCC [7910]

[           8060           8070           8080           8090
8100           8110           8120]
[
.
.]
A_genome      ATTTGCTCCT ATAGAATTTT GGA CTGGGG TGGTATCTTT CTTGCATCAT
TTGTTAGTGC  AATTTTTTAT [8019]
B_genome      ATTTGCTCCT ATAGAATTTT GGA CTGGGG TGGTATCTTT CTTGCATCAT
TTGTTAGTGC  AATTTTTTAT [8066]
C_genome      ATTTGCTCCT ATAGAATTTT GGACATGGGG TGGTATCTTT CTTGCATCAT
TTGTTAGTGC  AATTTTTTAT [8007]

```

D_genome ATTTGCTCCT ATAGAATTTT GGACTTGGGG TGGTATCTTT CTTGCATCAT
 TTGTTAGTGC AATTTTTTAT [8014]
 E_genome ATTTGCTCCT ATAGAATTTT GGACTTGGGG TGGTATCTTT CTTGCATCAT
 TTGTTAGTGC AATTTTTTAT [8064]
 F_genome ATTTGCTCCT ATAGAATTTT GGACTTGGGG TGGTATCTTT CTTGCATCAT
 TTGTTAGTGC AATTTTTTAT [8066]
 G_genome ATTTGCTCCT ATAGAATTTT GGACATGGGG TGGTATCTTT CTTGCATCAT
 TTGTTAGTGC AATTTTTTAT [8047]
 Gossyp.kirkii ATTTGCTCCT ATAGAATTTT GGACTTGGGG TGGTATCTTT CTTGCATCAT
 TTGTTAGTGC AATTTTTTAT [7977]
 Kokia.drynar ATTTGCTCCT ATAGAATTTT GGACTTGGGG TGGTATCTTT CTTGCATCAT
 TTGTTTGTGC AATTTTTTAT [7980]

[8130 8140 8150 8160
 8170 8180 8190]

[
 . .]
 A_genome CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTACTTGC
 TTCCACTGTG CTAGGCTACA [8089]
 B_genome CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTACTTGC
 TTCCACTGTG CTAGGCTACA [8136]
 C_genome CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTACTTGC
 TTCCACTGTG CTAGGCTACA [8077]
 D_genome CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTACTTGC
 TTCCACTGTG CTAGGCTACA [8084]
 E_genome CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTACTTGC
 TTCCACTGTG CTAGGCTACA [8134]
 F_genome CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCAT TCCTACTTGC
 TTCCACTGTG CTAGGCTACA [8136]
 G_genome CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTACTTGC
 TTCCACTGTG CTAGGCTACA [8117]
 Gossyp.kirkii CCCACAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTACTTGC
 TTCTACTGTG CTAGGCTACA [8047]
 Kokia.drynar CCAATAGCAT TAGGGACAAC TGCTCGAACA TGCCTTCCCT TCCTCCTTGC
 TTCTACTGTG CTAGGCTACA [8050]

[8200 8210 8220 8230
 8240 8250 8260]

[
 . .]
 A_genome TGGTTGGTTC GGGGTAAATT TTCATTTTTT TTCATCTTTA CAGCAGATTC
 ATATGGACAG GTTTTTCCTA [8159]
 B_genome TGGTTGGTTC GGGGTAAATT TTCATTTTTT TTCATCTTTA CAGCAGATTC
 ATATGGACAG GTTTTTCCTA [8206]
 C_genome TGGTTGGGTC GGGGTAAATT TTCATTTTTT TTCATCTTTA CAGCAGATTC
 ATATGGACAG GTTTTTCCTA [8147]
 D_genome TGGTTGGTTC GGGGTAAGTT TTCATTTTTT TTCATCTTTA CAGCAGATTC
 ATATGGACAG GTTTTTCCTA [8154]
 E_genome TGGTTGGTTC GGGGTAAATT TTCATTTTTT TTCATCTTTA CAGCAGATTC
 ATATGGACAG GTTTTTCCTA [8204]
 F_genome TGGTTGGTTC GGGGTAAATT TTCATTTTTT TTCATCTTTA CAGCAGATCC
 ATATGGACAG GTTTTTCCTA [8206]
 G_genome TGGTTGGGTC GGGGTAAATT TTCATTTTTT TTCATCTTTA CAGCAGATTC
 ATACGGACAG GTTTTTCCTA [8187]
 Gossyp.kirkii TGGTTGGTTC GGGGTAAATT TCCATTTTTT TTCATCTTTA CAACAGATTT
 ATATGGACAT GTTTTTCCTA [8117]
 Kokia.drynar TGGTTGGTTC GGGGTAAATT TCCATTTTTT TTCATCTTTA CAACAGATTT

ATATGGACAT GTTTTTCCTA [8120]

[8270 8280 8290 8300
8310 8320 8330]

[.]

A_genome ATAACAATA TAACATAATT TTATGAAATT TGTGCTAATT TGTATTCTTC
TGATTTTCAGG TTGCCATCTG [8229]

B_genome ATAACAATA TAACATAATT TTATGAAATT TGTGCTAATT TGTATTCTTC
TGATTTTCAGG TTGCCATCTG [8276]

C_genome ATAACAATA TAACATAATT TTATGAAATT TGTGCTAATT TGTATTCTTC
TGATTTTCAGG TTGCCATCTG [8217]

D_genome ATAACAATA TAACATAATT TTATGAAATT TGTGCTAATT TGTATTCTTC
TGATTTTCAGG TTGCCATCTG [8224]

E_genome ATAACAATA TAACATAATT TTATGAAAAT TGTGCTAATT TGTATTCTTC
TGATTTTCAGG TTGCCATCTG [8274]

F_genome ATAACAATA TAACATAATT TTGTGAAATT TGTGCTAATT TTTATTCTTC
TGATTTTCAGG TTGCCATCTG [8276]

G_genome ATAACAATA TAACATAGTT TTATGAAATT TGTGCTAATT TGTATTCTTC
TGATTTTCAGG TTGCCATCTG [8257]

Gossyp.kirkii ATAACAATA TAACATAATT TTATGAAATT TGTACCAATT TGTACTCTTC
TGATTTTCAGG TTGCCATCTG [8187]

Kokia.drynar ATGACAATA TAACATAATT TTATGAAATT TGTACCAATT TGTACTCTTC
TGGTTTCAGG TTGCCATCTG [8190]

[8340 8350 8360 8370
8380 8390 8400]

[.]

A_genome CTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCATTGG [8299]

B_genome CTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8346]

C_genome CTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8287]

D_genome CTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8294]

E_genome CTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8344]

F_genome CTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8346]

G_genome CTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8327]

Gossyp.kirkii GTGTGAAAAA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8257]

Kokia.drynar GTGTGAAACA AGTTCTTCAT CCGATTATTT GCTGTGCACT CTCAGCAGAT
CTTGCAGCAG TGGCTTTTGG [8260]

[8410 8420 8430 8440
8450 8460 8470]

[.]

A_genome GTACATTTCA CAGTCGGGAA TTGATGCGGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT TATTCTTTAA [8369]

B_genome GTACATTTCA CAGTCGGGAG TTGATGCGGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT TATTCTTTAA [8416]

C_genome TTACATTTCA CAGTCGGGAG TTGATGCGGT ATTAGGTATT ATTTAAAAGC

TGATCTTTCT TATTCTTTAA [8357]
D_genome GTACATTTCA CAGTCGGGAG TTGATGCGGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT TGTTCTTTAA [8364]
E_genome GTACATTTCA CAGTCGGGAG TTGATGCGGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT TATTCTTTAA [8414]
F_genome GTACATTTCA CAGTCGGGAG TTGATGCGGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT TATTCTTTAA [8416]
G_genome TTACATTTCA CAGTCGGGAG TTGATGCAGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT TATTCTTTAA [8397]
Gossyp.kirkii GTACATTTCA CAGTCGGGAG TTGATGCGGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT AGTTCTTTAA [8327]
Kokia.drynar GTACATTTCA CAGTCGGGAG TTGATGCGGT ATTAGGTATT ATTTAAAAGC
TGATCTTTCT AGTTCATTAA [8330]

[8480 8490 8500 8510
8520 8530 8540]

[.]
A_genome TTAAAGGAAA TCCAACATGG GAGTGT CACA AATGCATTCC ACGCTCGAAT
CGAAACCTGC CTAGCAG-AA [8438]
B_genome TTAAAGGAAA TCCAACATGG GAGTGT CACA AATGCATTCC ATCCTCGAAT
CGAAACCTCC CTAAAAG-AA [8485]
C_genome TTAAAGGAAA ACC??????? ?????????? ?????????? ??????????T
CGAAACCTGC CTAGCAGAAA [8427]
D_genome TTAAAGGAAA TCCAACATGG GAGTGT CACA AATGCATTCC ATCCTCGAAT
CGAAACCTGC CTAGCAG-AA [8433]
E_genome TTAAAGGAAA TCCAACATGG GAGTGT CACA AATGCATCGC ATCCTCGAAT
CGAAACCTGC CTAGCAG-AA [8483]
F_genome TTAAAGGAAA TCCAACATGG GAGTGT CACA AATGCATTCC ATCCTCGAAT
CGAAACCTGC CTAGCAG-AA [8485]
G_genome TTAAAGGAAA ACCAACATGG GAGTGT CACA AATGCATTCC ATCCTCGAAT
CGAAACCTGC CTAGCAG-AA [8466]
Gossyp.kirkii TTAAGAGAAA ACCAACATGG GAGTGT CACA ACTGCATTCC ATCCTCGAAT
CGAAACCTGC CTAGCAG-AA [8396]
Kokia.drynar TTAAGAGAAA ACCAACATGG GAGTGT CACA AATGCATTCC ATCCTCGAAT
CGAAACCTGC CTAGCAG-AA [8399]

[8550 8560 8570 8580
8590 8600 8610]

[.]
A_genome CGACCCGTGA ACGCGTTGTA TACAA-CATC GGAGGTGGTG CGGGTGCATC
GTTGCCTGTC CCCACCCCGG [8507]
B_genome CGACCCGTGT ACGCGTTGTA AACAA-CATC GGAGGTGGTG CGGGTGCATC
GTCGCCTCTC GCCACCCCGG [8554]
C_genome CGACCCGCGA ACGCGTTGTA AACAA-CACC GGAGGTGGCG CGGGCGCATC
CACGCCTCTC GCCACCCCCA [8496]
D_genome CGACCCGCGA ACGAGTTGCA AACAA-CACC GGAGGTGGTG CGGGTGCATC
CTCGCCTCTC GCCACCCCGG [8502]
E_genome CGACCCGTGA ACGCGTTGTG AACAA-CACC GGAGGTGGTG CGGGTGCATC
CACGCCTGTC AACACCCCGG [8552]
F_genome CGACCCGTGA ACGCGTTGTA AACAA-CAT? GGAGGTGGTG CAGGTGCATC
GTCGCCTGTT GCCACCCCGG [8554]
G_genome CGACCCGCGA ACGCGTTGTA AACAAACACC GGAGGTGGTG CGGGTGCATC
CGCGCCTCTC GCCACCCCGG [8536]
Gossyp.kirkii CGACCCGTGA ACGAGTTGTA AACAA-CACC GGAGGTGGTG TGGGTGCATT
C?TGCCTCTC GCCACTTCT [8465]

Kokia.drynar CGACCCGTGA ACGAGTTGTA AACAA-CACC GGAAGTGGTG TGGGTGCATC
CTTGCCTCTC GCCACTTCT [8468]

[8620 8630 8640 8650
8660 8670 8680]

[.]
A_genome CGTGTCCGAG CGGCCGGTCT TGTCATCCCT TTTGCCCATC GGGTGGGG-T
GAGATGTCAG GATCAACTTC [8576]
B_genome CGTGTCCGAG CGGCCGATCT TGTCGTCCCT TT-GCCCATC GGGTGGGG-T
GAAACGTAAG GATCAACTTC [8622]
C_genome CGTGTCCGAG TGGCCGGTCT CGTCGTCCCT TT-GCCCATC GGGTGGGG-T
GAGATGTCAA GATCAACCTC [8564]
D_genome TGTCTCCGAG CGGCCAGTCT CGTCGTCCCT CT-GCCCGTC GGGTGGGG-T
GAGATGCCGG GATCAACCTC [8570]
E_genome CGTCTTGAAG CAGTTGATCT CGTCGTCCCT TT-GCCCATC GGGTGGGGGT
GAGATGTCAA GCTCAACCTC [8621]
F_genome CGTGTCCGAG TGGCCGGTCT TGTCGTCCCT TT-GCCCATC GGGTGGGG-T
GAGATGTCAG GATCAACCTC [8622]
G_genome CGTCTCCGAG CGGTCGGTCT CGTCGTCCCT TT-GCCCATC GGGTGGGG-T
GAGATGTCAA GATCAACCTC [8604]
Gossyp.kirkii CGTC?CGGAG CGGTTGGTCT TGCTGTCCCT TC-GCC?ATC GGGTGGGG-T
GAGATGTCAA GTTCAACCTT [8533]
Kokia.drynar CGTCTCCGAG CTGTTGTTCT TGTCGTCCCT TT-GCCTATC GGGTGGGG-T
GAGATGCCAG GTTCAACCTT [8536]

[8690 8700 8710 8720
8730 8740 8750]

[.]
A_genome TTCGATGCAA AACGAACAAA CCCCCGGCGC GAATCGCGCC AAGGAATCGA
AATGAAA-AA A-GGGACACA [8644]
B_genome CTCGATTCCA AACGGACCAA CCCCCGGCGC GAATCGCCCC CAGGAATCGA
AACGAAA-AA AAGGGACACG [8691]
C_genome TTCGAGGCAA AACGAACAAA CCCCCGGCGC GAATCGCGCC AAGGAATCGA
AACGAAA-AA A-GGGGCACG [8632]
D_genome TTCGAGGCAA AACGAACAAA CCCCCGGCGC GAATCGCGCC AAGGAATCGA
AACGAAA-AA A-GGGGCACG [8638]
E_genome TTCGAGGCAA AACGAACAAA CCCCCGGCGC GAATCGCGCC AAGGAATCGA
AACGAAA-AG A-GGGGCACA [8689]
F_genome TTCGATGCAA AACGAACAAA CCCCCGGCGT GAATTGCGCC AAGGAATCGA
AATGAAA-AA A-GGGACACG [8690]
G_genome TTCGAGGCAA AACGAACAAA CCCCCGGCGC GAATCGCGCC AAGGAATCGA
AACGAGA-AA A-GGGGCACG [8672]
Gossyp.kirkii TTCGGGGCAA AACGAACAAA CCCCCGGCGC GAATCGCGCC AAGGAATCGG
AACTAAAAA AAGGGGCACG [8603]
Kokia.drynar TCTGGGGCAA AACGAACAAA CCCCCGGCGC GAATCGCGCC AAGGAATCGA
AACTAAA-AT AAGGGGCACG [8605]

[8760 8770 8780 8790
8800 8810 8820]

[.]
A_genome TCTCTTGTCT CCGCACCGTT CGCGGTGTCA GTGCTTCAGT GATGTTGTTC
TTTTGTCTGCA AAGTATATAG [8714]
B_genome TCTACTGTTG TTGCACCGTT CGCGGTGTCA GTGCTTCAGT GATGTTGTTC
TTTTGTCTGCA AAATATATAG [8761]

C_genome TCGTCTGTCTG CCGCACCGTT CGCGGTGTCA GTGCTTCAGT GATGTTGTTC
TCTTGTCTGCA AAATATACAG [8702]
D_genome TCTTCTGTCTG CCGCACCGTT CGCGGTGTCTG GTGCTTCAGT GATGCTGTTC
TCTTGTCTGCA AAATATACAG [8708]
E_genome TCTTCTGTCTG CTGCACCGTT CGCGGTGTCA ATGCTTCAG? GATGTTGTTC TCTTGTCTGCA
AAATATACAG [8759] `F_genome TCTTATGTTG CCGCACCGTT CGCGGTGTCA GTGCTTCA
GT GATGTTGTTC TTTTGTCTGCA AAATATATAG [8760]
G_genome TCTTCTGTCTG CCTCACCGTT CGCGGTGTCA GTGCTTCAGT GATGTTGTTC
TCTTGTCTGCA AAATATACAG [8742]
Gossyp.kirkii TCTTCTGTCTG TCGCACCGTT CGCGGTGTCTG CTGCTTCAGT GACGTTGTTC
TTTTGTTGGA AAATATACAG [8673]
Kokia.drynar TCTTCTGTCTG TCGCACCGTT CGCGGTGTCTG TTGCTTTAGT -ACGTTGTTC
TTTTGTTGGA AAATATACAA [8674]

[8830 8840 8850 8860
8870 8880 8890]

[.
. .]
A_genome AACGACTCTC GGCAACGGAT ATCTCGGCTC TCGCATCGAT GAAGAACGTA
GCGAAATGCG ATACTTGGTG [8784]
B_genome AACGACTCTC GGCAACGGA? ?????????? ?????????? ??????????
??GAAATGCG ATACTTGGTG [8831]
C_genome AACGACTCTC GGCAACGGAT ATCTCGGCTC TCGCATCGAT GAAGAACGTA
GCGAAATGCG ATACTTGGTG [8772]
D_genome AACGACTCTC GGCAACGGAT ATCTCGGCTC TCGCATCGAT GAAGAACGTA
GCGAAATGCG ATACTTGGTG [8778]
E_genome AACGACTCTC GGCAACGGAT ATCTCGGCTC TCGCATCGAT GAAGAACGTA
GCGAAATGCG ATACTTGGTG [8829]
F_genome AACGACTCTC GGCAACGGAT ATCTCGGCTC TCGCATCGAT GAAGAACGTA
GCGAAATGCG ATACTTGGTG [8830]
G_genome AACGACTCTC GGCAACGGAT ATCTCG???? ?????????? ??????????
???AAATGCG ATACTTGGTG [8812]
Gossyp.kirkii AACGACTCTC GGCAACGGAT ATCTCGGCTC TCGCATCGAT GAAGAACGTA
GCGAAATGCG ATACTTGGTG [8743]
Kokia.drynar AACGACTCTC GGCAACGGAT ATCT?????? ?????????? ??????????
?????????? ???CTTGGTG [8744]

[8900 8910 8920 8930
8940 8950 8960]

[.
. .]
A_genome TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCATT AGGCCGAGGG [8854]
B_genome TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCATT AGGCCGAGGG [8901]
C_genome TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCATT AGGCCGAGGG [8842]
D_genome TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCATT AGGCCGAGGG [8848]
E_genome TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCACT AGGCCGAGGG [8899]
F_genome TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCATT AGGCCGAGGG [8900]
G_genome TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCATT AGGCCGAGGG [8882]
Gossyp.kirkii TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
CCAAGCCATT AGGCCGAGGG [8813]

Kokia.drynar TGAATTGCAG AATCCCGTGA ACCATCGAGT CTTTGAACGC AAGTTGCGCC
 CCAAGCCATT AGGTCGAGGG [8814]

[8970 8980 8990 9000
 9010 9020 9030]

[.
]
 A_genome CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCCCATCTAA CCCCATCCC
 TCGGGACTCG G-TTGGACCG [8923]
 B_genome CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCCCATCCAA CCCCATCCC
 TCGGGACTCG G-TTGGACCG [8970]
 C_genome CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCCCATCCAA CCCTGAGCCC
 TCGGGCCTCG GTTTGGACCG [8912]
 D_genome CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCCCATCCAA CCATGAGCCC
 TCGAGCCTCG G-TTGGACCG [8917]
 E_genome CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCCCATCCAA CACTGAGCCT
 TCGGGCCTCG G-TTGGACCT [8968]
 F_genome CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCC-?TCCAA CCCCATCCC
 TCGGGACTCG GTTTGGACCG [8969]
 G_genome CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCCCATCCAA CCCTGAGCCC
 TCGGGCCTCG G-CTGGACCG [8951]
 Gossyp.kirkii CACGTCTGCC TGGGTGTCAC GCATCGTCGC CCCCATCCAA CCCTTAGCTC
 TCGGGCCTCG G-TTGAATTG [8882]
 Kokia.drynar CACGTCTGCC TGGGTGTCAC GCATAGTCGC CCCCATCCAA CCCTTAGCTC
 TCGGGCGTCG G-TTGAATTG [8883]

[9040 9050 9060 9070
 9080 9090 9100]

[.
]
 A_genome C-GGGCGGAA ATTGGCC-TC CCGTGCGCTC ACAGCCAGCG GTTGGCCTAA
 ATTCGAGTCC TCGATGACAT [8991]
 B_genome C-GGGCGGAA ATTGGCC-TC CCGTGCGCCC ACAGCTAGCG GTTGGCCTAA
 ATTCGAGTCC TCGACGACAT [9038]
 C_genome C-GGGCGGAA ATTGGCC-TC CCGTGCGCTC ACAGCGAGCG GTTGGCCTAA
 ATTCGAGCCC TCGACGAGAT [8980]
 D_genome C-GGGCGGAA ATTGGCC-TC CCGTGCGCTC ACAGCCAGCG GTTGGCCTAA
 ATTCGAGTCC TCGACGACAT [8985]
 E_genome C-GGGCGGAA ATTGGCC-TC CCGTGCGCTC ACAGCTATCG GTTGGCCTAA
 ATTCGAGTCC TCGACGACAC [9036]
 F_genome C-GGGCGGAA ATTGGCC-TC CCGTGCGCTC ACAGCCAGCG GTTGGCCTAA
 ATTCGAGTCC TCGACGACAT [9037]
 G_genome CGGGCGGAA ATTGGCCGTC CCGTGCGCTC ACAGCCAGCG GTTGGCCTAA
 ATTCGAGTCC TCGACGTCAT [9021]
 Gossyp.kirkii T-GGGCGGAA ATTGGCC-TC CCGTG?GCTC ATAGCTAACG GTTGGCCTAA
 ATTTGAGTCC TTGACGACAT [8950]
 Kokia.drynar T-GGGCGGAA ATTGGCC-TC CCGCGTGCTC ATAGCTAGCG GTTGGCCTAA
 ATTTGAGTCC TTGACGACAT [8951]

[9110 9120 9130 9140
 9150 9160 9170]

[.
]
 A_genome AATCGTCGCG ACGATCGGTG GTAATGCTGT A--AGCAA-- CCTCGTTCGG
 AGTCGTGCGC GTTCGTCGAT [9057]
 B_genome AACCGTCGCG ACGATCGGTG GTAATGCTTT A--AGCAA-- CCTCGTTCGG
 AGTCGTGCGC GTTCGTCGAT [9104]

C_genome CATCGTCGCG ACCATCGGTG GTAATGCTGT A--AGCAA-- CCTCGTTTCGG
 AGTCGCGCGC GTTCGTCGAT [9046]
 D_genome CATCGTCGCG ACGATCGGTG GTAATGCTGT A--AGCAA-- CCTCGTTTCGG
 AGTCGTGCGC GTCCGTCGAT [9051]
 E_genome CTTGTCGCG ACCATCGGTG GTAATGCTGT A--AGCAA-- CCTCGTTTGG
 AGTCGTGTGC GTTCGTCGAT [9102]
 F_genome CATCGTCGCG ACCATCGGTG GTAATGCTGT A--AGCAA-- CCTCGTTTCGG
 AGTCGTGCGC GTTCGTCGAT [9103]
 G_genome CATCGTCGCG ACCATCGGTG GTAATGCTGC A--AGCAAA- CCTCGTTTCGG
 AGTCGCGCGC GTTCGACGGT [9088]
 Gossyp.kirkii CATCGTCGCG ACGATCGGTG GTAATGCTCT ATTAGCACAG CCTCGTTCAA
 AGTTGTGCAC GATGGTCGAT [9020]
 Kokia.drynar CATCGTCGCG ACGATCGGTG GTAATGCTCT ATTAGCACAG CCTCGTTCAA
 AGTTGTGCAC GATGGTCGAT [9021]

[9180 9190 9200 9210
 9220 9230 9240]

[.]
 A_genome CGAGACCCTT AAACCCTTTC GGCATCGCA? ?????????? ?????GTACAT
 TTCTCTTTAA TTTCCTTCAT [9112]
 B_genome CGAGACCCTT GAACCCTTTC GGCATCGCAA GGACGGTGCT CGCAGTACAT
 TTCTCTTTAA TTTCCTTCGT [9174]
 C_genome CGAGACCCTT AAACCCTTTC GGCATCGCAA GGACGGTGCT CGCAGTACAT
 TTCTCTTTAA TTTCCTTCAT [9116]
 D_genome CGAGACCCTT GAACCCTTTC GGCATCGCAA GGACGGTGCT CGCAGTACAT
 TTCTCTTTAA TTTCCTTCAT [9121]
 E_genome CGAGACCCTT GAACCCTTTC GGCATCGCAA GGACGGTGCT CGCAGTACAT
 TTCTCTCTAA TTTCCTTCAT [9172]
 F_genome CGAGACCCTT GAACCCTTTC GGCATCGCAA GGATGATGCT CGCAGTACAT
 TTCTCTTTAA TTTCCTTCAT [9173]
 G_genome CGAGACCCTT GAACCCTTTC GGTATCGCAA GGACGGTGCT CGCAGTACAT
 TTCTCTTTCA TTTCCTTCAT [9158]
 Gossyp.kirkii CGAGGCCCTC GAACCCTTTC TGCATCGCAA TGACGGTGCT CGCAGTACTT
 TTCTCTTTCA TTTCCTT--- [9087]
 Kokia.drynar GAAGGCCCTC GAACCCTTTC GGCATCGCAA TGACGGTGCT CGCA??????
 ?????????? ?????????? [9091]

[9250 9260 9270 9280
 9290 9300 9310]

[.]
 A_genome TTTTTTT--- -CCATTTTCAT GTTTTTCTTG TTAATTTTGC ATTGAAGTGA
 TAAATTTGAG TGAATGATGT [9178]
 B_genome TTTTTTT--- -CCATTTTCAT GTTTTTCTTG TTAATTTTGC ATGGACGTGA
 TAAATTTGAG TGAATGATGT [9240]
 C_genome TTTTTTTTTT TCCAYTTTCAT GTTTTTCTTG TTAATTTTGC ATTGAAGTGA
 TAAATTTGAG TGAATGATGT [9186]
 D_genome TT-TTTT--- -CCATTTTCAT GTTTTTCTTG TTAATTTTGC ATTGAAGTGA
 TAAATTTGAG TGAATGATGT [9186]
 E_genome TTTTTTT--- -CCATTTTCAT GTTTTTCTTG TTAATTTTGC ATTGAAGTGA
 TAAATTTGAG TGAATGATGT [9238]
 F_genome TTTTTTT--- -CCATATCAT GTTTTTCTTG TTAATTTTGC ATTGAAGTGA
 TAAATTTGAG TGAATGATGT [9239]
 G_genome TTTTTTTT-- -CCATTTTCAT GTTTTTCTTG TTAATTTTGC ATTGAAGTGA
 TAAATTTGAG TGAATGATGT [9225]
 Gossyp.kirkii ----- --CATTTCAT GTTTCTCTTG TTAATTTTGC ATTGAAGTGA

TAAATTTGAG T----- [9136]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9161]

[9320 9330 9340 9350
 9360 9370 9380]

[.]
 A_genome TTGGTATATC TTCTTAGTAA CTGACCTTTT GAAAATACTA GCAT----TT
 TTTTTTTTTA ATATCAAGTG [9244]
 B_genome TTGGTATATC TTCTTAGTAA CTGACCTTTT GAAAATACTA GCAT----TT
 TTTT---A ATATCAAGTG [9303]
 C_genome TTGCTATATC TTCTTAGTAA CTGACCTTTT GAAAATACTA GCAT----TT
 TTTT---A ATATCAAGTG [9248]
 D_genome TTGGTATATC TTCTTAGTAA CTGACCTTTT GAAAATACTA GCAT----TT
 TTTTT---A ATATCAAGTG [9249]
 E_genome TTGATATATC TTCTTAGTAC CTGACCTTTT GAAAATACTA GCAT----TT
 TTTTTT--A ATATCAAGTG [9302]
 F_genome TTGGTATATC TTCTTAGTAA CCGACCTTTT GAAAATACTA GCAT----TT
 TTTT---A ATATCAAG-- [9299]
 G_genome TTGGTATATC TTCTTAGTAA CTGACCTTTT GAAAATACTA GCAT----TT
 TTTT-----A ATATCAAGTG [9286]
 Gossyp.kirkii -----ATATC TTCTTAGTAA CTGAGCTTTT GAAAATACTA GCTTCTTTTT
 TTTTTTTTTA ATATCAAGTG [9201]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9231]

[9390 9400 9410 9420
 9430 9440 9450]

[.]
 A_genome AAAGAAGAAG AAGAAGAAGA AGAAGAAGAA GAATTTTCGCC ATGCAAAAAG
 CTTTTTAAGG CTCTTTTTT- [9313]
 B_genome AAAGAAGAAG AAGAAGAAGA AGAAGAA--- ---TTTCGCC ATGCAAAAAG
 CTTTTTAAGG CTTTTTTTT- [9366]
 C_genome AAAGAAGAAG AAGAAGAAGA AGAAGAAGAA GAATTTTCGCC ATGCAAAAAG
 CTTTTTAAGG CTTTTT-TTT [9317]
 D_genome AAAGAAGAAG AA---GAA-- ----- ---TTTCGCC ATGCAAAAAG
 CTTTTTAAGG CTTTTCTTTT [9301]
 E_genome AAAGAAGAAG AAGAAGAAGA AGAAGAAGAA GAATTTTCGCC ATGCAAAAAG
 CTTTTTAAGG CTTTTTTTTT [9372]
 F_genome -AAGAAGAAG AAGAAGAAGA AGAAGAAGAA GAATTTTCGCC ATGCAAAAAG
 CTTTTTAAGG CTTTTTTTTT [9368]
 G_genome AAAGAAGAAG AAGAAGAA-- ----- ---TTTCGCC ATGCAAAAAG
 CTTTTTAAGG CTTTTCTTTT [9341]
 Gossyp.kirkii AAAGAAGAAG AAGAAGAA-- ----- ---TTTCGCC ATGYAAAAAG
 CTTTTT---- -TTTTTC--- [9248]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9301]

[9460 9470 9480 9490
 9500 9510 9520]

[.]
 A_genome TCTTAGATGA AAATTTATTT GTTTACTTAT ACTGTTCTTT TAAGCCTGAA
 GAAAGAAGCC ATGGTTT--- [9380]
 B_genome -CTTAGATCA AAATTTATTT GTTTACTTAT ACTGTTCTTT -AAGCCTGAA

GAAAGARGCC ATGGTTT--- [9431]
 C_genome TCWWAGATCA AAATTTATTT GTTTACTTAT ACTGTTCTTT TAAGCCTGAA
 GAAAGAAGCC ATGGTTT--- [9384]
 D_genome CCTTAGATCA AAATTTATTT GTTTACTTAT ACTGTTCTTT -----
 ----- [9341]
 E_genome TCTTAGATCA AAATTTATTT GTTTACTTA- -CTGTTCTTT TAAGCCTGAA
 GAGAGAAGCC ATGGTTT--- [9437]
 F_genome TCTTAGATCA AAATTTATTT GTTTACTTAT ACTGTTCTTT TAAGCCTGAG
 GAAAGAAGCC ATGGTTT--- [9435]
 G_genome TCATAGATCA AAATTTATTT GTTTACTTAT ACTGTTCTTT TAAGCCTGAA
 GAAAGAAGCC ATGGTTT--- [9408]
 Gossyp.kirkii -CTTAGATCC AAATTTATTT GTTTACTTAT AATGTTCTTT TAAGCCTGAA
 GAAAGAAGCC ATGGTTTTTTT [9317]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9371]

[9530 9540 9550 9560
 9570 9580 9590]

[.]
 A_genome ----- -CAATTT TTGAGAGTTT TATAGATCCC
 AGATACCAGA GAGCTTCATC [9426]
 B_genome ----- -CAATTT TTGAGAGTTT TA--AATCCC
 AGATACTAGA GAGCTTCATC [9475]
 C_genome ----- -CAATTT TTGAGAGTTT TA--AATCCC
 AGATACCAGA GAGCTTCATC [9428]
 D_genome ----- -CAATTT TTGAGAGTTT TA--AATCCC
 AAATACCAGA GAGCTTCATC [9385]
 E_genome ----- -CACTTT TTGAGAGTTT TA--AATCCC
 AGATACCAGA GAGCTTCATC [9481]
 F_genome ----- -CAATTT TTGAGAGTTT TA--AATCCC
 AGATACCAGA GAGCTTCATC [9479]
 G_genome ----- -CAATTT TTGAGAGTTT TA--AATCCC
 AGATACCAGA GAGCTTCATC [9452]
 Gossyp.kirkii CTTTTTATAA AAAATAATTC TGCTCAATTT TTGAAAGTTT TA--AATCCC
 AGATACCAGA GAGCTTCATC [9385]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9441]

[9600 9610 9620 9630
 9640 9650 9660]

[.]
 A_genome ATTTATTCAT ATATTTTTGA ACATTTTTTT- -AAAGCAAGA ACTTGTGATT
 TTTTTTTGGT ----- [9484]
 B_genome GTTTATTCAT ATATTTTTAA ACATTTTTTT- -AAAGCAAGA ACTTGTGATT
 TGTTTTTGGT ----- [9533]
 C_genome GTTTACTCAT ACATTTTTAA ACATTTTTTT- -AAAGCAAGA ACTTGTGATT
 TGTTTTYGGT ----- [9486]
 D_genome GTTTATTCAT ATATTTTTAA ACATTTTTTT- -AAAGCAAGA ACTTGTGATT
 TGTTTTTGGT ----- [9443]
 E_genome GTTTATTCAT ATATTTTTAA ACATTTTTTT- -AAAGCAAGA CCTTGTGATT
 TGTTTCTGGT ----- [9539]
 F_genome G?TTATTCAT ATATTTTTAA ACATTTTTTT- -AAAGCAAGA ACTTGTGATT
 TGTTTTTGGT ----- [9537]
 G_genome GTTTATTCAT ATATTTTTAA ACATTTTTTT- -AAAGCAAGA ACTTGTGATT
 TGTTTTTGGT ----- [9510]

Gossyp.kirkii GTTTATTTAT ATATTTTTAA ACATTTTTTT TAAAGCATCA ACCTGTGATT
 TGTTTTTGT CAAATCAGTG [9455]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9511]

[9670 9680 9690 9700
 9710 9720 9730]
 [.
 . .]

A_genome -----
 ----- [9484]
 B_genome -----
 ----- [9533]
 C_genome -----
 ----- [9486]
 D_genome -----
 ----- [9443]
 E_genome -----
 ----- [9539]
 F_genome -----
 ----- [9537]
 G_genome -----
 ----- [9510]

Gossyp.kirkii GCGGAGAGGA AGGAAGGACG AAATTAAATT TGTATATTTT TATTATTATA
 TTTTAGTAGT TTATATTAAC [9525]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9581]

[9740 9750 9760 9770
 9780 9790 9800]
 [.
 . .]

A_genome -----
 ----- [9484]
 B_genome -----
 ----- [9533]
 C_genome -----
 ----- [9486]
 D_genome -----
 ----- [9443]
 E_genome -----
 ----- [9539]
 F_genome -----
 ----- [9537]
 G_genome -----
 ----- [9510]

Gossyp.kirkii TTTTAAAAAG TTAAATTAAA TTTTTTATCA TTTTGAATA GGTCATAAGT
 GTAATTTTAT TTTTATTAAT [9595]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9651]

[9810 9820 9830 9840
 9850 9860 9870]
 [.
 . .]

A_genome -----
 ----- [9484]

```

B_genome      -----
-----      [9533]
C_genome      -----
-----      [9486]
D_genome      -----
-----      [9443]
E_genome      -----
-----      [9539]
F_genome      -----
-----      [9537]
G_genome      -----
-----      [9510]
Gossyp.kirkii TTAAAATTTT GTAAATTGTA AAAGATTAAA TTAAAAATTT ATTATTTTAA
GGGGTTACAA TATATATATA [9665]
Kokia.drynar  ?????????? ?????????? ?????????? ?????????? ??????????
?????????? ?????????? [9721]

[           9880           9890           9900           9910
9920       9930       9940]
[
.          .]
A_genome      -----
-----      [9484]
B_genome      -----
-----      [9533]
C_genome      -----
-----      [9486]
D_genome      -----
-----      [9443]
E_genome      -----
-----      [9539]
F_genome      -----
-----      [9537]
G_genome      -----
-----      [9510]
Gossyp.kirkii TATATATACA AAGGAGAAAA TTGTAAAAAT CTTAAAGTTT GGGGGTTTAC
TTATATTTTT GAGAAGGTCA [9735]
Kokia.drynar  ?????????? ?????????? ?????????? ?????????? ??????????
?????????? ?????????? [9791]

[           9950           9960           9970           9980
9990       10000       10010]
[
.          .]
A_genome      -----
-----      [9484]
B_genome      -----
-----      [9533]
C_genome      -----
-----      [9486]
D_genome      -----
-----      [9443]
E_genome      -----
-----      [9539]
F_genome      -----
-----      [9537]
G_genome      -----
-----

```

----- [9510]
 Gossyp.kirkii TAGTATATTT TCAAAGGGCT AAATTGAAAA AAATTTAAAC TTTAGAGTGC
 CATAGCCCTT GGGTCTCTAT [9805]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9861]

[10020 10030 10040 10050
 10060 10070 10080]
 [.
]

A_genome -----A AAATATGCAA TAAATCTTCA TATTTTTCGT AAATTTAAAA
 TTTAATCCTT TTAGTTTTTA [9545]
 B_genome -----A AAATATGCAA TAAATCTTCA TATTTTTCAT AAATTTAAAA
 TTTAATCCTT TTATTTTTTA [9594]
 C_genome -----A AAATATGCAA TAAATCTTCA TATTTTTCGT AAATTTAAAA
 TTTAATCCTT TTATCTTTTA [9547]
 D_genome -----A AAATATGCAA TAAATTTTCA TATTTTTCGT AAATTTAAAA
 TTTGATTCTT TTTACTTTTAA [9504]
 E_genome -----A AAATATGCAA TAAATCTTCA TATTTTTCGT AAATTTAAAA
 TTTAATCCTT TTATTTTTTA [9600]
 F_genome -----A AAATATGCAA TAAATYTTCA TATTTTTCGT AAATTTAAAA
 TTTAATCCTT TTATCTTTTA [9598]
 G_genome -----A AAATATGCAA TAAATCTTCA TATTTTTCGT AAATTTAAAA
 TTTAATCCTT TTATCTTTTA [9571]
 Gossyp.kirkii TCGTTGGTTA AAATACGAAA TAAATCTTCC TATTTTTCGT AAATTTAAAA
 TTTAATCTTT ATATYTTTTA [9875]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [9931]

[10090 10100 10110 10120
 10130 10140 10150]
 [.
]

A_genome GAATTTAATC TTTT----- -----TA AAATCTACGT TAAAT-----
 -----TTT TAACATTATT [9589]
 B_genome GAACTTAATC TTTT-ACTTT TTAGATTTTA AAATCTACGT TAAAT-----
 -----TTT TAATATTATT [9651]
 C_genome GAATTTAATC TTTT-ACTTT TTAGATTTTA AAATACAGAT TGAAT-----
 -----TTT TAACATTGTT [9604]
 D_genome GATTTAAATT TTTACTTTTT TTAGATTTTA AAATATAAC-- -----
 ----- [9542]
 E_genome AAATTTAATC TTTTACTTTT TTAAATTTTA AAATACACGT TAAAT-----
 -----TTT TAACATTATT [9658]
 F_genome AAATTTGATC TTTT-ATTTT TTAGATTTTA AAATACACGT TGAATCATTT
 TTAACATTTT TAACATTGTT [9667]
 G_genome GACTTTAATC TTTT-ACTTT TTAGATTTTA AA-TACACGT TGAAT-----
 -----TTT TAACATTGTT [9627]
 Gossyp.kirkii GAATTTAATT TCTCACATTT TCAAATTTAA TTTTYAACAT TGTTAAATTT
 ATT----TTT TAAATTTAGA [9941]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10001]

[10160 10170 10180 10190
 10200 10210 10220]
 [.
]

A_genome AAAATTGTTT TA-TTAAATT TAGATTATTA TTAGTAATTG AGTATTTTTT

T--ATTTCAA AATTTTACAT [9656]
 B_genome GAAATTATTT TA-TTAAATT TAGATTATTA TGAGTAATTG AGTATTTTTT
 T--ATTTCAA AATTTTACAT [9718]
 C_genome AAATTTATTT TA-TTAAATT TAGATTATTA TGAGTAATTG AGTATTTTTT
 TT-ATTTCAA AATTTTACAT [9672]
 D_genome -----GTTT CA-TTAAATT -AAATTATTA TAAGTAATTG AGTATTTTT--
 TA-ATTTTAA AATTTTACA- [9600]
 E_genome AAA----- ------TT TAGATTATTA TGAGTAATTG AGTATTTTTT
 TT-ACTTCAA AATTTTATAT [9712]
 F_genome AAAATTATTT TA-TTAAATT TAGATTATTA TGAATAATTG AGTATTTTTT
 T--ATTTCAA AATTTTACAT [9734]
 G_genome AAATTTATT- ----AAATT TAGATTATTA TGAGTAATTG AGTATTTTTT
 T--ATTTCAA AATTTTACAT [9689]
 Gossyp.kirkii TTATCAATTA CACTTTTAGT TATATTGCTA CTATTAAGTG AGTATTTTTT
 TTATTTTAAA ATATTTATAC [10011]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10071]

[10230 10240 10250 10260
 10270 10280 10290]

[.]
 A_genome CATCAAATTA AAAAAAAAAA --ACAAAGTT AACACTTGCA CTTGATTT--
 ----- ----CAATAT [9708]
 B_genome CATCAAATTA AAAARAAAAA --ACAAAGTT AA-----
 ----- ----ATAT [9752]
 C_genome CATCAARGTA AAAAAA--- ---CAAAGTT AACACTTGTA CTTGATTT--
 ----- ----TAATAT [9720]
 D_genome CATCAAATTA AAAAAA---- ----AAAGTT AACACTTGCA CTTGA-----
 ----- --GATTAAT [9645]
 E_genome CATCAAATTA AAAAAAAAAA AAACAAAGTT AACACTTGCA CTTGATTT--
 ----- ----CAACAT [9766]
 F_genome CATCAAATTA AAAAAAAAAA ---CAAAGTT AACGCTTGTA CTTGATTT--
 ----- ----TAA--- [9782]
 G_genome CATCAAAGTA AAAAAA--- ---CAAAGTT AACACTTGTA CTTGATTT--
 ----- ----TAATAT [9737]
 Gossyp.kirkii AATTAATTTT AACAAAAAAA TTATAAGATT AACAGTTAGA TTTGATTTTC
 AAAATATGAA AAATAARAAA [10081]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10141]

[10300 10310 10320 10330
 10340 10350 10360]

[.]
 A_genome CTAAAA---- -AATAGAAA- -----GG CTTAATTTTA AATTTTCAAA
 GAGTATAGGG ATTT--CTCT [9762]
 B_genome CTAAAA---- -AGTAGAAG- -----AG TTAAATTTCA AATTTTCAAA
 GAGTATAGAG ATTT--CTCT [9806]
 C_genome CTGAAA---- -AGTAGAAG- -----GG CTAAATTTTA AATTTTCAAA
 GAGTATAGGG ATTT--CTCT [9774]
 D_genome TTCAAATTTT TAGTAAAAG- -----GA TTAAATTTCA AATTTTCAAA
 GAGTATAGAG ACTT--CTCT [9704]
 E_genome ----AA---- -AATAAAG- -----GA CTAAATTTCA ATTTTTCAAA
 GAGTA----- [9803]
 F_genome -----AG- -----GG CTAAATTTTA ATTTTTCAAA
 GAGTATAGGG ATTT--CTCT [9824]

G_genome CTGAAA---- -AGTAGAAG- -----GG CTAAATTTTA AATTTTCAAA
 GAGTATAGGG ATTT--CTCT [9791]
 Gossyp.kirkii ATTAAATTCT TGAAAGTAAA TATACCTAGA CCAAATTTTA AATTTTCAAA
 AAATATAAAA ATTTTATTTT [10151]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10211]

[10370 10380 10390 10400
 10410 10420 10430]

[.]

A_genome ACTT----- -TTTTAGATT TAAGTTTA-- --TTAACACT TTCTTAATTA
 CATTTCACCTA AATTTAACTA [9821]
 B_genome ACTT----- -TTTTAGATT TAAATTTA-- --TTAACACT TTCTTAATTA
 CATTTCACCTA AATTTAACTA [9865]
 C_genome ACTT----- -TTT-AGATT TAAATTTA-- --TTAACACT TTCTTAATTA
 CATTTCACCTA AATTTAACTA [9832]
 D_genome ACATTTTAGA ATTTAAAATT TAAATCTAAC AGTTAACACT TTCTTAATTA
 CTTTACGATA AATTTAACTA [9774]
 E_genome -CTT----- -TTT-AGATT TAAATTTA-- --TTAACACT TTCTTAATTA
 AATTGCACTA AATTTAACTA [9860]
 F_genome A--T----- -TTTTAGATT TAAATTTA-- --TTAACACT TTCTTAATTA
 CATTTCACCTA AATTTAACTA [9881]
 G_genome AATT----- -TTTTACATT TAAATTTA-- --TTAATACT TTCTTAATTA
 CATTTCACCTA AATTTAACTA [9850]
 Gossyp.kirkii TC-----AGA TTTTAAAATT TAAGTCTAT- TATTAATACT TTCTTAGTTA
 CATTTCATTA AAATTAATTA [10215]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10281]

[10440 10450 10460 10470
 10480 10490 10500]

[.]

A_genome AAAA-TTGCA ATATTAATAG TTAAAATTAA ATTTTAGAAA GTACAAAGAC
 TAAATTTTAA ATTTTCAAAA [9890]
 B_genome AAAAATTACA ATATTAATAG TTAAAATTAA AATTTGAAAA GTACAAGGAC
 TAAATTTTAA ATTTTCAAAA [9935]
 C_genome AAAAATTACA ATATTAATAG TTAAAATTAA AATTTGAAAA GAMCAAGGAC
 TAAATTTTAA ATTTTCAAAA [9902]
 D_genome AAAAATTACA ATATTAATGG TTAAAATTAA AATTTGAAAA GTATAAGGAT
 TAAATTGTAA ATTTGCAAAA [9844]
 E_genome AAAAAT-ACA ATATTAATAG TTAAAGTTAA ATTTTAGAAA GTACAAGGAC
 TAAATTTTAA ATTTTCAAAA [9929]
 F_genome AAA--TTACA ATATTAATAG TTAAAATTAA ATTTTGAAAA GTACAAGTAC
 TAAATTTTAA ATTTTCAAAA [9949]
 G_genome AAAAATTACA ATATTAATAG TTAAAATTAA AATTTGAAAA GTACAAGGAC
 TAAATTTTAA ATTTTCAAAA [9920]
 Gossyp.kirkii AAAAATTACA ATA----- -----A AATTTGAAAA ATATAAGAGC
 TAAATTTTAA AATTTCA--- [10266]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10351]

[10510 10520 10530 10540
 10550 10560 10570]

[.]

A_genome AATATAGGAA GTTATAGTAC ATTTTAACTT TTATTTATTT CATATATGAT
GAGGTTTCCTG CATGCACCGA [9960]
B_genome AGTATAGGAA GTAATAGTAC ATTTTAACTT TTATTTATTT TATATATTAT
GAGGTTTCCTG CATGCACCGA [10005]
C_genome AGTATAGGAA GTTATAGTAT ATTTTAACTT TTATTTATTT TATATATGAT
GAGGTTTCCTG CATGCAACGA [9972]
D_genome AGTATAGGAA GTTATAGTAT ATTTTAACTT TTATTTATTT TATACCTGAT
GAAGTTTCCTG CATGCACCGA [9914]
E_genome AGTAGAGGAA GTTATGGTAC ATTTTAACTT TTATTTATTT TATATATGAT
GACGTTTCCTG CATAACCGA [9999]
F_genome AGTATAGGAA GTTATAGTAT ATTTTAACTT TTATTTATTT TATATATGAT
GAGGTTTCCTG CATGCA-CGA [10018]
G_genome AGTATAGGAA GTTATAGTAT ATTTTAACTT TTATTTATTT TATATATGAT
GAGGTTTCCTG CATGCACCGA [9990]
Gossyp.kirkii -----GAA TTTATAGTGT ATTTTAACTT TTATATTTTTT TATATCTGAT
GAGATTTCCTG CATGCACTGG [10329]
Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
???????????? ?????????? [10421]

[10580 10590 10600 10610
10620 10630 10640]

A_genome AGAAGTCACC TTTTGCCAGT ATTTTCGAGT GGCTTGTTTC TCTCAAAACT
ACCTTGAATC TTGAGACAGA [10030]
B_genome AGAAGTCACC TTTTGCCAGT ATTTTCGAGT GGCTTGTTTC TCTCAAAACT
ACCTTGAATC TTGAGACAGA [10075]
C_genome AGGAGTCACC TTTTGCCGGT ATTTYCGAGT GGCTTGTTTC TCTCAAAACT
ACCTTGAATC TTGAGACAGA [10042]
D_genome AGATGTCACC TTTTGCCAGT ATTTTCAGT GGCTTGTTTC GCTCAAAACT
ACCTTGAATC TTGAGACAGA [9984]
E_genome AG-AGTCACC TTTTGCCAGT ATTTTCGAGT GGCTTGTTTC TCTCAAAACT
ACCTTGAATC TTGAGACAGA [10068]
F_genome AGAAGTCACC TTT-GCCAGT ATTTTCGAGT RGCTTGTTTC TCTCAAAACT
ACCTTGAATC TTGAGACAGA [10087]
G_genome CGAAGTCACC TTTTGCCAGT ATTTTCGAGT GGCTTGTTTC TGTCAAAACT
ACCTTGAATC TTGAGACGGA [10060]
Gossyp.kirkii AGAAGTCCCC TTTTGCCAGT RATTTTCGAGT GGCTTGTTTC TCTCAAAACT
ACCTTGAATT TTGAGATTGA [10399]
Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
???????????? ?????????? [10491]

[10650 10660 10670 10680
10690 10700 10710]

A_genome ATTAAATATA ATTTTGGCCT TTTCTTCCAT TTTTCTCTCT CTATCTTCTT
TTAAAAATTG CTTTAGAGAA [10100]
B_genome ATTAAATATA ATTTTGGCCT TTTCTTCCAT TTTTCTCTCT CTATTTTCTT
TTAAAAATTG CTTTAGAGAA [10145]
C_genome ATTAAATATA TTTTGGCCT TTTCTTCCAT TTTTCTCTCT CTATTTTCTT
TTAAAAATTG CTTTAGAGAA [10112]
D_genome ATTAAATATA CTTTGGCCT TTTCTTCCAT TTTTCTCTCT CTATTTTCTT
TTAAAAATTG CTTTAGAGAA [10054]
E_genome ATTAAATATA ATTTTGGCCT TTTCTTCCAT TTTTCTCTCT CTATTTTCTT
TTAAAAATTG CTTTATAGAA [10138]
F_genome ATTAAATATA GTTTTGGCCT TTTCTTCCAT TTTTCTCTCT CTATTTTCTT

TTAAAAATTG CTTTAGAGAA [10157]
 G_genome ATTAATATA TTTTGGCCT TTTCTCCAT TTTTCTCTCT CTATTTTCTT
 TTAAAAATTG CTTTAGAGAA [10130]
 Gossyp.kirkii ATTAATATA TTTTGGCCT TTTCTCCAT TTTTCTCTCT CTATTTTCTT
 TTGAAAATA ATAATAATA [10469]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10561]

[10720 10730 10740 10750
 10760 10770 10780]
 [.
 .]

A_genome TTCAGAAAA ATACTTTCCA ACACGAAAAT TGCTTCAAAT TTATGGTTTA
 TATCTAATA ATGGTTGCTT [10170]
 B_genome TTCAGAAAA GTACTTTCCA ACACGAAAAT TGCTTCAAAT TTATTGTTCA
 TAT?TAATA CTGGTTGCTT [10215]
 C_genome TTCAGAAAA ATACTTTCCA ACACGAAAAT TGCTTCAAAT TTATTGTTTA
 TATCTAATA ATGGTTGCTT [10182]
 D_genome TTCAGAAAA ATACTTTCCA ACACGAAAAT TTCTTCAAAT TTATTGTTTA
 TATCTAATA ATGGTTGCTT [10124]
 E_genome TTCAGAAAA ATATTTTCCA ACACGAAAAT TGCTTCAAAT TTATTGTTTA
 TATCTAATA ATGGTTGCTT [10208]
 F_genome TTCAGAAAA ATACTTTCCA ACACGAAAAT TGCTTCAAAT TTATTGTTTA
 TATCTAATA ATGGTTGCTT [10227]
 G_genome TTCAGAAAA ATACTTTCCA ACAAGAAAAT TGCTTCAAAT TTATTGTTTA
 TATCTAATA ATGGTTGCTT [10200]
 Gossyp.kirkii ATTGTTCAAA --ACTAGCAG ACAAGGAATT TGTAACAGAA RTTTTGTTT-
 TCTCTTTTA- ---GTTTCAT [10532]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10631]

[10790 10800 10810 10820
 10830 10840 10850]
 [.
 .]

A_genome AATTT-AAAA AAAAAA--G TTATTGTAAT TAGTTTTGCT TCTTGCATGT
 CCAGCCTGCA AAATGGGTGC [10237]
 B_genome AATTTTCGAAA AAAAAAAG TTATTGTAAT TAATTTTCGCT TCTTGCATGT
 CCAGCCAGCA AAATGGGTGC [10285]
 C_genome AGTTTCGAAA AAAAA---G TTATTGTAAT TAGTTTTGCT TCTTGCRTGT
 CCAGCCAGCA AAATGGGTGC [10248]
 D_genome AATTTTGGA AAAAA--G TTATTGTAGT TAGTTTTGCT TCTTGCRTGT
 CCAGCCAGCA AAATGGGTGC [10192]
 E_genome AATTTTCGAAA AAAAAA--G TTATTGTAAT TAGTTTTGCT TCTTGCATGT
 CCAGCCAGCA AAATGGGTGC [10276]
 F_genome AATTTTCGAAA AAAAAA--G TTTTGTAAAT TAGTTATGCT TCTTGCATGT
 CCAGCCAGCA AAATGGGTGC [10295]
 G_genome AATTTTCGAAA AAAAA---G TTATTGTAAT TAGTTTTGCT CCTTGCATGT
 CCAGCCAGCA AAATGGGTGC [10267]
 Gossyp.kirkii TATTT----- -TATTATAAT TAATTTTGAT TCTTGCATGT
 CCTGCCAGCA AAATGGGTGC [10586]
 Kokia.drynar ?????????? ?????????? ?????????? ?????????? ??????????
 ?????????? ?????????? [10701]

[10860 10870 10880 10890
 10900 10910 10920]

```
[
.
.]
A_genome      CGGTGGTAGG ATGCTAGTTG ACGGTAAAAA GGAGGAAAAA CGAGGCTCGG
TCAATCGAGT   TCCGATCGAG  [10307]
B_genome      CGGTGGTCGG ATGCTAGTTG CCGGTAAAAA GGAGGAAAAT CGAGGCTCGG
TCAATCGAGT   TCCGATCGAG  [10355]
C_genome      CGGTGGTAGG ATGCTAGTTG ATGGTARAAA AGAGGAAAAT CGAGGCTCGG
TCAATCGAGT   TCCGATCGAG  [10318]
D_genome      CGGTGGTAGG ATGCCAATTG ACGGTATAAA GGAGGAAAAT CGAGGCTCGG
TCAATCGAGT   TCCGATCGAG  [10262]
E_genome      CGGGGGTAGG ATGCTAGTTG ACGGTAAAAA GGAGGAAAAT CGAGTCTCGG
ACAATCGAGT   TCCGATCGAG  [10346]
F_genome      CGGTGGTAGG ATGCTAGTTG ACGGTAAAAA GGAGGAAATT CGAGGCTCGG
TCAATCGAGT   TCCGATCGAG  [10365]
G_genome      CGGTGGTAGG ATGCCAGTTG ACGGTAAAAA GGAGGAAAAT CGAGGCTCGG
TCAATCGAGT   TCCGATCGAG  [10337]
Gossyp.kirkii CGGTGGTAGG ATACTAGTTG ACGG----- -----
-CAATCGAGT   TCCGATTGAG  [10629]
Kokia.drynar  ?????????? ?????????? ?????????? ?????????? ??????????
??????????? ?????????? [10771]
```

```
[
10970      10980      ]
10930      10940      10950      10960
```

```
[
.
.]
A_genome      AAGCCTCCGT TTACGCTCGG TCAGATCAAG CAAGCCATTC CGCCCCACTG
TTTTCGCCGC   TCCCTCCT  [10375]
B_genome      AAGCCTCCGT TTACGCTCGG TCAGATCAAG CAAGCCATTC CGCCCCACTG
TTTTCGCCGC   TCCCTCCT  [10423]
C_genome      AAGCCTCCCT TTACGCTCGG TCAGATCAAG CAAGCCATTC CGCCCCACTG
TTTTCGCCGC   TCCCTCCT  [10386]
D_genome      AAGCCTCCGT TTACGCTCGG TCAGATCAAG CAAGCCATTC CGCCCCACTG
TTTTCGCCGC   TCCCTCCT  [10330]
E_genome      AAGCCTCCGT TTACGCTCGG TCAGATCAAG CAAGCCATTC CGCCCCACTG
TTTTCGCCGC   TCCCTCCT  [10414]
F_genome      AAGCCTCCGT TTACGCTCGG TCAGATCAAG CAAGCCATTC CGCCCCACTG
TTTTCGCCGC   TCCCTCCT  [10433]
G_genome      AAGCCTCCGT TTACGCTCGG TCAGATCAAG CAAGCCATTC CGCCCCACTG
TTTTCGCCGC   TCCCTCCT  [10405]
Gossyp.kirkii AAGCCTCCGT TTACGCTCGG TCAGATCAAG CAAGCCGTTT CACCCCCACTG
TTTTCGCCGC   TCCCTTCT  [10697]
Kokia.drynar  ?????????? ?????????? ?????????? ?????????? ??????????
??????????? ?????????? [10839];
END;
```

```
[begin character partitions for Partition-Homogeneity tests]
CHARPARTITION A1751vsAdhA = gene1:1-858, gene2:859-1811;
CHARPARTITION A1751vsG1262 = gene1:1-858, gene3:1812-2745;
CHARPARTITION A1751vsCesA1b = gene1:1-858, gene4:2746-3922;
CHARPARTITION A1751vsCesA1 = gene1:1-858, gene5:3923-5008;
CHARPARTITION A1751vsAdhC = gene1:1-858, gene6:5009-5948;
CHARPARTITION A1751vsA1341 = gene1:1-858, gene7:5949-6629;
CHARPARTITION A1751vsA1713 = gene1:1-858, gene8:6630-7224;
CHARPARTITION A1751vsG1121 = gene1:1-858, gene9:7225-7972;
CHARPARTITION A1751vsG1134 = gene1:1-858, gene10:7973-8519;
CHARPARTITION A1751vsITS = gene1:1-858, gene11:8520-9214;
CHARPARTITION A1751vsFAD2 = gene1:1-858, gene12:9215-10988;
```


CHARPARTITION AdhAvsG1262 = gene2:859-1811, gene3:1812-2745;
 CHARPARTITION AdhAvsCesA1b = gene2:859-1811, gene4:2746-3922;
 CHARPARTITION AdhAvsCesA1 = gene2:859-1811, gene5:3923-5008;
 CHARPARTITION AdhAvsAdhC = gene2:859-1811, gene6:5009-5948;
 CHARPARTITION AdhAvsA1341 = gene2:859-1811, gene7:5949-6629;
 CHARPARTITION AdhAvsA1713 = gene2:859-1811, gene8:6630-7224;
 CHARPARTITION AdhAvsG1121 = gene2:859-1811, gene9:7225-7972;
 CHARPARTITION AdhAvsG1134 = gene2:859-1811, gene10:7973-8519;
 CHARPARTITION AdhAvsITS = gene2:859-1811, gene11:8520-9214;
 CHARPARTITION AdhAvsFAD2 = gene2:859-1811, gene12:9215-10988;
 CHARPARTITION G1262vsCesA1b = gene3: 1812-2745, gene4:2746-3922;
 CHARPARTITION G1262vsCesA1 = gene3: 1812-2745, gene5:3923-5008;
 CHARPARTITION G1262vsAdhC = gene3: 1812-2745, gene6:5009-5948;
 CHARPARTITION G1262vsA1341 = gene3: 1812-2745, gene7:5949-6629;
 CHARPARTITION G1262vsA1713 = gene3: 1812-2745, gene8:6630-7224;
 CHARPARTITION G1262vsG1121 = gene3: 1812-2745, gene9:7225-7972;
 CHARPARTITION G1262vsG1134 = gene3: 1812-2745, gene10:7973-8519;
 CHARPARTITION G1262vsITS = gene3: 1812-2745, gene11:8520-9214;
 CHARPARTITION G1262vsFAD2 = gene3: 1812-2745, gene12:9215-10988;
 CHARPARTITION CesA1bvsCesA1 = gene4:2746-3922, gene5:3923-5008;
 CHARPARTITION CesA1bvsAdhC = gene4:2746-3922, gene6:5009-5948;
 CHARPARTITION CesA1bvsA1341 = gene4:2746-3922, gene7:5949-6629;
 CHARPARTITION CesA1bvsA1713 = gene4:2746-3922, gene8:6630-7224;
 CHARPARTITION CesA1bvsG1121 = gene4:2746-3922, gene9:7225-7972;
 CHARPARTITION CesA1bvsG1134 = gene4:2746-3922, gene10:7973-8519;
 CHARPARTITION CesA1bvsITS = gene4:2746-3922, gene11:8520-9214;
 CHARPARTITION CesA1bvsFAD2 = gene4:2746-3922, gene12:9215-10988;
 CHARPARTITION CesA1vsAdhC = gene5:3923-5008, gene6:5009-5948;
 CHARPARTITION CesA1vsA1341 = gene5:3923-5008, gene7:5949-6629;
 CHARPARTITION CesA1vsA1713 = gene5:3923-5008, gene8:6630-7224;
 CHARPARTITION CesA1vsG1121 = gene5:3923-5008, gene9:7225-7972;
 CHARPARTITION CesA1vsG1134 = gene5:3923-5008, gene10:7973-8519;
 CHARPARTITION CesA1vsITS = gene5:3923-5008, gene11:8520-9214;
 CHARPARTITION CesA1vsFAD2 = gene5:3923-5008, gene12:9215-10988;
 CHARPARTITION AdhCvsA1341 = gene6:5009-5948, gene7:5949-6629;
 CHARPARTITION AdhCvsA1713 = gene6:5009-5948, gene8:6630-7224;
 CHARPARTITION AdhCvsG1121 = gene6:5009-5948, gene9:7225-7972;
 CHARPARTITION AdhCvsG1134 = gene6:5009-5948, gene10:7973-8519;
 CHARPARTITION AdhCvsITS = gene6:5009-5948, gene11:8520-9214;
 CHARPARTITION AdhCvsFAD2 = gene6:5009-5948, gene12:9215-10988;
 CHARPARTITION A1341vsA1713 = gene7:5949-6629, gene8:6630-7224;
 CHARPARTITION A1341vsG1121 = gene7:5949-6629, gene9:7225-7972;
 CHARPARTITION A1341vsG1134 = gene7:5949-6629, gene10:7973-8519;
 CHARPARTITION A1341vsITS = gene7:5949-6629, gene11:8520-9214;
 CHARPARTITION A1341vsFAD2 = gene7:5949-6629, gene12:9215-10988;
 CHARPARTITION A1713vsG1121 = gene8:6630-7224, gene9:7225-7972;
 CHARPARTITION A1713vsG1134 = gene8:6630-7224, gene10:7973-8519;
 CHARPARTITION A1713vsITS = gene8:6630-7224, gene11:8520-9214;
 CHARPARTITION A1713vsFAD2 = gene8:6630-7224, gene12:9215-10988;
 CHARPARTITION G1121vsG1134 = gene9:7225-7972, gene10:7973-8519;
 CHARPARTITION G1121vsITS = gene9:7225-7972, gene11:8520-9214;
 CHARPARTITION G1121vsFAD2 = gene9:7225-7972, gene12:9215-10988;
 CHARPARTITION G1134vsITS = gene10:7973-8519, gene11:8520-9214;
 CHARPARTITION G1134vsFAD2 = gene10:7973-8519, gene12:9215-10988;
 CHARPARTITION ITSvsFAD2 = gene11:8520-9214, gene12:9215-10988;

BEGIN CODONS;

```

CODONPOSSET * CodonPositions =
  N: 1 857-944 992-1065 1478-1561 1638-1735 1810-1812 2882-3057
3132-3252 3305-3389 3532-3759 3922 4068-4240 4315-4403 4456-4549 4695-4832
5010 5126-5211 5295-5382 5459-5557 5620-5804 5901-7226 7320-7659
7881-10988,
  1: 2-854\3 945-990\3 1067-1475\3 1562-1637\3 1738-1807\3
1813-2881\3 3060-3129\3 3253-3304\3 3392-3530\3 3761-4067\3 4243-4312\3
4404-4455\3 4552-4693\3 4834-5125\3 5214-5292\3 5383-5458\3 5560-5617\3
5805-5898\3 7227-7317\3 7660-7879\3,
  2: 3-855\3 946-991\3 1068-1476\3 1563-1635\3 1736-1808\3
1814-2879\3 3058-3130\3 3254-3302\3 3390-3531\3 3762-4065\3 4241-4313\3
4405-4453\3 4550-4694\3 4835-5123\3 5212-5293\3 5384-5456\3 5558-5618\3
5806-5899\3 7228-7318\3 7661-7880\3,
  3: 4-856\3 947-989\3 1066-1477\3 1564-1636\3 1737-1809\3
1815-2880\3 3059-3131\3 3255-3303\3 3391-3529\3 3760-3919\3 3925-4066\3
4242-4314\3 4406-4454\3 4551-4692\3 4833-5007\3 5013-5124\3 5213-5294\3
5385-5457\3 5559-5619\3 5807-5900\3 7229-7319\3 7662-7878\3;
CODESET * UNTITLED = Universal: all;
END;

BEGIN ASSUMPTIONS;
OPTIONS  DEFTYPE=unord PolyTcount=MINSTEPS ;
  CHARSET A1751 = 1-858;
  CHARSET AdhA = 859-1811;
  CHARSET G1262 = 1812-2745;
  CHARSET CesA1b = 2746-3922;
  CHARSET CesA1 = 3923-5008;
  CHARSET AdhC = 5009-5948;
  CHARSET A1341 = 5949-6629;
  CHARSET A1713 = 6630-7224;
  CHARSET G1121 = 7225-7972;
  CHARSET G1134 = 7973-8519;
  CHARSET ITS = 8520-9214;
  CHARSET FAD2 = 9215-10988;
    CHARSET FAD2badaln1 = 10150-10230;
    CHARSET FAD2badaln2 = 10744-10802;
END;

```