```
                                 (((((((..((((...........)))).(((((.......)))))....(((((.....
chr-LG05.trna180-Gly-TCC    CCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGUCUUCCAAGCAAA-GACCCGGGUUUGA 56
chr-LG19.trna170-Gly-TCC    ACGUUUGUAGUCCAACGG--UCA-GGAUAAUUACCUUCCAAGCAAU-GACCCGGGUUUGA 56
chr-LG05.trna79-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGAUUCGA 57
chr-LG05.trna177-Gly-TCC    GUGUUUGUAGUCCAAAGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna18-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna8-Gly-TCC      GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna77-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG02.trna16-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna80-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG19.trna168-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna184-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna81-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna107-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna114-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna105-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna176-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna103-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna102-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna101-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna100-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna99-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna98-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna184-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG13.trna5-Gly-TCC      GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG07.trna4-Gly-TCC      GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG09.trna182-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna9-Gly-TCC      GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG20.trna78-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna10-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna11-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna12-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna14-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna29-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna15-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna16-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna17-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG19.trna171-Gly-TCC    GCGUUUGUAGUCCAACGG--UCA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna171-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUUGA 57
chr-LG05.trna182-Gly-TCC    GCGUUUGUAGUCCAACAG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG14.trna106-Gly-TCC    GCGUUUGUAGUCCAACCG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG19.trna169-Gly-TCC    GCGUUUGUAGUCCAACGG--UCA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG04.trna106-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-UGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG12.trna6-Gly-TCC      GUGUUUGUAGUCCAACUG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACUCGGGUUCGA 57
chr-LG06.trna6-Gly-TCC      GCGUUUGUAGUUCAAUGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG09.trna183-Gly-TCC    GCGUUUGUAGUCCAACAG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCAGGGUUCGA 57
chr-LG09.trna184-Gly-TCC    GCGUUUGUAGUCCAACAG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCAGGGUUCGA 57
chr-LG05.trna174-Gly-TCC    GUGUUUGUAGCCCAACGG--UUA-GGAUAAUUGCUUUCCAAGCAAUAGACUCGGGUUUGA 57
chr-LG05.trna181-Gly-TCC    GCGUUUGUAGCCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG05.trna178-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCAGGUUCAA 57
chr-LG04.trna147-Gly-TCC    GCGUUUGUAGUCCAAUGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACUCGGGUUUGA 57
chr-LG12.trna22-Gly-TCC     GCGUUUGUAGUCCAAUGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUGUGA 57
chr-LG04.trna146-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACUUGGGUUCGA 57
chr-LG05.trna78-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCUGGGUUCGA 57
chr-LG12.trna40-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCUGGGUUCGA 57
chr-LG12.trna21-Gly-TCC     GUGUUUGUAGUCCAACGG--UUA-GGAUAAUUGUCUUCCAAGCAAUAGACCUAGGUUUGA 57
chr-LG09.trna185-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 57
chr-LG04.trna107-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGAGUUUGA 57
chr-LG12.trna13-Gly-TCC     GCGUUUGUAGUCCAACGG--UUU-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUAGA 57
chr-LG12.trna25-Gly-TCC     GCAUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCAUCCAAGCAAUAGACUCGGGUUCAA 57
chr-LG12.trna30-Gly-TCC     GUGUUUGUAGUCCAAUGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUCCAA 57
chr-LG14.trna104-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGUCUUCCAAGCAAUAGACCCAGGUUCGA 57
chr-LG14.trna61-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGAGCUUGA 57
chr-LG12.trna170-Gly-TCC    GCAUUUGUAGUCCAACGG--UUG-GGAUAAUUGCCUUCCAAGUAAUAGACCUGGGUUCAA 57
chr-LG12.trna23-Gly-TCC     GCGUUUGUAGUCCAACGG--UUG-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUUUA 57
chr-LG05.trna172-Gly-TCC    GCGUUUGUAGUCUAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCAA 57
chr-LG05.trna173-Gly-TCC    GCGUUUGUAGUCUAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCAA 57
chr-LG12.trna173-Gly-TCC    GCGUUUGUAGUCCAACGG--UUA-GGUCAAUUGCCUUCCAAGCAAUAGACCUGAGUUUGA 57
chr-LG05.trna175-Gly-TCC    GCGUUUGUAGUUCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAAUCCCGGGUUCGA 57
chr-LG14.trna108-Gly-TCC    GCGUUUGUAGUCCAAUGG--UUA-GGAUAAUUGCCAUCCAAGCAAUAGACUCGGGUUUGA 57
chr-LG05.trna179-Gly-TCC    GUGUUUGCAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACUUGGGUUCGA 57
chr-LG12.trna172-Gly-TCC    GCGUUUGUGGUCCAACGG--UUA-GGAUAAUUGCUUUCCAAGCAAUAGAAUUGGGUUUGA 57
chr-LG07.trna220-Gly-TCC    GCAUUUGUAGUCCAACGG--UUA-GUAUAAUUGCCUUCCAAGCAAUAGACCUGGGUUUAA 57
chr-LG07.trna221-Gly-TCC    GCGUUUGUAGUCCAAUGG--UUA-GGAUAAUUGCCUUCCAAGCAAUUGACCCAAGUUAGA 57
chr-LG12.trna20-Gly-TCC     GUGUUUGUAAUCCAACGG--UUA-GAAUAAUUGUCUUCCAAGCAAUAGACCCGAGUUCGA 57
chr-LG05.trna168-Gly-TCC    GCGUUUGUAGUCCAAUGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACUCGGGUUUGA 57
chr-LG05.trna169-Gly-TCC    GCGUUUGUAGUCAACAGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGAUUCGGGUUCGG 57
chr-LG12.trna31-Gly-TCC     GCGUU-GUAGUCCAACGGUAUUA-GGAUAAUUGCCUUCCAAGCAAUAGACCCGGGUUCGA 58
chr-LG12.trna39-Gly-TCC     GCGUUUGUAGUCCAACGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGA------UUCGA 51
chr-LG12.trna37-Gly-TCC     GUGUUUGUAGUCCAAUGG--UUA-GGAUAAUUGCCUUCCAAGCAAUAGACCUGACUUGGG 57
chr-LG12.trna24-Gly-TCC     GCGUUUGUAGUCAACGGUUAGGAUGGAUAAUUGCCUUCCAAGCAAUAGACCUGGGUUUGA 60
chr-LG06.trna46-Gly-TCC     GUCUCUUUCGUCCGGUGG--UUA-GGACAUUGUCUUUCCAUGUCGAAGAUACGAGUUCGA 57
                            .........10........20........30........40........50.........
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                            ..)....))))))))))).
chr-LG05.trna180-Gly-TCC    CUC----CCGGCAAACGUG 71
chr-LG19.trna170-Gly-TCC    CUC----CCGGCAAAUGCA 71
chr-LG05.trna79-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG05.trna177-Gly-TCC    CUC----CCGGCAAAUGCA 72
chr-LG05.trna18-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna8-Gly-TCC      CUC----CCGACAAACGCA 72
chr-LG05.trna77-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG02.trna16-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG05.trna80-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG19.trna168-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna184-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna81-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG14.trna107-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna114-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna105-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna176-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna103-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna102-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna101-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna100-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna99-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG14.trna98-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG05.trna184-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG13.trna5-Gly-TCC      CUC----CCGGCAAACGCA 72
chr-LG07.trna4-Gly-TCC      CUC----CCGGCAAACGCA 72
chr-LG09.trna182-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG12.trna9-Gly-TCC      CUC----CCGGCAAACGCA 72
chr-LG20.trna78-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna10-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna11-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna12-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna14-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna29-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna15-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna16-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna17-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG19.trna171-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna171-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna182-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG14.trna106-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG19.trna169-Gly-TCC    CUC----CCGCCAAAUGCA 72
chr-LG04.trna106-Gly-TCC    CUC----CCGGCAAAUGCA 72
chr-LG12.trna6-Gly-TCC      CUC----CCGACAAACGCA 72
chr-LG06.trna6-Gly-TCC      CUC----CCGGCAAACGCA 72
chr-LG09.trna183-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG09.trna184-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna174-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna181-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG05.trna178-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG04.trna147-Gly-TCC    CUC----CCGGCAAACGCA 72
chr-LG12.trna22-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG04.trna146-Gly-TCC    CUC----UCGGCAAACGCA 72
chr-LG05.trna78-Gly-TCC     CUC----CCGGCAAAUGCA 72
chr-LG12.trna40-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna21-Gly-TCC     CUC----CUAGCAAACACA 72
chr-LG09.trna185-Gly-TCC    CUC----CCAACAAACGCA 72
chr-LG04.trna107-Gly-TCC    CUC----CCGGUAAACGCA 72
chr-LG12.trna13-Gly-TCC     CUC----CCGGCAAACGCA 72
chr-LG12.trna25-Gly-TCC     CUC----UUGACAAAUGCA 72
chr-LG12.trna30-Gly-TCC     CUU----CCGGUAAACGUA 72
chr-LG14.trna104-Gly-TCC    CUC----CCGGCAAACCCA 72
chr-LG14.trna61-Gly-TCC     CUC----CCGGCAAUCGCA 72
chr-LG12.trna170-Gly-TCC    CUC----CCGACAAAUGCA 72
chr-LG12.trna23-Gly-TCC     CUC----CCGGAAAACGCA 72
chr-LG05.trna172-Gly-TCC    CUC----CCGGCAAACACA 72
chr-LG05.trna173-Gly-TCC    CUC----CCGGCAAACACA 72
chr-LG12.trna173-Gly-TCC    UUC----CUGGCAAACACA 72
chr-LG05.trna175-Gly-TCC    CUC----CCGUCAAACGCA 72
chr-LG14.trna108-Gly-TCC    CUC----CCGACAAAUAUA 72
chr-LG05.trna179-Gly-TCC    CUC----C-GGCAAACGCA 71
chr-LG12.trna172-Gly-TCC    CUC----UUGGCAAACGCA 72
chr-LG07.trna220-Gly-TCC    CUU----UUGGCAAAUGCA 72
chr-LG07.trna221-Gly-TCC    CUC----UUAGCAAACGCA 72
chr-LG12.trna20-Gly-TCC     CUC----ACGGCAAACGCA 72
chr-LG05.trna168-Gly-TCC    -UC----CUGACAAUCGCA 71
chr-LG05.trna169-Gly-TCC    CUC----CCGGCAAACACA 72
chr-LG12.trna31-Gly-TCC     CUC----CUGGUAAAUGCA 73
chr-LG12.trna39-Gly-TCC     CUC----CCGGCAAAUGCA 66
chr-LG12.trna37-Gly-TCC     UUCAACUCUUACAAAUGCA 76
chr-LG12.trna24-Gly-TCC     CUC----CCGAAAAACGUG 75
chr-LG06.trna46-Gly-TCC     UUC----UCAUAAGGAAUA 72
                            .........70........
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