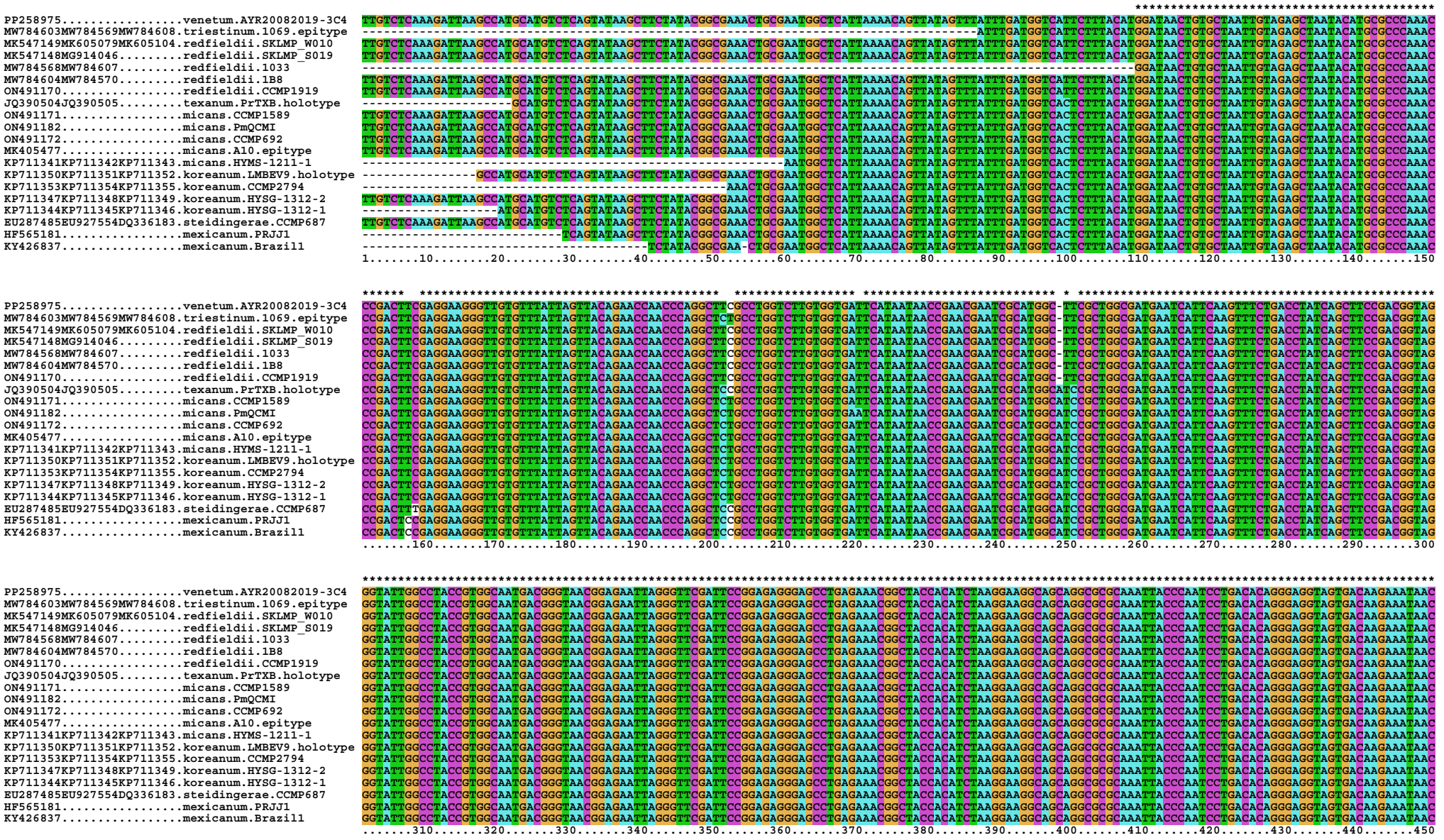

Fig. S9. Nucleotide alignment of 18S-D3 rDNA sequences from species belonging to sister clades encompassing *P. venetum* and *P. micans*. Continuous full lenght sequences for strains with a single accession number; combination of discontinuous partial sequences (two or three joint accession numbers for the other strains. Phylogenetic analyses were conducted with fragments between nucleotide positions 1-1749 for the 18S rDNA, positions 1770-2369 for the ITS region, and positions 2390-3073 for the 28S D1-D2 region. (8 pages)

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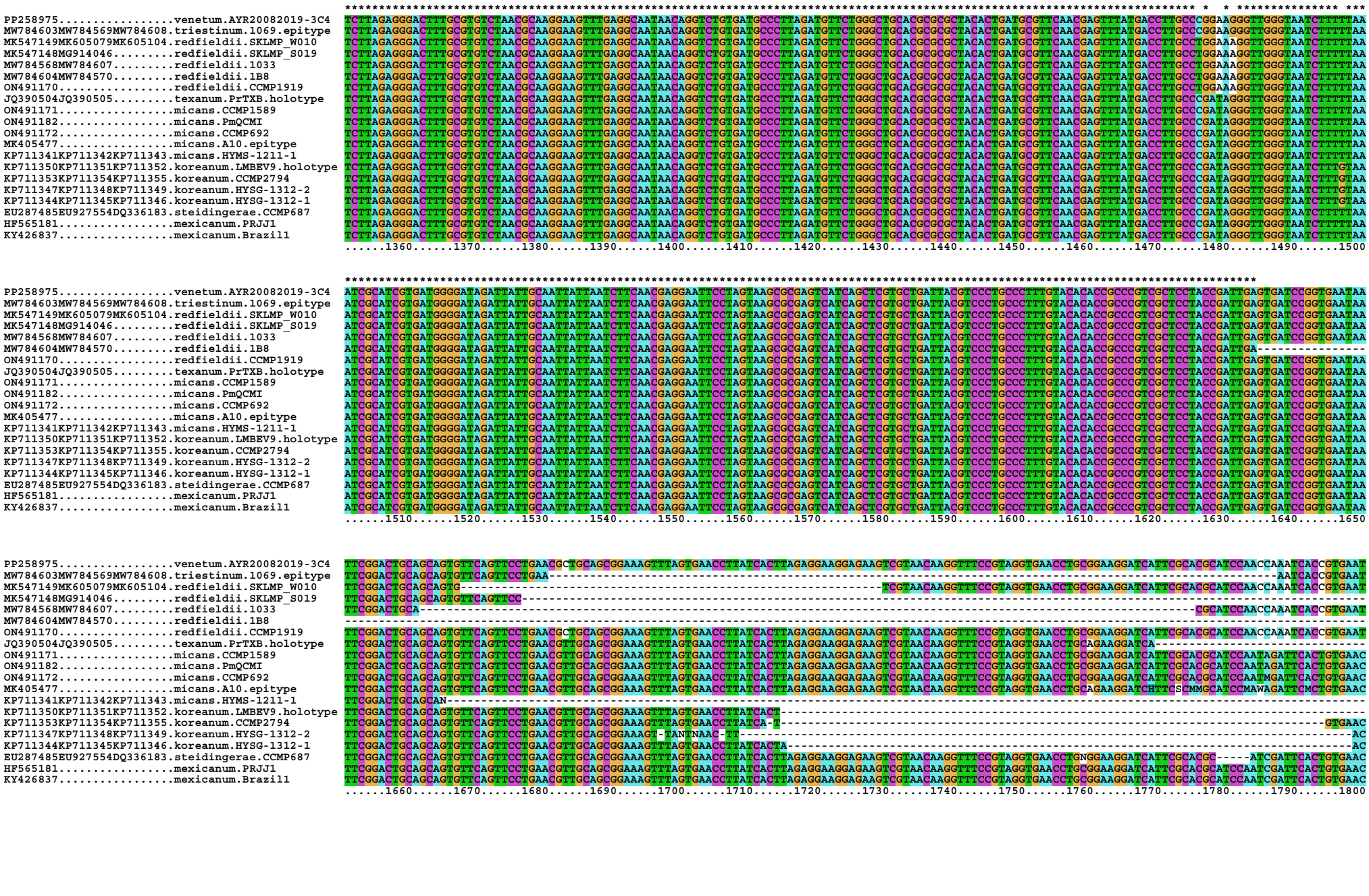
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MK547148MG914046.........redfieldii.SKLMP_S019   GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTAATTCATTTCATTCCAGCAACCTGGTTTTCCAGTGCTGCTTGGGTGTATTTGTGTGTCAGTGTGCTTTTT-------GCCTTTGACACATTGAGCTCATCAGGTTTT
MW784568MW784607.........redfieldii.1033          GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTAATTCATTTCATTCCAGCAACCTGGTTTTCCAGTGCTGCTTGGGTGTATTTGTGTGTCAGTGTGCTTTTT-------GCCTTTGACACATTGAGCTCATCAGGTTTT
MW784604MW784570.........redfieldii.1B8           GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTAATTCATTTCATTCCAGCAACCTGGTTTTCCAGTGCTGCTTGGGTGTATTTGTGTGTCAGTGTGCTTTTT-------GCCTTTGACACATTGAGCTCATCAGGTTTT
ON491170.................redfieldii.CCMP1919      GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTAATTCATTTCATTCCAGCAACCTGGTTTTCCAGTGCTGCTTGGGTGTATTTGTGTGTCAGTGTGCTTTTT-------GCCTTTGACACATTGAGCTCATCAGGTTTT
JQ390504JQ390505.........texanum.PrTXB.holotype  GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGATCTGGGCTTCCAGCGTCGCTTGTGTGTCTTTGTGCGTTAGGGCGCTCGCTTCGTGCAGCCTCTGACGCATTCAATGCA-CAGGGACC
ON491171.................micans.CCMP1589          GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGTGTGTCTTTGTGCGTTAGGGCGCTCGCCTCGTGCAGCCTTGACGCATTAATGCA-CAGGGACC
ON491182.................micans.PmQCMI            GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGTGTGTCTTTGTGCGTTAGGGCGCTCGCCTCGTGCAGCCTTTGACGCATTTAATGCA-CAGGGACC
ON491172.................micans.CCMP692           GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGTGTGTYTTTGTGCGTTAGAGCGCTCGCCTCGTGCAGCCTTTGACGCATTTAAYGCA-CAGGGACC
MK405477.................micans.A10.epitype       GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGTGTGTTTTGTGCGTTAGAGCGCTCGCCTCGTGCAGCCTTTGACGCATTTAACGCA-CAGGGACC
KP711341KP711342KP711343.micans.HYMS-1211-1      GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGTGTGTCTTTGTGCGTTAGAGCGCTCGCCTCGTGCAGCCTTTGACGCATTTAATGCA-CAGGGACC
KP711350KP711351KP711352.koreanum.LMBEV9.holotype GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTCTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGGGAGTCTTTGTGCGTTAGGGCGCTCGCCTCGTGCAGCCCTTGACGCATTCAGCTCA-CAGGGGCC
KP711353KP711354KP711355.koreanum.CCMP2794       GCGCTTTCGGGATATCCCTGAAAGCATGCCTTCTTCAGTGTCTATTCTTTCTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGGGAGTCTTTGTGCGTTAGGGCGCTCGCCTCGTGCAGCCCTTGACGCATTCAGCTCA-CAGGGGCC
KP711347KP711348KP711349.koreanum.HYSG-1312-2    GCGCTTTCGGGATATCCCTGAAAGCATGCCTTCTTCAGCGTCTATTCTTTCTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGGGAGTCTTTGTGCGTTAGGGCGCTCGCCTCGTGCAGCCCTTGACGCATTCAGCGCA-CAGGGGCC
KP711344KP711345KP711346.koreanum.HYSG-1312-1    GCGCTTTCGGGATATCCCTGAAAGCATGCCTTCTTCAGCGTCTATTCTTTCTCATTCCAGCGATCTGGGTTTCCAGCGTCGCTTGGGAGTCTTTGTGCGTTAGGGCGCTCGCCTCGTGCAGCCCTTGACGCATTCAGCGCA-CAGGGGCC
EU287485EU927554DQ336183.steidingerae.CCMP687   GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGTGACATGGTTCTCCATGGTCGCTTGCGTGTCTTTGTGCGTTAGGGCGCTCGCTTCGTGCAGCCCTTGACGCATTCAGCGTA-CAGGGACC
HF565181.................mexicanum.PRJJ1          GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGACCTGGTTCTCCAGAGTCGCTTGCGTGTCTTTGTGCGTTAGGGCGCTCGCTTCTTGCGGCCCTTGACGCATTCAATGCA-CAGGGACC
KY426837.................mexicanum.Brazil1        GCGCTTTCGGGATATCCCTGAAAGCATGCCTGCTTCAGTGTCTATTCTTTTTCATTCCAGCGACCTGGTTCTCCAGAGTCGCTTGCGTGTCTTTGTGCGTTAGGGCGCTCGCTTCTTGCGGCCCTTGACGCATTCAATGCA-CAGGGACC
                                                  .....2110......2120......2130......2140......2150......2160......2170......2180......2190......2200......2210......2220......2230......2240......2250
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PP258975................venetum.AYR20082019-3C4 CCTTGCGCAAGCAATTAGAAGGGTGTTGTTATGACGCTATCTGTTTGCTTGTTCGCCAAGGGAAGCTTGGCTTGCAGTGCCTTCTGCACTCAACCC-AGACATGAAGTTAGGCCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
MW784603MW784569MW784608.triestinum.1069.epitype CCTTGCGCAAGCAATTAGAAGGGTGTTGTTATGACGCTATCTGTTTGCTTGTTTGCTAAGGGAAGCTTGGCTTGCA-----------------------------------------------------------------------------
MK547149MK605079MK605104.redfieldii.SKLMP_W010 CCTTGCGCAAGCAATTAGAAGGGTGTTATTATGACGCTATCTGTTTGCTTGTTTGCTAAGGGAAGCTTGGCTTGCAGTGCCTTGTGCACTCAACCC-AGACATGAAGTTAGGCCAGCAAACCCGCTGAACTTAAGCATATAA-TN-----
MK547148MG914046.........redfieldii.SKLMP_S019 CCTTGCGCAAGCAATTAGAAGGGTGTTATTATGACGCTATCTGTTTGCTTGTTTGCTAAGGGAAGCTTGGCTTGCAGTGCCTTGTGCACTCAACCC-AGACATGAAGTTAGGCCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
MW784568MW784607.........redfieldii.1033 CCTTGCGCAAGCAATTAGAAGGGTGTTATTATGACGCTATCTGTTTGCTTGTTTGCTAAGGGAAGCTTGGCTTGCAGTGCCTTGTGCACTCAACCC-AGACATGAAGTTAGGCC-----------------------------------
MW784604MW784570.........redfieldii.1B8 CCTTGCGCAAGCAATTAGAAGGGTGTTATTATGACGCTATCTGTTTGCTTGTTTGCTAAGGGAAGCTTGGCTTGCAGTGCCTTGTGCACTCAACCC-AGACATGAAGTTAGGCCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
ON491170................redfieldii.CCMP1919 CCTTGCGCAAGCAATTAGAAGGGTGTTATTATGACGCTATCTGTTTGCTTGTTTGCTAAGGGAAGCTTGGCTTGCAGTGCCTTGTGCACTCAACCC-AGACATGAAGTTAGGCCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
JQ390504JQ390505.........texanum.PrTXB.holotype CCTCGCACAAGCAACTAGAAGAGCCTCTTGGCGT--TTCCTTGTTGTCTTGCCTGCGTGAAGGGCTTTGCCATCCAGTGCCCAGCGCACTCCAACCAAGACATGAAGTTAGGTCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
ON491171................micans.CCMP1589 CCTCGCACAAGCAACTAGAAGAGCCTCTTGGCGT--TTCCTTGTTGTCTTGCCTGTGAGGAGGGCCTTGCCATCCAGTGCCCAGCGCACTCCAACCAAGACATGAAGTTAGGTCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
ON491182................micans.PmQCMI CCTCGCACAAGCAACTAGAAGAGCCTCTTGGCGT--TTCCTTGTTGTCTTGCCTGTGAGAAGGGCCTTGCCATCCAGTGCCCAGCGCACTCCAACCAAGACATGAAGTTAGGTCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
ON491172................micans.CCMP692 CCTCGCACAAGCAACTAGAAGAGCCTCTTGGCGT--TTCCTTGTTGTCTTGCCTGCGAGGAGGGCCTTGCCATCCAGTGCCTAGCGCACTCCAACCAAGACATGAAGTTAGGTCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
MK405477................micans.A10.epitype CCTCGCACAAGCAACTAGAAGAGCCTCTTGGCGT--TTCCTTGTTGTCTTGCCTGCGAGGAGGGCCTTGCCATCCAGTGCCTAGCGCACTCCAACCAAGACATGAAGTTAGGTCAGMAAMCCCSCTDAWTTTAAGCATATAAGTWAGCGG
KP711341KP711342KP711343.micans.HYMS-1211-1 CCTCGCACAAGCAACTAGAAGAGCCTCTTGGCGT--TTCCTTGTTGTCTTGCCTGCGAGGAGGGCCTTGCCATCCAGTGCCTAGCGCACTC-----------------------------------------------------------
KP711350KP711351KP711352.koreanum.LMBEV9.holotype TCTCGCACAAGCAACTAGAAGAGCTTC-TAGCGT--TTCCTTGTTGTCTTGCTTGCGAGTTGGTTCTTGCCATCCAGTGCCTA-C-------------------------------------------------------------
KP711353KP711354KP711355.koreanum.CCMP2794 TCTCGCACAAGCAACTAGAAGAGCTTC-CAGCGT--TTCCTTGTTGTCTTGCTTGCGAGTTGGTTCTTGCCATCCAGTGCCTAGTGCACTCCAACCAAGACATGAAGT-----------------------------------
KP711347KP711348KP711349.koreanum.HYSG-1312-2 TCTCGCACAAGCAACTAGAAGAGCTTC-CAGCGT--TTCCTTGTTGTCTTGCTTGCGAGTTGGTTCTTGCCATCCAGTGCCCAGTGCACTCCAACCAAGACATGAAG-----------------------------------
KP711344KP711345KP711346.koreanum.HYSG-1312-1 TCTCGCACAAGCAACTAGAAGAGCTTC-CAGCGT--TTCCTTGTTGTCTTGCTTGCGAGTTGGTTCTTGCCATCCAGTGCCCAGTGCACTCCAACCAAGACATGAAGT-----------------------------------
EU287485EU927554DQ336183.steidingerae.CCMP687 CCTTGCACAAGCAACTAGAAGAGCCTCTTGGCGT--TTCATTGTTGTCTTGCCTGCGAGCGGGGCTTTGCCATCCAGTGCCCAGCGCACTCCAACCAAGACATGAAGTTAGGTCA-CAA----------------ATATAAGTAAGCGG
HF565181................mexicanum.PRJJ1 CCTTGCACAAGCAACTAGAAGAGCCTCTGGGCGT--TTCCTTGTTGTCTTGCATGCGAGCGGGGCTTTGCCATCCAGTGCAGAACGCACTCCAACCAAGACATGAAGTTAGGTCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
KY426837................mexicanum.Brazil1 CCTTGCACAAGCAACTAGAAGAGCCTCTGGGCGT--TTCCTTGTTGTCTTGCATGCGAGCGGGGCTTTGCCATCCAGTGCAGAACGCACTCCAACCAAGACATGAAGTTAGGTCAGCAAACCCGCTGAATTTAAGCATATAAGTAAGCGG
                                                 ......2260......2270......2280......2290......2300......2310......2320......2330......2340......2350......2360......2370......2380......2390......2400

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
PP258975................venetum.AYR20082019-3C4 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTT-GGCCTTGAATTGTAGTCTCGAGATGTATTGCCAACGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
MW784603MW784569MW784608.triestinum.1069.epitype ----------------------------------------AACAGGGATCAGCTCAGCATGGAAATTGGGGCCTT-GGCCTTGAATTGTAGTCTCGAGATGTATTGCCAACGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
MK547149MK605079MK605104.redfieldii.SKLMP_W010 ----------------------------------------------GGATCAGCTCAGCATGGAAATTGGGGCCTT-GGCCTTGAATTGTAGTCTCGAGATGTATTGCCAACGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
MK547148MG914046.........redfieldii.SKLMP_S019 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTT-GGCCTTGAATTGTAGTCTCGAGATGTATTGCCAACGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
MW784568MW784607.........redfieldii.1033 ----------------------------------------------------------------------------------------------------------------------------------------------------AAAAGAGCATCA
MW784604MW784570.........redfieldii.1B8 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTT-GGCCTTGAATTGTAGTCTCGAGATGTATTGCCAACGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
ON491170................redfieldii.CCMP1919 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTT-GGCCTTGAATTGTAGTCTCGAGATGTATTGCCAACGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
JQ390504JQ390505.........texanum.PrTXB.holotype AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
ON491171................micans.CCMP1589 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
ON491182................micans.PmQCMI AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
ON491172................micans.CCMP692 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
MK405477................micans.A10.epitype RGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
KP711341KP711342KP711343.micans.HYMS-1211-1 ---------AACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
KP711350KP711351KP711352.koreanum.LMBEV9.holotype ---------AACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTTCGGCCTTGAATTGTAGTCTCCAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
KP711353KP711354KP711355.koreanum.CCMP2794 -------GAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCTTCGGCCTTGAATTGTAGTCTCCAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
KP711347KP711348KP711349.koreanum.HYSG-1312-2 ------------TAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCCAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
KP711344KP711345KP711346.koreanum.HYSG-1312-1 ---------AACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCCAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
EU287485EU927554DQ336183.steidingerae.CCMP687 AGGATAAG-AACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGAATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
HF565181................mexicanum.PRJJ1 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
KY426837................mexicanum.Brazil1 AGGATAAGAAACTAAATAGGATTCCCTCAGTAATGGCGAATGAACAGGGATCAGCTCAGCATGGAAATTGGGGCCCTCGGCCTTGAATTGTAGTCTCGAGATGCATCGCCAATGGAGGCGCAGATGTAAGCCTCTTGGAAAAGAGCATCA
                                                 ......2410......2420......2430......2440......2450......2460......2470......2480......2490......2500......2510......2520......2530......2540......2550

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PP258975................venetum.AYR20082019-3C4 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGACCCCCGTGCACGGCGTACCTTCCAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTGAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
MW784603MW784569MW784608.triestinum.1069.epitype ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGACCCCCGTGCACGGCGTACCTTCCAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTGAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
MK547149MK605079MK605104.redfieldii.SKLMP_W010 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGACCCCCGTGCACGGCGTACCTTCCAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTGAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
MK547148MG914046.........redfieldii.SKLMP_S019 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGACCCCCGTGCACGGCGTACCTTCCAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTGAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
MW784568MW784607.........redfieldii.1033 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGACCCCCGTGCACGGCGTACCTTCCAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTGAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
MW784604MW784570.........redfieldii.1B8 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGACCCCCGTGCACGGCGTACCTTCCAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTGAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
ON491170................redfieldii.CCMP1919 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGACCCCCGTGCACGGCGTACCTTCCAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTGAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
JQ390504JQ390505.........texanum.PrTXB.holotype ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
ON491171................micans.CCMP1589 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTCAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
ON491182................micans.PmQCMI ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTCAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
ON491172................micans.CCMP692 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTCAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
MK405477................micans.A10.epitype ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCKTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTCAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
KP711341KP711342KP711343.micans.HYMS-1211-1 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTCAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
KP711350KP711351KP711352.koreanum.LMBEV9.holotype ACGAGGGTGAGAGTCCCGCTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
KP711353KP711354KP711355.koreanum.CCMP2794 ACGAGGGTGAGAGTCCCGCTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
KP711347KP711348KP711349.koreanum.HYSG-1312-2 ACGAGGGTGAGAGTCCCGCTTGTCATCTGCAGTCCCCCATGCACGGCATGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
KP711344KP711345KP711346.koreanum.HYSG-1312-1 ACGAGGGTGAGAGTCCCGCTTGTCATCTGCAGTCCCCCATGCACGGCATGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
EU287485EU927554DQ336183.steidingerae.CCMP687 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
HF565181................mexicanum.PRJJ1 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
KY426837................mexicanum.Brazil1 ACGAGGGTGAGAGTCCCGTTTGTCATCTGCAGTCCCCCATGCACGGCGTGCCTTCTAAGAGTCGCGTTCCTCGGAATTGGAGCGTAAATTGGGTGGTAAATTTCATCTCAAGCTAAATATTGGTTCGAGACCGATAGCAAACAAGTACCA
                                                 ......2560......2570......2580......2590......2600......2610......2620......2630......2640......2650......2660......2670......2680......2690......2700
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              
PP258975.................venetum.AYR20082019-3C4 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGC-GCTTGGTGAGATTGTCACATGGCTTC-CATGTGGTGGTTCTTGCCTTGTGTGTCATTGCCAGTTTGCA
MW784603MW784569MW784608.triestinum.1069.epitype TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGC-GCTTGGTGAGATTGTCACATGGCTTC-CATGTGGTGGTTCTTGCCTTGTGTGTCATTGCCAGTTTGCA
MK547149MK605079MK605104.redfieldii.SKLMP_W010 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGC-GCTTGGTGAGATTGTCACATGGCTTC-CATGTGGTGGTTCTTGCCTTGTGTGTCATTGCCAGTTTGCG
MK547148MG914046.........redfieldii.SKLMP_S019 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGC-GCTTGGTGAGATTGTCACATGGCTTC-CATGTGGTGGTTCTTGCCTTGTGTGTCATTGCCAGTTTGCG
MW784568MW784607.........redfieldii.1033 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGC-GCTTGGTGAGATTGTCACATGGCTTC-CATGTGGTGGTTCTTGCCTTGTGTGTCATTGCCAGTTTGCG
MW784604MW784570.........redfieldii.1B8 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGC-GCTTGGTGAGATTGTCACATGGCTTC-CATGTGGTGGTTCTTGCCTTGTGTGTCATTGCCAGTTTGCG
ON491170.................redfieldii.CCMP1919 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGC-GCTTGGTGAGATTGTCACATGGCTTC-CATGTGGTGGTTCTTGCCTTGTGTGTCATTGCCAGTTTGCG
JQ390504JQ390505.........texanum.PrTXB.holotype TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCATACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGCG
ON491171.................micans.CCMP1589 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCGTACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGCG
ON491182.................micans.PmQCMI TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCGTACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGCG
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MK405477.................micans.A10.epitype TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCGTACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGCG
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KP711350KP711351KP711352.koreanum.LMBEV9.holotype TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCATACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGTG
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KP711347KP711348KP711349.koreanum.HYSG-1312-2 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCATACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGTG
KP711344KP711345KP711346.koreanum.HYSG-1312-1 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCATACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGTG
EU287485EU927554DQ336183.steidingerae.CCMP687 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCATNCGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGCG
HF565181.................mexicanum.PRJJ1 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCATACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGCG
KY426837.................mexicanum.Brazil1 TGAGGGAAAGGTGAAAAGGACTTTGAAAAGAGAGTTAAAAGTGCCTGAAATTGCTGAAAGGGAAGCGAATGGAACCAGTGTTGCTTGGCGAGATTGTCATACGCATTCGCGTGTGGTGGTTCTTGCCTTGTGTGTCAACGCCAGTTCGCG
                                        .....2710.....2720.....2730.....2740.....2750.....2760.....2770.....2780.....2790.....2800.....2810.....2820.....2830.....2840.....2850

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
PP258975.................venetum.AYR20082019-3C4 TTCGAGGAAAACTCCAGAGACATGGTAGCCTGGCTCTGGCTGGGTGAATGTGTCTGGTAGAACTCATTTGCGGACTGTTTTCT--GTGTCTGGTTGCAGTGC-ACTGTGCCATCTGGGGGTGGCT-GGAGA-GGGAGTTTACTCCACTTC
MW784603MW784569MW784608.triestinum.1069.epitype TTCGAGGAAAACTCCAGAGACATGGTAGCCTGGCTCCGGCTGGGTGAATGTGTCTGGTAGAACTCATTTGCGGACTGTTTTCT--GTGTCTGGTTGCAGTGC-ACTGTGCCATCTGGGGGTGGCT-GGAGA-GGGAGTTTACTCCACTTC
MK547149MK605079MK605104.redfieldii.SKLMP_W010 TTCGAGGAAAACTCCAGAGACATGGTAGCCTGGCCTCGGCTGGGTGAATGTGTCTGGTAGAACTCATTCGCGTACTGTTTTCT--GTGTCTGGTTGCAGTGC-ACTGTGCCATCTGGGGGTGGCT-GGAGA-GGGAGTTTACTCCACTTC
MK547148MG914046.........redfieldii.SKLMP_S019 TTCGAGGAAAACTCCAGAGACATGGTAGCCTGGCCTCGGCTGGGTGAATGTGTCTGGTAGAACTCATTCGCGTACTGTTTTCT--GTGTCTGGTTGCAGTGC-ACTGTGCCATCTGGGGGTGGCT-GGAGA-GGGAGTTTACTCCACTTC
MW784568MW784607.........redfieldii.1033 TTCGAGGAAAACTCCAGAGACATGGTAGCCTGGCCCCGGCTGGGTGAATGTGTCTGGTAGAACTCATTCGCGTACTGTTTTCT--GTGTCTGGTTGCAGTGC-ACTGTGCCATCTGGGGGTGGCT-GGAGA-GGGAGTTTACTCCACTTC
MW784604MW784570.........redfieldii.1B8 TTCGAGGAAAACTCCAGAGACATGGTAGCCTGGCCCCGGCTGGGTGAATGTGTCTGGTAGAACTCATTCGCGTACTGTTTTCT--GTGTCTGGTTGCAGTGC-ACTGTGCCATCTGGGGGTGGCT-GGAGA-GGGAGTTTACTCCACTTC
ON491170.................redfieldii.CCMP1919 TTCGAGGAAAACTCCAGAGACATGGTAGCCTAGCCTCGGCTGGGTGAATGTGTCTGGTAGAACTCATTCGCGTACTGTTTTCT--GTGTCTGGTTGCAGTGC-ACTGTGCCATCTGGGGGTGGCT-GGAGA-GGGAGTTTACTCCACTTC
JQ390504JQ390505.........texanum.PrTXB.holotype ATCGAGGAAAACTCCATGGACATGGTAGCCTGGCTCCGGTTGGGTGAATGTGCTTGGCAGAACTCATTCGCGTACTGATTCCTTCGTGTCTGGTTGCAGCGCTGCTTGCTCTTTGTGTTGGC-GCTTGGGTGTGGGAGCTCGCTCCCTACA
ON491171.................micans.CCMP1589 ATCGAGGAAAACTCCAGGGACATGGTAGCCTACCCCTGGGTGGGTGAATGTGCCTGGTAGAACTCATTTGCGGACTGTTTCCTTCGTGTCTGGTTGCAGTGCTGCTTGATCCTGTGTTGGC-GCTTGGGGGTGGGAGCTCGCTCCTCACA
ON491182.................micans.PmQCMI ATCGAGGAAAACTCCAGGGACATGGTAGCCTACCCCTGGGTGGGTGAATGTGCCTGGTAGAACTCATTTGCGGACTGTTTCCTTCGTGTCTGGTTGCAGTGCTGCTTGATCCTGTGTTGGC-GCTTGGGGGTGGGAGCTCGCTCCTCACA
ON491172.................micans.CCMP692 ATCGAGGAAAACTCCAGGGACATGGTAGCCTACCCCTGGGTGGGTGAATGTGCCTGGTAGAACTCATTTGCGGACTGTTTCCTTCGTGTCTGGTTGCAGTGCTGCTTGATCTTGTGTTGGC-GCTTGGGGGTGGGAGCTCGCTCCTCACA
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KP711341KP711342KP711343.micans.HYMS-1211-1 ATCGAGGAAAACTCCAGGGACATGGTAGCCTACCCCTGGGTGGGTGAATGTGCCTGGTAGAACTCATTTGCGGACTGTTTCCTTCGTGTCTGGTTGCAGTGCTGCTTGATCCTGTGTTGGC-GCTTGGGGGTGGGAGCTCGCTCCTCACA
KP711350KP711351KP711352.koreanum.LMBEV9.holotype ATCGAGGAAAACTCTAGGGACATGGTAGCTTGCCTCTGGGTGGGCGAATGTGCCTGGTAGAACTCATTTGCGGACTGATTCATTTGTGTCTGGTTGCAGTGCTTGTTG-TCAT-TTCGACGTGCT-GGTGATAGGGGCTCGCTCCTTGAT
KP711353KP711354KP711355.koreanum.CCMP2794 ATCGAGGAAAACTCTAGGGACATGGTAGCTTGCCTCTGGGTGGGCGAATGTGCCTGGTAGAACTCATTTGCGGACTGATTCATTTGTGTCTGGTTGCAGTGCTTGTTG-TCAT-TTCGACGTGCT-GGTGATAGGGGCTCGCTCCTTGAT
KP711347KP711348KP711349.koreanum.HYSG-1312-2 ATCGAGGAAAACTCTAGGGACATGGTAGCTTGCCTCTGGGTGGGCGAATGTGCCTGGTAGAACTCATTTGCGGACTGATTCATTTGTGTCTGGTTGCAGTGCTTGTTG-TCAC-TTCGACGTGCT-GGTGATGGGGGCTCGCTCCTTGAT
KP711344KP711345KP711346.koreanum.HYSG-1312-1 ATCGAGGAAAACTCTAGGGACATGGTAGCTTGCCTCTGGGTGGGCGAATGTGCCTGGTAGAACTCATTTGCGGACTGATTCATTTGTGTCTGGTTGCAGTGCCTGTTG-TCAC-TTCGACGTGCT-GGTGATGGGGGCTCGCTCCTTGAT
EU287485EU927554DQ336183.steidingerae.CCMP687 ATCGAGGAAAACTCTTGGGACATGGTAGCCTGTCTTCGGGCGGGTGAATGTGCCTTGTAGAACTCATTTGCGGACTGATCCTTCGTGTCTGGTTGCAGCGCTTCTTG-TCTC-TTCGACGTGCTTGGGGGTGGGAGTTCGCTCCTCGCA
HF565181.................mexicanum.PRJJ1 ATCGAGGAAAACTCTTGGGACATGGTAGCCTGTCTTCGGGCGGGTGAATGTGCCTTGTAGAACTCATTTGCGGACTGATTACTTCGTGTCTGGTTGCAGCGCTTCTTG-TCGC-TTGGACGTGCTTGGGCGTGGGAGCTTGCTCCTCGCG
KY426837.................mexicanum.Brazil1 ATCGAGGAAAACTCTTGGGACATGGTAGCCTGTCTTCGGGCGGGTGAATGTGCCTTGTAGAACTCATTTGCGGACTGATTACTTCGTGTCTGGTTGCAGCGCTTCTTG-TCGC-TTGGACGTGCTTGGGCGTGGGAGCTTGCTCCTCGCG
                                        .....2860.....2870.....2880.....2890.....2900.....2910.....2920.....2930.....2940.....2950.....2960.....2970.....2980.....2990.....3000

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                
PP258975.................venetum.AYR20082019-3C4 TCTGGGTAACTTCTGGGCGACCAGGGTACTTCCTTGACACATAGACGATGACTAAATGGTTCTTTTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGTCAAACCTGCTGGCGCAGTGAAAGCGAC
MW784603MW784569MW784608.triestinum.1069.epitype TTTGGCT-------------------------------------------------------------------------------------------------------------------------------------------------------------------
MK547149MK605079MK605104.redfieldii.SKLMP_W010 TTTGGCTAACTTCTGGGTGACCAGGGCACTTCCTTGACACATAGACGATGACTAAATGGTTCTTTTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGTCAAACCTGCTGGCGCAGTGAAAGCGAC
MK547148MG914046.........redfieldii.SKLMP_S019 TTTGGCTAACTTCTGGGTGACCAGGGCACTTCCTTGACACATAGACGATGACTAAATGGTTCTTTTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGTCAAACCTGCTGGCGCAGTGAAAGCGAC
MW784568MW784607.........redfieldii.1033 TTTGGCTAACTTCTGGGTGA-------------------------------------------------------------------------------------------------------------------------------------------------
MW784604MW784570.........redfieldii.1B8 TTTGGCTAACTTCTGGGTGACCAGGGCACTTCCTTGACACATAGACGATGACTAAATGGTTCTTTTCGACCCGTCTTG-----------------------------------------------------------------------------------------
ON491170.................redfieldii.CCMP1919 TTTGGCTAACTTCTGGGTGACCAGGGCACTTCCTTGACACATAGACGATGACTAAATGGTTCTTTTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGTCAAACCTGCTGGCGCAGTGAAAGCGAC
JQ390504JQ390505.........texanum.PrTXB.holotype CCCTGCC--CATCTAAG-GTGCACGGCGCTTCCCTGACACATAGACGATGACTAAATGGTTTTATTCGA-----------------------------------------------------------------------------------------
ON491171.................micans.CCMP1589 CCCTGCC--CTTCTAAG-GTTCTCGGCGCTTCCCTGACACATAGACGATGACTAAATGGTTCTATTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGGTAAACCTGCTGGCGCAGTGAAAGCGAC
ON491182.................micans.PmQCMI CCCTGCC--CTTCTAAG-GTTCTCAGCGCTTCCCTGACACATAGACGATGACTAAATGGTTCTATTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGGTAAACCTGCTGGCGCAGTGAAAGCGAC
ON491172.................micans.CCMP692 CCCTGCC--CTTCTAAG-GTTCTCAGCGCTTCCCTGACACATAGACGATGACTAAATGGTTCTATTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGGTAAACCTGCTGGCGCAGTGAAAGCGAC
MK405477.................micans.A10.epitype CCCTGCC--CTTCTAAG-GTTCTCAGCGCTTCCCTGACACATAGACGATGACTAAATGGTTCTATTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGGTAAACCTGCTGGCGCAGTGAAAGCGAC
KP711341KP711342KP711343.micans.HYMS-1211-1 CCCTGCC--CTTCTAAG-GTTCTCAGCGCTTCCCTGACACATAGACGATGACTAAA-----------------------------------------------------------------------------------------
KP711350KP711351KP711352.koreanum.LMBEV9.holotype CTGTGCG--CT-CGGGT-GA-CTGGGCATTTCCCTGACATATAGACGATGACTAAA-----------------------------------------------------------------------------------------
KP711353KP711354KP711355.koreanum.CCMP2794 CTGTGCG--CT-CGGGT-GA-CTGGGCATTTCCCTGACATATAGACGATGACTA------------------------------------------------------------------------------------------
KP711347KP711348KP711349.koreanum.HYSG-1312-2 CTTTGCG--CT-CGGGT-GA-CTGGGCATTTCCCTGACATATAGACGATGACTAAA-----------------------------------------------------------------------------------------
KP711344KP711345KP711346.koreanum.HYSG-1312-1 CTTTGCG--CT-CGGGT-GA-CTGGGCATT--------------------------------------------------------------------------------------------------------------------
EU287485EU927554DQ336183.steidingerae.CCMP687 CCCAGCG--CT-CGGGT-GA-CTGGGCGCTTCCCTGACACATAGACGATGACTAAATGGTTCTATTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGGTAAACCTGCTGGCGCAGTGAAAGCGAC
HF565181.................mexicanum.PRJJ1 CCCAGCG--CT-CTGGT-GA-CTGGGCGCTTCCCTGACACATAGACGATGACTAAATGGTTCTTTTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGGTAAACCTGCTGGCGCAGTGAAAGCGAC
KY426837.................mexicanum.Brazil1 CCCAGCG--CT-CTGGT-GA-CTGGGCGCTTCCCTGACACATAGACGATGACTAAATGGTTCTTTTCGACCCGTCTTGAAACACGGACCAAGGAGTCTAACATATGTGCGAGTCCACGGGTGGTAAACCTGCTGGCGCAGTGAAAGCGAC
                                        .....3010.....3020.....3030.....3040.....3050.....3060.....3070.....3080.....3090.....3100.....3110.....3120.....3130.....3140.....3150
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PP258975.................venetum.AYR20082019-3C4   TGCTGGGATCTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
MW784603MW784569MW784608.triestinum.1069.epitype  ----------------------------------------------------------------------------------------------------
MK547149MK605079MK605104.redfieldii.SKLMP_W010    TGCTGGGATCTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAG-------------
MK547148MG914046.........redfieldii.SKLMP_S019    TGCTGGGATCTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAG-------------
MW784568MW784607.........redfieldii.1033          ----------------------------------------------------------------------------------------------------
MW784604MW784570.........redfieldii.1B8           ----------------------------------------------------------------------------------------------------
ON491170.................redfieldii.CCMP1919      TGCTGGGATCTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
JQ390504JQ390505.........texanum.PrTXB.holotype   ----------------------------------------------------------------------------------------------------
ON491171.................micans.CCMP1589          TGCTGGGATTTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
ON491182.................micans.PmQCMI            TGCTGGGATTTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
ON491172.................micans.CCMP692           TGCTGGGATTTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
MK405477.................micans.A10.epitype        TGCTGGGATTTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
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KP711350KP711351KP711352.koreanum.LMBEV9.holotype ----------------------------------------------------------------------------------------------------
KP711353KP711354KP711355.koreanum.CCMP2794        ----------------------------------------------------------------------------------------------------
KP711347KP711348KP711349.koreanum.HYSG-1312-2     ----------------------------------------------------------------------------------------------------
KP711344KP711345KP711346.koreanum.HYSG-1312-1     ----------------------------------------------------------------------------------------------------
EU287485EU927554DQ336183.steidingerae.CCMP687     TGCTGGGATTTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
HF565181.................mexicanum.PRJJ1           TGCTGGGATTTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
KY426837.................mexicanum.Brazil1         TGCTGGGATTTTTGCACCAGCAACCGACCAATCAATTGAGAGAGGTTTGAGTATGAGCATATCTGTTAGGACCCGAAAGATGGTGAACTATGCCTGAGAAGGGCAAACTCAGGGGAAACTCTGATGGAGGCTCGTAGCGATACTGACGTG
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PP258975.................venetum.AYR20082019-3C4   CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
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MK547149MK605079MK605104.redfieldii.SKLMP_W010    ---------------------------------------------
MK547148MG914046.........redfieldii.SKLMP_S019    ---------------------------------------------
MW784568MW784607.........redfieldii.1033          ---------------------------------------------
MW784604MW784570.........redfieldii.1B8           ---------------------------------------------
ON491170.................redfieldii.CCMP1919      CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
JQ390504JQ390505.........texanum.PrTXB.holotype   ---------------------------------------------
ON491171.................micans.CCMP1589          CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
ON491182.................micans.PmQCMI            CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
ON491172.................micans.CCMP692           CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
MK405477.................micans.A10.epitype        CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
KP711341KP711342KP711343.micans.HYMS-1211-1      ---------------------------------------------
KP711350KP711351KP711352.koreanum.LMBEV9.holotype ---------------------------------------------
KP711353KP711354KP711355.koreanum.CCMP2794        ---------------------------------------------
KP711347KP711348KP711349.koreanum.HYSG-1312-2     ---------------------------------------------
KP711344KP711345KP711346.koreanum.HYSG-1312-1     ---------------------------------------------
EU287485EU927554DQ336183.steidingerae.CCMP687     CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
HF565181.................mexicanum.PRJJ1           CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
KY426837.................mexicanum.Brazil1         CAAATCGTTCGTCATACTTGGGTATAGGGGCGAAAGACTAATCGAACCATC
                                                  ......3310......3320......3330......3340......3350.
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