**Appendix 1** Four hot region after de novo assembly.

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| **SNP-PIS-133396** |
| GAAATGAAATATTGCACATTTTTCAATATAATACAAACAATAAAAATGGAAAAAAATTAAAAAATGAAAACATTAATGAATAGGCCATTTAACCACCACTAGGTGGTTCAGCGGTCAACTAGGACTCTTTGGTGTATTATTCAAGCAATCATGAGTTCAATCCATCTAGGTTGTTAATAGGGATGGCCAGTGAGAGGATTTATCCGTTAACTTCAGGGTCCTAAGGAATTAGTTAAGGTACGCACAAACAAGGTCAGACACCCAGGTCATCAAAAAAAAAAAAAAAAAAANNNGAAAGTGCTCAATTTATTTACCATATGTTCTATGAACATGCCATGGTTCTATATGAGAATTCTCCTCTGTTTTTTGGGCAAACCGCAAAGAAGATTAAAGTAGCTGATCCATGATCTTCAAGTTTCAGTACTATTCATACATATAAATGATGAAATGGGAATTATTCCAAGCTCAATTTTCATGATGTTTTTGTAGCTATTTTGGCATATAGCAGGACCACCAGCTTCTTTTATNGCCTATTACGTTATCAGGACTCTCACTGCCATGGTTGGTGAAATCAGCATCAATTGCCTAGCTCTTGCTTACGTGGTAATTAATCACATTATAATCATCTTAATCTTTTCTAATTAATTAGGATAATATTTCATACATAACCAGTTGTCATGTTAATTTCTCAGGCAGATAACATCCCAGAAGGANCAACGGGCATCAGCATTCGGAATTTTATCTGGTGTAGGTACCGGCGCCTCCTTTGTCTGTGGAACCTTGGCCACTCGTTTCCTCTCCACAACTTCCACATTCCGGGTTGCTACATACATTATTTGGAATTTATATTTGCTGCCTCTGTTATATTTTATTGCATGGTTTTGACATATATNTTTGTGTTTCCTTTGCAGGTTGCTACATTATTCTCCATGATTGCAGCTGTGTACATGAGAGTTTTTCTCAAGGAGAGTTTACGCCCTGATGAGGATGGNNNNNNNNNNNNNNNACAAGCTTCATTACTGGTATACCTTTTAATGCATAATTTTCTATATGAATGTACACCAAATTCTATTATAATTACTAACTTTTAAGATCTTATCTCATGTAGTACTTCTTAAAGGCTCAATTTCACTTCAACAAAAACCAGTTTGCTGATCTGATGCTAATTCTTGGGGTTGCAGGAATGGTTTCACAGGCATGTCTTATCTAACTCTGTGTCCCCATGCATATTCTGTTTTTCATTTACTAAATTCGAATTCTTTGGAATCCTGCAGCTC |
| **SNP-PIS-136404** |
| GGGCAATGAGTTCTTGAGGAAGAGGATGAAACCGAGTTCAAAATCTGAGATTAGTCCTGGTACAATGAGGAGGATTAAAAGGTTTGGCTTTTATATTTTTTACATCATGCTTGATGGTTTCTTTGAATAGTACTTCTTTGTGCATTTTTTATTCATTCCCATTTGTAGGTCCTAATTTTGTGTGTCAGTGAAATGTAGAATACAGGTGATTTTGGCTTCTAATATTTGTTACGAACCTATGTAGGGTTAAGAAGGTGACAAAGATGTCCAAGAAAGCCACTACTGGAATTCTTTTAGGGGTTGTCAAAGNCGGATTCCTCACAAATTCAATTGCCAACTCTAAAGCTGGCAAGAAATTCTTTAGCATTCTGCCTGGAGAAGTTGTCCTTGCTAGTTTGGACGGATTTNACTGCCTTGGCTTATATATCCTTAATCAGCTTTGAAGTATATTTTACTTATGTAGTTATAGTATGTGCTATATCTTGTAGCTTTAAGATTTGTTATGCTCTGTACTTGCTGCTCATGTTATTGTTCATTCTATGTACAGAGAAAGTTATTAATGCAGTTGAGGTTAGCGGTAAGAATGTTATGTCAACTACATCAGTAGTAACTACTGGGCTTGTTTCAGAGAGGTATATCTTTAATCTCAATCTAACAACATAATTGATGCTTCATTATGCCATCACCACTTTGATGTAACAATATAATTGATGCTTCATTGTTTCATAAACTTTTGAACTAATATTTTTTCTGAACACGATTTTCATCCTATTTCATGTATGTTATTTTTCATTGGCTGGTTTAATCATATTGTTTCTCATTTCAGGTATGGGGAGGAAGCAGCAAAGGCAACCAATGAAGGGCTACATGCAGCCGGCAATGTAATTGGCTCTGCTTGGACCATTTTTAAGATTAAAAAGGCAGTCAATCCAGTGACCATGTTGAAACCCACAATCCTTGCAAAAGCTACTGGGAAAGCAAATTATGTCGAATTGAAGGCAAAACAACATAAATAATTGCAACTCATAGATTTTTATTTTGGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTTTTTTTTTTTTTTTTTTTTATCTCTTAATGCTGGAGCTTTTGTCTTTAATTTGGCAACAATTTGTAGATGCAGACATGCAATTCTATTTGTTTTTTCTTTTCATGAAGAAAAATGTNAGACCCATACAAAGAGGGCTACAAAGTGACATCGGCAAGAAGATAAAAAAAAAGAAAAACGGAAAAAGAGAGAGAGAGAGAGAAATCATGAAAATCAAGGATAGGAATTGTC |
| **SNP-PIS-167992** |
| TCAATAAAAAATTATCAAGCAAAACAAAAAACTAACGTGACTTAAAGGACAACAGCTCATAACCAGTAACAGCACCAACATATTTCTATTGCTATTTCTTCTTAATAAGAAACANCATTGCTATTGATAACTTACCAACATAAAAGATTATGAGCATACACAAAATACACATGCATGGAAAAAGCGGCATATTTCCCCATGCATTCTAGAGCTACACAGAGACTGCATTCAAAGTTGAATGGGACCACTGAACAAAATTGGTGATGCCTCCAAAATTAAGGGAATCTGNNNNNNACCATAAGTTCAACTTTTAATCATTTGGCATCTTAACAGCCAGTGCTTCAGAAATGGATCCATTCAGATGAATTANTGGAGCAATACAATCAGATGGGACAACCAAACATATCTTAGGACACATTTATAACCAANGACATGAAATTCACAATCTGAGGAGGACAGTGACTCTTGATTTTGAGAGTCATTTCCAGAAACTTTAGGCAGTGGTGATTGGATTCTTCTACTCATGATTGCTGCTGGTTCATTTNNNNNNNNNNNNNNNNNGAATAGGTAGAAACATGGAACAATTTTCAATCCTGTTTGTCAAATGTTACCATTAATATCNAGAAAAAGAAAAGAAACATATCATATTCGAAACAAAAAAGAAAGAGAACTAAATATTACATAAAACAAAAGGAAAGAGAGCTAACTACTGCACAATAGAAATAAATGTTTCTTGAAAATCTAAAGCACAAATAACAAATGAAACACTACAATTTTACTTCAAGCAAGGATTTAAATGCTTGGATACAACATTAATAATAATAATCAATAAGTATATGCATATGCGAGCAACCAAAAAAAAAAAAAAGTAACAGTATTCAAAGTTCCACACAGAAGAGGAAGANNNNNNNNNNNNNNTAAGGGCTTGAAAAGGAATTCAAACGAAAAATAACTTCATAGCGTGAGCTCTTTGTTGTTCCACCTGTAACCGCAACCCTAAGCTGCAATTGATCACTTCCAGTATCTGATTTTAATGAAATGCGCATAGCACCTTCA |
| **SNP-PIS-174431** |
| CCTCTCCTTTTCTCTTTCCCTAAGCTCCTGCTCCCGAATCCTCTCTCTTTCATCCTGGTCGCTTCGGTGCCGTTCTGGCCGACTCCCACTTCGACGTGACTGCTCTCTCTCCTTCTCCTTATCCCTTTCCCTCTCTCTTTCACCGTCACGTTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGATCCCTATCTCTTTCCTTATCCCTCCCATTCCTCTCTTCTCTATCCCTATCCTTATCTCTCTCTCTATCCTTATGTTCCCGGCTACTCTTGTGTCTATCACTCACTCCATCTCTAGACCTTGAGCGATTACGGGATGAGCCCCTTTCTTTCCTTCTATCATGATCACGTATATCATCTCTAGATTTGAAGGCCTTCAAGCGACGCGCATCATCATCATGATCTTCATCCTTCTCATCACTCCTATGCTTTGAACTCCTACTCCGTTCTCTCTCTTCAGACTTCCTAGCTCCACCACCACCATTTTCCTTTGCCTTCCCTTTCGAAGGCTCAGGATTCTCAACCGTTTTCTCCAAGTATTCGTACTCATCAAAATCCATTTTGCTCCTTTTTAACCAAACAACCCACCGAACACCTTGGCTGATAAACTACACCTACCACCGCAGAAACCTTAAAAAAAAATTAAAAAATAAATAAATTAACATTTCTCAAGCAAATATTAAAACAGCTCCTCTGTTTCCTAAAAATCAAACACANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNTATAAAGAGTGAATTCCATTACTTCAACAAGTCTCTAGCCGCGTACATATAAAAATTAACTACTCACAGTGAAAGTGGACAAATTGTTAAGTTAAAACAAATGCATGTTCTGATTACAAATTTATAATATTCGATTCANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAACAAAGAAATAAAAACAAGTAAAAACATCACCAGGCTTTGAGTTTCGTTTATAGTTTAATTACACTGACCTAGAGATTGTGATTGGCAGCAGAGAAGAAGAAGCTTAAAAACGAGTCAAAACGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCGGAGAATATGAGCTCAAATGTGTTTAAAACGCGAGGATTTAGAGGAAGTCCGGGACTCCTCTCTCTCTCTCTCTCTCACTGGATCTTTCGCTAGGGTAGCAAGAGTGAAAAGA |

**Note:** In Table S1, red letter emphasis SNP positions for each region and yellow text emphasis sequence around these SNPs and used to find the location of the polymorphism. Yellow labelled sequences are given by Kafakas et al. (2015). Blue labelled texts emphasise the defined primers to use for Sanger sequence.

**Appendix 2** Alignment results of each *Pistacia* species.

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| >Nucleotide\_alignment\_167992\_(vera)\_consensus\_sequence Alignment of 4 sequences: P.vera\_female.167992.PCR.F.ab1 (reversed), P.vera\_female.167992.PCR.R.ab1, P.vera\_male.167992.PCR.F.ab1 (reversed), P.vera\_male.167992.PCR.R.ab1 |
| ACMCATAKAGTATCTCTGGATTGCGGGGTGTTKRCYCGGGTCTTGCCGMYMWAKKCMCTTYKCMGTWRTTSAGTCACAATACACCKASMAGRMMAATTACGRARAATTWTCCKGSMTYTYTTWMATWATWRAWAAKSSTARAGARAMWGATTMGMMSRGSMGYCMAGYTRSWKWMACTAACMCGGAACTTCTYAAKASTKYWWATSTGGGTYCRSMCTAGAKKCTSGAWRMATAKRTASTCAYCTWCMCGRWKGAKAAACTCAGGGARRAAWWCARAYMKYGSAKMATSSATKAYSCRMKRTCTGWWWKCYKCMTAAGCTGTCTSHWCCGCGTAGGYTSAATMTAKKYWTYCAGAMTSTAGWBBGWAMACMGATTTBACGTYATAAKNADGACCWGGTWMKGAAACTCAGMWBKACTCMYCTGTGTATCHTTTTTCTMGSCWYATYWAGAATSAGRRRRAACMCRKKAAACACHNCNGAACKSMMTTTWAAATCAGATACTGGAAGTGATCAATTGCAGCTTAGGGTTGCGGTTAGAGGTGGAACAAAGAGCTCACGCTATGAAGTTATTTTTCGTTTGAATTCCTTTTCAAGCCCTTACAGGTTATATTGTAAAGCCATATACATACAAGTTTTCATGTCTCTTCCTCTTCTGTGTGGAACTWWYGAKCKYKAM |
| >Nucleotide\_alignment\_167992\_(terebinthus)\_consensus\_sequence Alignment of 4 sequences: P.terebinthus\_female.167992.PCR.F.ab1, P.terebinthus\_female.167992.PCR.R.ab1 (reversed), P.terebinthus\_male.167992.PCR.F.ab1, P.terebinthus\_male.167992.PCR.R.ab1 (reversed) |
| KWAYASHYYAWAGTTCCACACAGAAGAGGAAGAGACATGAAAACTTGTATGTATATGGCTTTACAGTATCACCTGTAAGGGCTTGAAAAGGAATTCAAACGAAAAATAACTTCATAGCGTGAGCTCTTTGTTCCACCTCTAACCGCAACCCTAAGCTGCAATTGATCACTTCCAGTATCTGATTTTAAAKYSRMA |
| >Nucleotide\_alignment\_167992\_(mutica)\_consensus\_sequence Alignment of 4 sequences: P.mutica\_male.167992.PCR.R.ab1 (reversed), P.mutica\_male.167992.PCR.F.ab1, P.mutica\_female.167992.PCR.R.ab1 (reversed), P.mutica\_female.167992.PCR.F.ab1 |
| CMYKASTCAWWGTTCCACACAGAAGAGGAAGAGACATGAAAACTTGTATGTATATGGCTTTACAATATAACCTGTAAGGGCTTGAAAAGGAATTCAAACGAAAAATAACTTCATAGCGTGAGCTCTTTGTTCCACCTCTAACCGCAACCCTAAGCTGCAATTGATCACTTCCAGTATCTGATTTWAAARCKGTTAACTTACYYWTTTWWGTGGKKTGGGMYCMMKGSCCYTYTTYCARRRARGRAAACTGGCCTGGCCGCTKSAWTWAAGRAACC |
| >Nucleotide\_alignment\_167992\_(khinjuk)\_consensus\_sequence Alignment of 4 sequences: P.khinjuk\_female.167992.PCR.F.ab1 (reversed), P.khinjuk\_female.167992.PCR.R.ab1, P.khinjuk\_male.167992.PCR.F.ab1 (reversed), P.khinjuk\_male.167992.PCR.R.ab1 |
| TKGGSTTTTTTAAAATCAGATACTGGAAGTGATCAATTGCAGCTTAGGGTTGCGGTTAGAGGTGGAACAAAGAGCTCACGCTATGAAGTTATTTTTCGTTTGAATTCCTTTTCAAGCCCTTACAGGTNATAYTGTAAAGCCATATACATACAAGTTTTCATGTCTCTTCCTCTTCTGTGTGGAAMWTWHGAKKCRC |
| >Nucleotide\_alignment\_133396\_(vera)\_consensus\_sequence Alignment of 4 sequences: P.vera\_female.133396.PCR2.F.ab1, P.vera\_female.133396.PCR2.R.ab1 (reversed), P.vera\_male.133396.PCR2.F.ab1, P.vera\_male.133396.PCR2.R.ab1 (reversed) |
| GAAACGRSTGCCCAAGGTTCCCACAAAAAARGAGGGCGCGGTACCTCACANCCAGATAAAATTCCGAAAWGCTGATGCCCGTTGTGCCTTCTGGGAWGTAATCCGCCYGACAAATNAACCAGACCAACGKWMCGKAKGAAAWATGAWCCCAAATNAATWAGAAAAGGATAAAGAKGATTATAAKGTGAWRTTGTWTTTAATTGCCCTAAGTCTGCTTACGTGGTAATTAATCACATTATAATCATCTTAATCTTTTCTAATTAATTAGGATAATATTTCATACATAACCAGTTGTCATGTTAATTTCTCAGGCAGATAACATCCCAGAAGGACAACGGGCATCAGCATTCGGAATTTTATCTGGTGTAGGTACCGGCGCCTCCTTTGTCTGTGGAACCTTGGCCACTCGTTTCCTCTCCACAACTTCCACATTCCGGGTTGCTACATACATTATTTGGAATTTATATTTGCTGCCTCTGTTATATTTTATTGCATGGTTTTGACATATATTTTGTGTTTCCTTTGCAGGTTGCTACATTATTCTCCATGATTGCAGCTGTGTACATGAGAGTTTTTCTCAAGGAGAGTTTACGCCCTGATGAGGATGGTTTAACGCAGCCAATTATCAAAGGAGGACCGGATGATAATCAAAATGAGAGGGCTGATTCTCCAAGGAAGATATGGGAATTCAAGAACATCCCATCAGTAAGGGATGTTACTTGTTTACTCAAGACTAGGTAATGCTTTCTAAAAGGTTTTGATTGATTGAATTAATTTAAAATTTAATCAGAAAACTTGAATCTAAACTTGTTTGCAGTGTTACCTTTTCGCAAGCGGCGGTTGTTGCATTTTTCAGCAGTCTAGCAGATGGAGGAATACAAGCTTCATTACTGGTATACCTTTTAATGCATAATTTTCTATATGAATGTACACCAAATTCTATTATAATTACTAACTTTTAAGATCTTATCTCATGTAGTACTTCTTAAAGGCTCAATTTCACTTCAACAAAAACCAGTTTGCTGATCTGATGCTAATTCTTGGGGTTGCAGGAATGGTTTCACAGGCATGTCTTATCTAACTCT |
| >Nucleotide\_alignment\_133396\_(khinjuck)\_consensus\_sequence Alignment of 4 sequences: P.khinjuk\_female.133396.PCR2.F.ab1, P.khinjuk\_female.133396.PCR2.R.ab1 (reversed), P.khinjuk\_male.133396.PCR2.F.ab1, P.khinjuk\_male.133396.PCR2.R.ab1 (reversed) |
| GCCCAAAGTTCCCMCAAAACAAARGGAGGGCCCCGKACCCTCACACCCGATAAAAATTCCSAAAGMYGAWSMCCGCYCGCCCTTCCKGMAAGGWAAGYCCCCCCGAACAKKAAMCAGACMCACYAGYAACSRAKGAAAGAAWGAACCCAAAACAMYWAGGAAAGGRTTAARGAGATWRGWAAAGKKAGATGTTGTTTATAATTGCCCTMGMTCYTGCTTACGTGGTAATTAATCACATTATAATCATCTTAATCTTTTCTAATTAATTAGGATAATATTTCATACATAACTAGTTGTCATGTTAATTTCTCAGGCAGATAACATCCCAGAAGGACAACGGGCATCAGCATTCGGAATTTTATCTGGTGTAGGTACCGGCGCCTCCTTTGTCTGTGGAACCTTGGCCACTCGTTTCCTCTCCACAACTTCCACATTCCGGGTTGCTACATACATTATTTGGAATTTATATTTGCTGCMTCTGTTATATTTTATTGCATGGTTTTGACATATATTTTGTGTTTCCTTTGCAGGTTGCTACATTATTCTCCATGATTGCAGCTGTGTACATGAGAGTTTTTCTCAAGGAGAGTTTACGCCCTGATGAGGATGGTTTAACGCAGCCAATTATCAAAGGAGGACCGGATGATAATCAAAATGAGAGGGCTGATTCTCCAAGGAAGATATGGGAATTCAAGAACATCCCATCAGTAAGGGATGTTACTTGTTTACTCAAGACTAGGTAATGCTTTCTAAAAGGTTTTGATTGATTGAATTAATTTAAAATTTAATCAGAAAACTTGAATCTAAACTTGTTTGCAGCGTTACCTTTTCGCAAGCGGCGGTTGTTGCATTTTTCAGCAGTCTAGCAGATGGAGGAATACAAGCTTCATTACTGGTATACCTTTTAATGCATAATTTTCTATATGAATGTACACCAAATTCTATTATAATTACTAACTTTTAAGATCTTATCTCATGTAGTACTTCTTAAAGGCTCAATTTCACTTCAACAAAAACCAGTTTGCTGATCTGATGCTAATTCTTGGGGTTGCAGGAATGGTTTCACAGGCATGTCTTATCTAACTCTGTGTCCCCATGCAA |
| >Nucleotide\_alignment\_133396\_(integerrima)\_\_consensus\_sequence Alignment of 4 sequences: P.integerrima\_female.133396.PCR2.F.ab1, P.integerrima\_female.133396.PCR2.R.ab1 (reversed), P.integerrima\_male.133396.PCR2.F.ab1, P.integerrima\_male.133396.PCR2.R.ab1 (reversed) |
| TCTAATTAATTAGGATAATATTTCATACATAACTAGTTGTCATGTTAATTTCTCAGGCAGATAACATCCCAGAAGGACAACGGGCATCAGCATTCGGAATTTTATCTGGTGTAGGTACCGGCGCCTCCTTTGTCTGTGGAACCTTGGCCACTCGTTTCCTCTCCACAACTTCCACATTCCGGGTTGCTACATACATTATTTGGAATTTATATTTGCTGCCTCTGTTATATTTTATTGCATGGTTTTGACATATATTTTGTGTTTCCTTTGCAGGTTGCTACATTATTCTCCACGATTGCAGCTGTGTACATGAGAGTTTTTCTCAAGGAGAGTTTACGCCCTGATGAGGATGGTTTAACGCAGCCAATTATCAAAGGAGGACCGGATGATAATCAAAATGAGAGGGCTGATTCTCCAAGGAAGATATGGGAATTCAAGAACATCCCATCAGTAAGGGATGTTACTTGTTTACTCAAGACTAGGTAATGCTTTCTAAAAGGTTTTGATTGATTGAATTAATTTAAAATTTAATCAGAAAACTTGAATCTAAACTTGTTTGCAGCGTTACCTTTTCGCAAGCGGCGGTTGTTGCATTTTTCAGCAGTCTAGCAGATGGAGGAATACAAGCTTCATTACTGGTATACCTTTTAATGCATAATTTTCTATATGAATGTACACCAAATTCTATTATAATTACTAACTTTTAAGATCTTATCTCATGTAGTACTTCTTAAAGGCTCAATTTCACTTCAACAAAAACCAGTTTGCTGATCTGATGCTAATTCTTGGGGTTGCAGGAATGGKTTCACAGGCATGTYTTAKCTAACTCKKTG |
| >Nucleotide\_alignment\_107303\_(vera)\_consensus\_sequence Alignment of 2 sequences: P.vera\_female.107303.PCR1\_2.F.ab1, P.vera\_male.107303.PCR1\_2.F.ab1 |
| TTCGGTGCCGTTCTGAGCCGACWCCCACTTCGACGTGACTGCTCTCTCTCCTTCTCCTTATCCCTTTCCCTCTCTCTTTCACCGTCACGTTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGATCCCTATCTCTTTCCTTATCCCTCCCATTCCTCTCTTCTCTATCCCTATCCTTATCTCTCTCTCTATCCTTATGTTCCCGGCTACTCTTGTGTCTATCACTCACTCCATCTCTAGACCTTGAGCGATTACGGGATGAGCCCCTTTCTTTCCTTCTATCAYGATCACGTATATCATCTCTAGATTTGAAGGCCTTCAAGCGACGCGCATCATCATCATGATCTTCATCCTTCTCATCACTCCTATGCTTTGAACTCCTACTCCGTTCTCTCTCTTCAGACTTCCTAGCTCCACCACCACCATTTTCCTTTGCCTTCCCTTTCGAAGGCTCAGGATTCTCAACCGTTTTCTCCAAGTATTCGTACTCATCAAAATCCATTTTGCTCCTTTTTAACCAAACAACCCACCGAACACCTTGGCTGATAAACTACACCTACCACCGCAGAAACCTTAAAAAAAAATTAAAAAATAAATAAATTAACATTTCTCAAGCAAATATTAAAACAGCTCCTCTGTTTCCTAAAAATCAAACACATATAAAGAGTGAATTCCATTACTTCAACAAGTCTCTAGCCGCGTACATATAAAAATTAACTACTCACAGTGAAAGTGGACAAATTGTTAAGTTAAAACAAATGCATGTTCTGATTACAAATTTATAATATTCGATTCAAACAAAGAAATAAAAACAAGTAAAAACATCACCAGGCTTTGAGTTTCGTTTATAGTTTAATTACACTGACCTAGAGATTGTGATTGGCAGCAGAGAAAAAGAAGCTTAAAAACGAATCAAAACRACGRRRRATKTGAAGCTCAAATKTGTTTAAAASSNCAGGATTTAGRGGAAAAKCCGGGAYTCCTTGMTCTTTCTTCYCYYMRARRRMAAGTTCRGGAGWGYSMARAAAAAAAAWA |
| >Nucleotide\_alignment\_107303\_(palaestina)\_consensus\_sequence Alignment of 2 sequences: P.palaestina\_female.107303.PCR1\_2.F.ab1, P.palaestina\_male.107303.PCR1\_2.F.ab1 |
| MCCCTTCGACGTGACTGCTCTCTCTCCTTCTCCTTATCCCTTTCCCTCTCTCTTTCACCGTCACGNNNTTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGATCCCTATCTCTTTCCTTATCCCTCCCATTCCTCTCTTCTCTATCCCTATCCTTATCTCTCTCTCTATCCTTATGTTCCCGGCTACTCTTGTGTCTATCACTCACTCCATCTCTAGACCTTGAGCGATTACGGGATGAGCCCCTTTCTTTCCTTCTATCACGATCACATATATCATCTCTAGATTTGAAGGCCTTCAAGCGACACGCATCATCATCATGATCTTCATCCTTCTCATCACTCCTATGCTTTGAACTCCTACTCCGTTCTCTCTCTTCAAACTTCCTAGCTCCACCACCACCATTTTCCTTTGCCTTCCCTTTCGAAGGCTCAGGATTCTCAACCGTTTTCTCCAAGTATTCGTACTCATCAAAATCCATTTTGCTCCTTTTTAACCAAACAACCCACCGAACACCTTGGCTGATAAACTACACCTACCACCGCAGAAACCTTAAAAAAAATAAAAAAAATMAATAAATTAACATTTCTCAAGCAAATATTAAAACAGCTCCTCTGTTTCCTAAAAATCAAACACATATAAAGAGCGAATTCCATTACTTCAACAAGTCTCTAGCCGCGTACATATAAAAATTAACTACTCACAGTGAAAGTGGACAAATTGTTAWGTTAAAACAAATGCATGTTCTGATTACGAATWTAATATTATTCGATTTCAGACKAAAAAAATARAAATCAAGTRAGAAACATCCACCAGGCTTTGGAGTTTCGGTTTTYGTTTTWATTWACACTGACCCGGAAGGTTGWGGATTGKGAGTCRGAGGAGSAAGAAGMSSTTAAGTAGAGARKMCKAAGCGRSTGGARTAARGTGAAACTTSYAAGGTKGGKTKAAGGTSGGGARA |
| >Nucleotide\_alignment\_107303\_(integerrima)\_consensus\_sequence Alignment of 3 sequences: P.integerrima\_female.107303.PCR1\_2.F.ab1, P.integerrima\_male.107303.PCR1\_2.F.ab1, P.integerrima\_male.107303.PCR1\_2.R.ab1 (reversed) |
| CCMCCCTTCGACGTGNCTGCTCTCTCTCCTTCTCCTTATCCCTTTCCCTCTCTCTTTCACCGTCACGTTNNNGNNNNNNNCNGNNNNNNNNNNNNNNACATTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGCTCTCTTCTGTCTTTGTCATGATCACGTTCCCGATCCCTATCTCTTTCCTTATCCCTCCCATTCCTCTCTTCTCTATCCCTATCCTTATCTCTCTCTCTATCCTTATSTTCCCGGCTACTCTTGTGTCTRTCACTCACTCCATCTCTAGACCTTGAGCGATTAYGGGATGAGCCCCTTTCTTTCCTTCTATCACGATCACGTATATCATCTCTAGATTTGAAGGCCTTCAAGCGACGCGCATCATCATCATGATCTTCATCCTTCTCATCACTCCTATGCTTTGAACTCCTACTCCGTTCTCTCTCTTCAGACTTCCTAGCTCCACCACCACCATTTTCCTTTGCCTTCCCTTTCGAAGGCTCAGGATTCTCARCCGTTTTCTCCAAGTATTCGTACTCATCAAAATCCATTTTGCTCCTTTTTAACCAAACAACCCACCGAACACCTTGGCTGATAAACTACACCTACCACCGCAGAAACCTTAAAAAAAAATANAAAAAAAAATAAATTAGCASTTCTCAAGCAAATATTAAAACAGCTCCTCTGTTTCTTAAAAATCAAACACATATAAAGAGCGAATTCCATTACTTCAACAAGTCTCTAGCCGCGTACATATAAAAATTAACTACTCACAGTGAAAGTGGACAAATTGTTAAGTTAAAACAAATGCATGTTCTGATTACAAATTTATAATATTCGATTCAAACAAAGAAATAAAAACAAGTAAAAACATCACCAGGCTTTGAGTTTCGTTTATAGTTTAATTACACTGACCTAGAGATTGTGATTGGCAGCAGAGAAGAAGAAGCTTAAAAACGACTCWWAACGA |
| >Nucleotide\_alignment\_107303\_(atlantica)\_consensus\_sequence Alignment of 4 sequences: P.atlanitca\_female.107303.PCR1\_2.F.ab1 (reversed), P.atlanitca\_female.107303.PCR1\_2.R.ab1, P.atlanitca\_male.107303.PCR1\_2.F.ab1 (reversed), P.atlanitca\_male.107303.PCR1\_2.R.ab1 |
| GRAAGSAGGAGTCCCCGGACTTCCTCTAAATCCTRGCGTTTTAAACACATTTGAGCTCATATTCTCCGTCGTTTTGAGTCGTTTTTAAGCTTCTTCTTCTCTGCTGCCAATCACAATCTCTAGGTCAGTGTAATTAAACTATAAACGAAACTCAAAGCCTGGTGATGTTTTTACTTGTTTTTATTTCTTTGTTTGAATCGAATATTATAAATTTGTAATCAGAACATGCATTTGTTTTAACTTAACAATTTGTCCACTTTCACTGTGAGTAGTTAATTTTTATATGTACGCGGCTAGAGACTTGTTGAAGTAATGGAATTCGCTCTTTATATGTGTTTGATTTTTAGGAAACAGAGGAGCTGTTTTAATATTTGCTTGAGAAATGCTAATTTATTTATTTTTTATTTTTTTTTTAAGGTTTCTGCGGTGGTAGGTGTAGTTTATCAGCCAAGGTGTTCGGTGGGTTGTTTGGTTAAAAAGGAGCAAAATGGATTTTGATGAGTACGAATACTTGGAGAAAACGGTTGAGAATCCTGAGCCTTCGAAAGGGAAGGCAAAGGAAAATGGTGGTGGTGGAGCTAGGAAGTCTGAAGAGAGAGAACGGAGTAGGAGTTCAAAGCATAGGAGTGATGAGAAGGATGAAGATCATGATGATGATGCGCGTCGCTTGAAGGCCTTCAAATCTAGAGATGATATACGTGATCGTGATAGAAGGAAAGAAAGGGGCTCATCCCATAATCGCTCAAGGTCTAGAGATGGAGTGAGTGACAGACACAAGAGTAGCCGGGAACATAAGGATAGAGAGAGAGATAAGGATAGGGATAGAGAAGAGAGGAATGGGAGGGATAAGGAAAGAGATAGGGATCGGGAACGTGATCATGACAAAGACAGAAGAGAGCGGGAACGTGATCATGACAAAGACAGAAGAGAGCGGGAATGTGATCATGACAAAGACAGAAGAGAGCGGGAACGTGACGGTGAAAGAGAGAGGGAAAGGGATAAGGAGAAGGAGAGAGAGCAGTCACGTCGAAGTGGGAGTCGG |
| >Nucleotide\_alignment\_91951\_(vera)\_consensus\_sequence Alignment of 3 sequences: P.vera\_female.91951.PCR1.F.ab1, P.vera\_female.91951.PCR1.R.ab1 (reversed), P.vera\_male.91951.PCR1.F.ab1 |
| GAGAAACCGAGTTCAAAATCTGAGATTAGTCCTGGTACAATGAGGAGGATTAAAAGGTTTGGCTTTTATATTTTTTACATCATGCTTGATGGTTTCTTTGAATAGTACTTCTTTGTGCATTTTTTATTCATTCCCATTTGTAGGTCCTAATTTTGTGTGTCAGTGAAATGTAGAATACAGGTGATTTTGGCTTCTAATATTTGTTACGAACCTATGTAGGGTTAAGAAGGTGACAAAGATGTCCAAGAAAGCCACTACTGGAATTCTTTTAGGGGTTGTCAAAGTGACCGGATTCCTCACAAATTCAATTGCCAACTCTAAAGCTGGCAAGAAATTCTTTAGCATTCTGCCTGGAGAAGTTGTCCTTGCTAGTTTGGACGGATTTGGTGAGTTGTTCTTTTCTTACTGCCTTGGCTTATATATCCTTAATCAGCTTTGAAGTATATTTTACTTATGTAGTTATAGTATGTGCTATATCTTGTAGCTTTAAGATTTGTTATGCTCTGTACTTGCTGCTCATGTTATTGTTCATTCTATGTACAGAGAAAGTTATTAATGCAGTTGAGGTTAGCGGTAAGAATGTTATGTCAACTACATCAGTAGTAACTACTGGGCTTGTTTCAGAGAGGTATATCTTTAATCTCAATCTAACAACATAATTGATGCTTCATTATGCCATCACCACTTTGATGTAACAATATAATTGATGCTTCATTGTTTCATAAACTTTTGAACTAATATATTTTCTGAACACGATTT |
| >Nucleotide\_alignment\_91951\_(palaestina)\_consensus\_sequence Alignment of 4 sequences: P.palaestina\_female.91951.PCR1.F.ab1 (reversed), P.palaestina\_female.91951.PCR1.R.ab1, P.palaestina\_male.91951.PCR1.F.ab1 (reversed), P.palaestina\_male.91951.PCR1.R.ab1 |
| RGKAAATCGTGTTCAGAAAATATATTAGTTCAAAAGTTTATGAAACAATGAAGCATCAATTATATTGTTACATCAAAGTGGTGATGGCATAATGAAGCATCAATTATGTTGTTAGATTGAGATTAAAGATATACCTCTCTGAAACAAGCCCAGTAGTTACTACTGATGTAGTTGACATAACATTCTTACCGCTAACCTCAACTGCATTAATAACTTTCTCTGTACATAGAATGAACAATAACATGAGCAGCAAGTACAGAGCATAACAAATCTTAAAGCTACAAGATATAGCACATACTATAACTACATAAGTAAAATATACTTCAAAGCTGATTAAGGATATATAAGCCAAGGCAGTAAGAAAAGAACAACTCACCAAATCCGTCCAAACTAGCGAGGACAACTTCTCCAGGCAGAATGCTAAAGAATTTCTTGCCAGCTTTAGAGTTGGCAATTGAATTTGTGAGGAATCCGGTCACTTTGACAACCCCTAAAAGAATTCCAGTAGTGGCTTTCTTGGACATCTTTGTCACCTTCTTAACCCTACATAGGTTCGTAACAAATATTAGAAGCCAAAATCACCTGTATTCTACATTTCACTGACACACAAAATTAGGACCTACAAATGGGAATGAATAAAAAATGCACAAAGAAGTACTATTCAAAGAAACCATCAAGCATGATGTAAAAAATATAAAAGCCAAACCTTTTAATCCTCCTCATTGTACCAGGACTAATCTCAGATTTTGAACTCGGTTTCTC |
| >Nucleotide\_alignment\_91951\_(mutica)\_\_consensus\_sequence Alignment of 4 sequences: P.mutica\_female.91951.PCR1.F.ab1, P.mutica\_female.91951.PCR1.R.ab1 (reversed), P.mutica\_male.91951.PCR1.F.ab1, P.mutica\_male.91951.PCR1.R.ab1 (reversed) |
| AAGGGAGAAACCGAGTTCAAAATCTGAGATTAGTCCTGCTACAATGAGGAGGATTAAAAGGTTTGGCTTTTATATTTTTTACATCATGCTTGATGGTTTCTTTGAATAGTTCTTCTTTGTGCATTTTTTATTCATTCCCATTTGTAGGCCCTAATTTTGTGTGTCAGTGAAATGTAGAATACAGGTGATTTTGGCTTCTAATATTTGTTACGAACCTATGTAGGGTTAAGAAGGTGACAAAGATGTCCAAGAAAGCCACTACTGGAATTCTTTTAGGGGTTGTCAAAGTGACCGGATTCCTCACAAATTCAATTGCCAACTCTAAAGCTGGCAAGAAATTCTTTAGCATTCTGCCTGGAGAAGTTGTCCTCGCTAGTTTGGACGGATTTGGTGAGTTGTTCTTTTCTTACTGCCTTGGCTTATATATCCTTAATCAGCTTTGAAGTATATTTTACTTATGCAGTTATAGTATGTGCTATATCGTGTAGCGTTAAGAGTTGTTGTGCTCTGTACTTGCTGCTCATGTTATTGTTCATTCTATGTACAGAGAAAGTTATTAATGCAGTTGAGGTTAGCGGTAAGAATGTTATGTCAACTACATCAGTAGTAACAACTGGGCTTGTTTCAGAGAGGTATATCTTTTAATCTCAATCTAACAACATAATTGATGCTTCGTTATGCCATCACCACTTTGATGTAACAATATAATTGATGCTTCATTGTTTCATAAACTTTTGAACTAATATAATTTCTGAACACGATTTC |
| >Nucleotide\_alignment\_91951\_(khinjuk)\_consensus\_sequence Alignment of 4 sequences: P.khinjuk\_female.91951.PCR1.F.ab1, P.khinjuk\_female.91951.PCR1.R.ab1 (reversed), P.khinjuk\_male.91951.PCR1.F.ab1, P.khinjuk\_male.91951.PCR1.R.ab1 (reversed) |
| GAACCGAGTTCAAAATCTGAGATTAGTCCTGGTACAATGAGGAGGATTAAAAGGTTTGGCTTTTATATTTTTTACATCATGCTTGATGGTTTCTTTGAATAGTACTTCTTTGTGCATTTTTTATTCATTCCCATTTGTAGGTCCTAATTTTGTGTGTCAGTGAAATGTAGAATACAGGTGATTTTGGCTTCTAATATTTGTTACGAACCTATGTAGGGTTAAGAAGGTGACAAAGATGTCCAAGAAAGCCACTACTGGAATTCTTTTAGGGGTTGTCAAAGTGACCGGATTCCTCACAAATTCAATTGCCAACTCTAAAGCTGGCAAGAAATTCTTTAGCATTCTGCCTGGAGAAGTTGTCCTCGCTAGTTTGGACGGATTTGGTGAGTTGTTCTTTTCTTACTGCCTTGGCTTATATATCCTTAATCAGCTTTGAAGTATATTTTACTTATGTAGTTATAGTATGTGCTATATCTTGTAGCTTTAAGATTTGTTATGCTCTGTACTTGCTGCTCATGTTATTGTTCATTCTATGTACAGAGAAAGTTATTAATGCAGTTGAGGTTAGCGGTAAGAATGTTATGTCAACTACATCAGTAGTAACTACTGGGCTTGTTTCAGAGAGGTATATCTTTAATCTCAATCTAACAACATAATTGATGCTTCATTATGCCATCACCACTTTGATGTAACAATATAATTGATGCTTCATTGTTTCATAAACTTTTGAACTAATATATTTTCTGAACACGATTTMCC |
| >Nucleotide\_alignment\_91951\_(integerrima)\_consensus\_sequence Alignment of 4 sequences: P.integerrima\_female.91951.PCR1.F.ab1 (reversed), P.integerrima\_female.91951.PCR1.R.ab1, P.integerrima\_male.91951.PCR1.F.ab1 (reversed), P.integerrima\_male.91951.PCR1.R.ab1 |
| GGKAAATCGTGTTCAGAAAATATATTAGTTCAAAASTTTCTGAAACAATGAAGCATCAATTATATTGTTACATCAAAGTGGTGATGGCATAATGAAGCATCAATTATGTTGTTAGATTGAGATTAAAGATATACCTCTCTGAAACAAGCCCAGTTGTTACTACTGATGTAGTTGACATAACATTCTTACCGCTAGCCTCAACTGCATTAATAACTTTCTCTGTACATAGAATGAACAATAACATGAGCAGCAAGTACAGAGCATAACAAATCTTAAAGCTAGACGATATAGCACATACTATAACTACATAAGTAAAATATACTTCAAAGCTGATTAAGGATAYATAAGCCAAGGCAGTAAGAAAAGAACAACTCACCGAATCCGTCCAAACTAGCGAGGACAACTTCTCCGGGCAGAATGCTAAAGAATTTCTTGCCAGCTTTAGAGTTGGCAATTGAATTTGTGAGGAATCCGGTCAYTTTGACAACCCCTAAAAGAATTCCAGTAGTGGCTTTCTTGGACATCTTTGTCACCTTCTTAACCCTACATAGGTCCGTAACAAATATTAGAAGCCAAAATCAGCTGTATTCTAYATTTCACTGACACACAAAATTAGGACCTACAAATGGGAATGAATAAAAAATGCACAAAGAAGTACTATTCAAAGAAACCATCAAGCATGATGTAAAAAATATAAAAGCCAAACCTTTTAATCCTCCTCATTGTACCAGGACTAATCTCAGATTTTGAACTCGGTTTCATC |
| >Nucleotide\_alignment\_91951\_(atlantica)\_\_consensus\_sequence Alignment of 4 sequences: P.atlanitca\_female.91951.PCR1.F.ab1, P.atlanitca\_female.91951.PCR1.R.ab1 (reversed), P.atlanitca\_male.91951.PCR1.F.ab1, P.atlanitca\_male.91951.PCR1.R.ab1 (reversed) |
| GAACCGAGTTCAAAATCTGAGATTAGTCCTGCTACAGTGAGGAGGATTAAAAGGTTTGGCTTTTATATTTTTTACATCATGCTTGATGGTTTCTTTGAATAGTTCTTCTTTGTGCATTTTTTATTCATTCCCATTTGTAGGTCCTAATTTTGTGTGTCAGTGAAATGTAGAATACAGGTGATTTTGGCTTCTAATATTTGTTACGAACCTATGTAGGGTTAAGAAGGTGACAAAGATGTCCAAGAAAGCCACTACTGGAATTCTTTTAGGGGTTGTCAAAGTGACCGGATTCCTCACAAATTCAATTGCCAACTCTAAAGCTGGCAAGAAATTCTTTAGCATTCTGCCTGGAGAAGTTGTCCTCGCTAGTTTGGACGGATTYGGTGAGTTGTTCTTTTCTTACTGCCTTGGCTTATATATCCTTAATCAGCTTTGAAGTATATTTTACTTATGYAGTTATAGTATGTGCTATATCGTSTAGCKTTAAGAKTTGTTRTGCTCTGTACTTGCTGCTCATGTTATTGTTCATTCTATGTACAGAGAAAGTTATTAATGCAGTTGAGGYTAGCGGTAAGAATGTTATGTCAACTACATCAGTAGTAACAACTGGGCTTGTTTCAGAGAGGTATATCNTTTAATCTCAATCTAACAACATAATTGATGCTTCRTTATGCCATCACCACTTTGATGTAACAATATAATTGATGCTTCATTGTTTCAGAAACTTTTGAACTAATATAWTTTCTGAACACGATTTYC |