

Supplementary

Isolation and characterization of microsatellite markers from *Garcinia morella* using next generation sequencing technology and cross-species amplification

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Supplementary Table 4 : Genetic analysis of microsatellite markers developed for *G. morella*

| Locus name | Forward sequence 5'-3' | Reverse Sequence 5'-3' | Repeat Type | Number of Allele (k) | Expected size Range (bp) | Observed Heterozygosity (Ho) | Expected Heterozygosity (He) | Polymorphic Information Content (PIC) | Probability of Identity (PI) |
|------------|---------------------------------|---------------------------------|--------------------|----------------------------|--------------------------------|------------------------------------|------------------------------------|--|------------------------------------|
| GM_KVR#90 | AAAAAGCCAGTGAG TGGGGGA | TTGATGGTATGTGTGGC TTTGGTT | (TG) ₆ | 4 | 219-234 | 0.192 | 0.649 | 0.577 | 0.128115 |
| GM_KVR#003 | AAAAGAGGGGTGGG ACGAGA | TTCTCATTCCTCCCTAGG CCGACA | (GA) ₁₀ | 2 | 384-386 | 0.000 | 0.127 | 0.117 | 0.774341 |
| GM_KVR#004 | AAAAGATCATGCACGG GAAGGCA | TCTTCTCTTCCACACCT CCCA | (GA) ₁₈ | 9 | 226-292 | 0.074 | 0.855 | 0.82 | 0.035163 |
| GM_KVR#022 | AAAAGGGGTACTGGT GCCGA | TGGGCCACTTCTCTCTTT AGCTGC | (AG) ₁₃ | 2 | 286-384 | 0.000 | 0.127 | 0.117 | 0.774341 |
| GM_KVR#038 | AAACCCAGTGAGCAAA TGAGCAGT | TCGTGCAGTATAGGCCGG GTGT | (AT) ₇ | 4 | 243-301 | 0.000 | 0.685 | 0.611 | 0.168956 |
| GM_KVR#045 | AAACGCCCGTCTGTCC GATTTT | AGCCACTTCTCTCTCTA GCCCTCT | (AG) ₆ | 2 | 156-161 | 0.071 | 0.07 | 0.067 | 0.674141 |
| GM_KVR#046 | AAACGCGAGGGAAGA GACGGG | TGGACCTTGTCTTCTCCTC GTCA | (AG) ₇ | 8 | 110-144 | 0.76 | 0.858 | 0.821 | 0.034871 |
| GM_KVR#047 | AAACGCGTCTGCTCTCTC GGAAG | ACCCACCCCACTACTTT CCCT | (AG) ₆ | 5 | 108-116 | 0.48 | 0.723 | 0.671 | 0.082382 |
| GM_KVR#048 | AAACGCTGAAACGAGGA GGCCG | TGGGCTCATCTGGGAC TTTCT | (AG) ₈ | 6 | 102-141 | 0.12 | 0.822 | 0.777 | 0.047679 |
| GM_KVR#049 | AAACGCTGAAACGAGGG AGCCG | GCCAAAGATCAAAGCCTCC CCTTGC | (AG) ₇ | 19 | 210-298 | 0.207 | 0.926 | 0.903 | 0.012982 |
| GM_KVR#075 | AAAGCCCTGGTGGGCTG AGTGT | TGACACATGCAAAAACAC ATCCTTGC | (AC) ₁₁ | 18 | 250-340 | 0.25 | 0.892 | 0.866 | 0.021273 |
| GM_KVR#076 | AAAGCCGACGGGTGAAA GAGCC | TGTCAAAGTTGCAAAGCTG GTCATGGT | (AT) ₇ | 20 | 366-474 | 0.259 | 0.943 | 0.921 | 0.009272 |
| GM_KVR#077 | AAAGCCGAGAGGAAGGC CGAGA | ATCTCCTCGTTGCCATGG TCGT | (GA) ₇ | 21 | 101-188 | 0.37 | 0.941 | 0.919 | 0.009473 |
| GM_KVR#090 | AAAGCTTGAGGTGGGGT GGGA | TCTTTGTGTGTTTGAGAG AATGGACCC | (TA) ₇ | 19 | 125-214 | 0.107 | 0.936 | 0.914 | 0.010235 |
| GM_KVR#091 | AAAGCTTGGGCCCCAGA AAGCC | TGGGTGCAATTTGTGTGTG CTCAA | (AT) ₇ | 22 | 177-299 | 0.111 | 0.92 | 0.899 | 0.012498 |
| GM_KVR#092 | AAAGGAAATCGAGGGGAC CGGCA | CCATCTTTGCACCTTCACA AGCATCCA | (AC) ₂₁ | 24 | 110-196 | 0.286 | 0.959 | 0.939 | 0.005915 |
| GM_KVR#093 | AAAGGAAATGATGGGGA TGTTGTGGAA | CCACCCACTCAITCTTGC CAITCCC | (AT) ₁₂ | 13 | 102-157 | 0.321 | 0.892 | 0.865 | 0.021749 |
| GM_KVR#094 | AAAGGAAAGTCCGGCGGA TGGAG | TACGCTCGGTCTGTCTGCT GGTT | (AG) ₇ | 21 | 208-296 | 0.593 | 0.942 | 0.92 | 0.009415 |
| GM_KVR#095 | AAAGGAATGCCGTACGT ATGAGAGGA | TCGAGTCTGGGCATTCA CCAA | (TA) ₆ | 15 | 212-282 | 0.069 | 0.906 | 0.881 | 0.019508 |

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| GM_KVRx133 | AAAGTCACTCTAGGGACG CCCG | AGGGAGTGGCAATCAATGG CTTGT | (GA) ₇ | 10 | 175-199 | 0.04 | 0.706 | 0.671 | 0.078668 |
| GM_KVRx134 | AAAGTCAGTCCCAGCGT GGCG | TCTCCTGCAGTACGACAT GTTTGC | (AT) ₆ | 11 | 124-199 | 0.071 | 0.67 | 0.636 | 0.120535 |
| GM_KVRx135 | AAAGTCAGTCCCAGCGT GGCG | AGAAAGGGTGCATAGG GTGTAICC | (AT) ₈ | 10 | 100-176 | 0.000 | 0.711 | 0.681 | 0.106519 |
| GM_KVRx432 | AAGACTTGTGTGCGGCT GACG | GTCGGGAGACCAACC TATTGT | (AT) ₈ | 9 | 403-495 | 0.034 | 0.69 | 0.625 | 0.149528 |
| GM_KVRx433 | AAGAGAAACCCAGCAGA GTTGCGTA | ACGTCTGATTAGGCTAGC CACCAAT | (AT) ₆ | 10 | 99-146 | 0.103 | 0.701 | 0.657 | 0.113342 |
| GM_KVRx434 | AAGAGACCTTGATGTGGT GGGA | TCTCATGCCACTCCTTAG AGTGTGT | (TA) ₆ | 15 | 114-204 | 0.08 | 0.885 | 0.858 | 0.024016 |
| GM_KVRy205 | ACACACCTACGGGTGGCA TGG | AGTAGACCGTGGCCGTTTC GTAGT | (AT) ₇ | 11 | 100-176 | 0.074 | 0.763 | 0.726 | 0.064490 |
| GM_KVRy206 | ACACACCTACGGGTGGCA TGG | AGACTGTGCCCGTTCGCA GTTG | (TA) ₁₀ | 9 | 100-177 | 0.222 | 0.744 | 0.695 | 0.079501 |
| GM_KVRy207 | ACACACCTACGGGTGGCA TGGAAICT | AGCCCGTAGGCTCTTGCC TGGAAICT | (AT) ₇ | 12 | 113-177 | 0.241 | 0.886 | 0.859 | 0.025804 |
| GM_IIHRb888 | AGAGGTGAGCAATCAAC AGGCT | AGGGATGCCCAAGGGATG GGAT | (TG) ₉ | 10 | 322-409 | 0.000 | 0.891 | 0.863 | 0.23059 |
| GM_IIHRb889 | AGAGGGTGAGCAATCCAC GAGC | TTGGCATGACGGCCCAATG TGGT | (GT) ₆ | 18 | 276-421 | 0.259 | 0.926 | 0.902 | 0.12854 |
| GM_IIHRg191 | CCCGTAGGCCTAGGCAITC ATGTAGT | TCCCCACCTGAGAGGGAC CTTGAT | (TA) ₆ | 20 | 292-401 | 0.241 | 0.954 | 0.934 | 0.006721 |
| GM_IIHRg192 | CCCGTAGGTGCCCTACATG TCT | TGGAAGCCTACGGGCTAC ACGA | (TA) ₆ | 15 | 294-389 | 0.12 | 0.827 | 0.8 | 0.037676 |
| GM_IIHRu169 | TGTTGAAAGAAAGCCCCAG AAAGGCT | ATCTCATCTCAATAGGCC CCGGC | (AG) ₆ | 6 | 156-174 | 0.3 | 0.627 | 0.565 | 0.198126 |
| GM_IIHRx419 | NCGGCTTAAGAATGAGGA ATCGGC | GGTGTTTTTGTGAGGACC CATGGTTGT | (ATA) ₅ | 10 | 286-386 | 0.31 | 0.854 | 0.822 | 0.038323 |
| GM_IIHRx420 | NCGGAATTAGTGCATTTT GGTTGT | TGGGTGTTTTGAGGGTAAT TCCTGCC | (TTG) ₅ | 9 | 182-309 | 0.148 | 0.822 | 0.782 | 0.047074 |
| GM_IIHRx421 | NCGTATTTGTTGAACCACA CTTGGG | TCGGGCTCAAAGTCACG GACCA | (GAT) ₅ | 11 | 355-442 | 0.571 | 0.882 | 0.852 | 0.026273 |
| GM_IIHRx536 | TCAACCCGTCCTGCTTCTG GGA | AGAGCCCACTGCGCCTG CTTTA | (GGT) ₅ | 11 | 115-161 | 0.231 | 0.493 | 0.474 | 0.184013 |
| GM_IIHRx537 | TCAACCCGGCCCTTGATGG AAC | GGTGTCACTGATTTGGGG CATGCTT | (CAC) ₅ | 18 | 374-474 | 0.667 | 0.939 | 0.916 | 0.010224 |
| GM_IIHRz510 | TTTCCCATGCCATCCCCAC CTC | AAGTAGGCTAATGGGACA CCACCA | (TGA) ₅ | 15 | 329-369 | 0.32 | 0.887 | 0.858 | 0.024175 |

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|------------|----------------------------------|---------------------------------|--|----|---------|-------|-------|-------|----------|
| GM_IHRz511 | TTTCTCCACTACACGGTA GCCCC | CAAAGGAGGGCCAAGAA TGCGT | (TCA) ₅ | 15 | 371-447 | 0.552 | 0.915 | 0.891 | 0.016250 |
| GM_IHRz512 | TTTCTCAGCCTTGCCCTCA CGC | TTTGGTGGTGTGGAACA TTGGA | (TAT) ₇ | 18 | 101-153 | 0.241 | 0.911 | 0.887 | 0.017023 |
| GM_IHRz572 | ACACATGTGCGCACACCAATG CACT | TGACATGACCAGTTTAGG TGGGTGG | (AAATG) ₅ | 20 | 101-204 | 0.286 | 0.94 | 0.918 | 0.009237 |
| GM_MRDa479 | GAAAGTCGACAAAAGGCAAC GCGG | CCCACCCGTGGAAGTGTT ACTTGG | (AGAAA) ₅ | 16 | 351-484 | 0.107 | 0.672 | 0.651 | 0.099727 |
| GM_MRDa828 | AGGACCCTCCAACGCTC AAGT | AACCTCTCAGGCAAACTCT CTCACTCT | (GTGAGA) ₅ | 18 | 209-298 | 0.071 | 0.928 | 0.906 | 0.011589 |
| GM_KVRa040 | AACCACCAGACAACGGTTC ATCAAAAGA | CAGCGATGGTCCAGTGAT GGGT | (TC) 6taacctttctctcttttttc tctaa(CT) ₇ | 15 | 228-300 | 0.034 | 0.758 | 0.734 | 0.067187 |
| GM_KVRa041 | AACCACGGGTTGGGGTC TCAT | ACCGTCTGGCAATGGGGA CAGT | (ATTC) 5ggctttctcttttttc ctttttttctttttt(TC) ₆ | 14 | 431-535 | 0.000 | 0.828 | 0.8 | 0.043133 |
| GM_KVRa042 | AACCAGTGGACCCCTGA CCAA | TTTCATAAATGAGCACAG AGCCCCC | (TA) 6cataggatataatgatata atag(TA) ₆ c(AT) 6ctatatgatataaca tatagatacatag(TACAATA) 5tgtatacatatgtatatafg ttcataatacaatac(AT) 7aa(AT) ₈ (GT) ₁₃ | 15 | 225-318 | 0.033 | 0.816 | 0.79 | 0.051826 |
| GM_KVRa325 | ACATCCGATAAACACATAG CATCAACA | GGTGAGAGGTTTGTGTG TGTGCC | (AT) ₇ ctac(AT) ₉ | 19 | 102-171 | 0.1 | 0.893 | 0.869 | 0.023720 |