**Supplementary Table 1: Whole genome sequence (WGS) based mungbean SSR markers**

| **Marker code** | **Name of marker** | **Forward primer** | **Reverse primer** | **Chromosome number** |
| --- | --- | --- | --- | --- |
| SSR 90 | C557648\_1 | GGTGCAACAGTTCTGCCAAG | GTCAACAAACACTTGCGGCT | 7 |
| SSR 91 | C662292\_1 | ACCGTGGACCTCTCCTACTC | TGGCAAGGACAGAGTTCGAC | 4 |
| SSR 92 | C674768\_1 | TTCGAGCTGCCATGGAAGAG | GATTGTAGGCAGTGTGGACCA | 7 |
| SSR 94 | C846310\_2 | AACCACCACGAACACCAACT | CAAAGGCTCTGGAGAGGGTG | 6 |
| SSR 95 | C943972\_1 | CAAGGTCAGTGAGCGCCTAA | CAAATTCTCACACTCGCCGC | 11 |
| SSR 96 | C966082\_1 | AGCCCGGCCATTAAACAGAA | ATCGTGGTGTGCTCCTCTTG | 11 |
| SSR 97 | C1001926\_1 | CTATCGTATGCCAGGCCCAG | AACCAGTCAACCCCAGCTTC | 1 |
| SSR 98 | C1092456\_2 | CGGGAAAGAAGGGTGGAGAC | TAGCCATGCCTGCAACATCA | 3 |
| SSR 99 | C648698\_1 | ATGGGTGCATGGAAAGCATC | AGCGAATCATGTGCATCTGC | 7 |
| SSR 100 | C730824\_1 | GCCTTGATCGCATACCTTTGG | TCGAAGGCCGACATCATGAC | 11 |
| SSR 101 | scaffold58097\_2 | TGATCTGGGCACTGAAGCAG | TGCCCCACTTTCCACAACTT | 6 |
| SSR 102 | C637890\_1 | CTTCGTTCAAGATCGCGCTG | CGCTGCAAGAAGAGAGCAAC | 7 |
| SSR 103 | scaffold25914\_3 | GCAGTTGTTTTGCCGACCAT | TGGCCCACTTTGTCACTGTT | 6 |
| SSR 104 | scaffold49414\_2 | CGCGAGGCATTACCCCTTAT | TGTCGAGGAGGAGAAGAGGG | 2 |
| SSR 105 | C1005104\_1 | AGCAGCTTTAACTTGCACTCT | GAATGCGCACACACACACAT | 6 |
| SSR 106 | C702770\_1 | ACTGGTGATCTCTCATGCTGA | AACCTTCCACTGTTGGCACT | 7 |
| SSR 107 | C899446\_2 | TGGTGTGAGTTGCTGGTAGT | TCCGCACGATTGGAAGTGAT | 5 |
| SSR 108 | C962210\_2 | ACACGTGCCTAAAACGGACT | ATTACCAGAAGGCACCGACC | 8 |
| SSR 109 | scaffold2217\_1 | TGGCAGATTCCTCTCCCTCT | CGTTGCTTTTGAGGGTGCAT | 9 |
| SSR 110 | scaffold23261\_1 | CTGGTGTGGTTGCGTGAATG | GCAGGATGTCGTTGGAGTCA | 7 |
| SSR 111 | scaffold68429\_2 | GACCCATCACACAGGACCAG | TACCCAACCATGGTTACGCC | 2 |
| SSR 112 | C853864\_2 | GAAGGGCACGAACGGAAAAC | TGGATGACGAAATCCCAGCA | 1 |
| SSR 113 | C897048\_1 | CAAACGCCAATTCCGGGTTT | AACAGGGGTGAAAAAGGCCA | 5 |
| SSR 114 | scaffold58193\_1 | ATGAGGATGGTGGATGGGGA | AGAGCCCAAGATGTCTGCAC | 10 |
| SSR 115 | C1016434\_1 | AAGTGTGTCCCTGCTATGCC | ATTTCTGCACGCAACACACC | 5 |
| SSR 116 | C1038752\_1 | TAATGGCCGTGGGTGATTCC | AACTTTCCCCAGGAGCGATG | 5 |
| SSR 117 | C1049822\_2 | AGACGGTAGCAAGGAAAGCC | TCGAAAAGGAGTGGATGGGC | 10 |
| SSR 118 | C800474\_1 | GCTTGCATAAGGTATGTCGGC | GTGTGAACGCGAAACACCTC | 1 |
| SSR 119 | C851092\_1 | GCAGCTAACTGGATCTGCCT | TGGTCCCACTTCCAACCAAA | 7 |
| SSR 120 | C899432\_2 | GGCATCCATGGACAACAGGA | TGAAGCAGCCAAAAACGCTC | 5 |
| SSR 121 | C965134\_1 | GAACCCCAGAATCCACTCGG | CCCACCATTCATGTTCACAGC | 4 |
| SSR 122 | scaffold34789\_3 | AGGTAAACGTGCATGAGCCA | TCTGGTGCTCCGGTGAGATA | 8 |
| SSR 123 | scaffold34789\_3 | AGGTAAACGTGCATGAGCCA | TCTGGTGCTCCGGTGAGATA | 4 |
| SSR 124 | scaffold37844\_4 | GATCGAAAAATGGCGCCCTC | CGACGTGCCTCTCTCTTTGT | 7 |
| SSR 125 | scaffold7676\_1 | CTGGTGTGGTTGCGTGAATG | GCAGGATGTCGTTGGAGTCA | 5 |
| SSR 126 | C1060528\_1 | CTGTCTCTCTGCAACCACGT | ACCCAACATCACAGGCGTAG | 8 |
| SSR 127 | C1067174\_2 | ATCTTCCCAAGCCAAGCCTC | AGATGGAGCGCATGAGAAGG | 6 |
| SSR 128 | C683446\_1 | CTTTGGCTACGTGGGGACTT | CTTCACAGAGCCCTGAGAGC | 8 |
| SSR 129 | C852478\_1 | CTCTACCATCCTCATGCACACA | GTGTGAAGACATGTCAAGTGCA | 5 |
| SSR 130 | C931956\_1 | AGAGCAACTACGAGCCGTTC | TTGCTGTAGCTGCAGTTCGA | 1 |
| SSR 131 | C934778\_2 | TCTTGCCACACCTCTGAAGC | GAAAGGACCATGGACTCCGG | 10 |
| SSR 132 | scaffold44028\_1 | CCCTGAAACACCCTCATCCC | CGGTTGCCCCATGTTTTTGT | 5 |
| SSR 133 | C1024266\_3 | CAGGCTCATGTTGCACCAAC | CTTTCAAGAAGAGCCCCCGT | 6 |
| SSR 134 | C604544\_1 | TACGATGATGCTGCTGTCCC | AATAAGGAGGGACCCTGCCA | 8 |
| SSR 135 | C814002\_2 | AGTTACTCCCTCACCTCCCC | TCCCCAACAAGCACACATGA | 5 |
| SSR 136 | C873736\_1 | GTTCGGAAAAGCACCACCAC | TTCAACTCAACCGGCCCTAC | 8 |
| SSR 137 | C911600\_1 | CAGCCACACTCATCCACACT | CGATGGTGGGATGTGGGAAA | 5 |
| SSR 138 | C973706\_1 | CTGCCATGACTTAGCCACCA | TGTCGGTTTCCAGACACGAG | 8 |
| SSR 139 | scaffold10648\_4 | ATGACCATGCCACTCCAAGG | AGCCCAATTCCTACACCAGC | 7 |
| SSR 140 | scaffold56308\_3 | AACTCCCTCCCATAGGTCCC | GGAGTGTACATGGGTTGGGG | 1 |
| SSR 141 | scaffold66933\_1 | TTGTGACAGGTGCACCCTTT | AAGAACCCTGAGTGCGATGG | 6 |
| SSR 142 | C1060876\_1 | CTCGCCCACTTTCACAGAGT | ACGTGAAGGCCTGAAGACAG | 4 |
| SSR 143 | C1064026\_2 | TCTTGGCTCACGAACAGACC | GGCCCCATCTCAAGTGGAAA | 4 |
| SSR 144 | C1067122\_2 | TGCCTCTCTCTTCCTTCCGA | CAGCCTCTCGGAACCAAAGT | 8 |
| SSR 145 | C774576\_1 | ATGGCCAAGTCTTCCACCAG | GATTGGGGAGCCAAGCTTCT | 1 |
| SSR 146 | C792976\_1 | TGGGAATGGAAATGCCCGAA | CATGCCACTTTGCCAAGGAC | 3 |
| SSR 147 | C885532\_1 | TGTGTGTGTGTGGGAAGCAT | TTGTTTTCACGGGTGTGTGC | 3 |
| SSR 148 | scaffold16519\_1 | CACAGACTGCGCTAAATGCA | GACGTCTAAGGGGTGACGTT | 11 |
| SSR 149 | scaffold28771\_2 | TATGCGTGCCACACTCATGT | CCCCACCGTACACACTTTGA | 2 |
| SSR 150 | scaffold43217\_3 | AGAGAACACTGGAAGCGGTG | TCCGAAACAAGCGCTCTTCT | 4 |
| SSR 151 | scaffold8087\_6 | ACTGCGCTTTGTTCAAACCC | TCAATGTTGTCGGCCTCTCC | 10 |
| SSR 152 | C1030106\_3 | GGACGAAGGGAAGAGGTTGG | TTGCTTTGTGGCGTTTACCG | 11 |
| SSR 153 | C1034310\_3 | GAGTGCACTAGGTTGGCCAT | TTCCCCCACGTTACAGAAGC | 7 |
| SSR 154 | C1042138\_3 | ATATACGCAGCGACCTTGCA | ATTAGGAGGCATGCCGATCG | 8 |
| SSR 155 | C528462\_3 | AAATTATGGCAGGCGGTCCA | TGTGCTGCGTGATACACTCA | 5 |
| SSR 156 | C576634\_1 | AGAGCAGCGTGAAAAAGAAGT | GGCCAACCGAATGAATGCAT | 5 |
| SSR 157 | C914242\_2 | CACGGACTATTCGGTCGGAG | TCCCAGCCACACCTCTTCTA | 8 |
| SSR 158 | scaffold36771\_1 | GCTCTTGTGGTGGAAGGTCA | TCGTCATGCTTTACACAAGGT | 4 |
| SSR 159 | scaffold41429\_1 | TGTCGTCAACAATACCGGCA | ACTGCGGATGTGCGATCTAG | 8 |
| SSR 160 | scaffold63334\_1 | CGTTGGGAAAGTCGAGACCA | TTTGCATGGCACGAAACCTG | 2 |
| SSR 161 | C1059764\_1 | TTGAGAGGGAATCACGCGTG | CATGGTGAGGCAGAAGCAGA | 5 |
| SSR 162 | C660824\_1 | AGCGGACCATGTTGTATGTGT | CCACCAACGACCTTCACGTA | 5 |
| SSR 163 | C937646\_3 | CCATACTCACAACGCCACCT | GCTAATACCGGCCGAACAGA | 5 |
| SSR 164 | scaffold14086\_1 | CCGTCAACTGCAAACAAGCA | CTCATCATGCTTCCCCTGCA | 2 |
| SSR 165 | C1003812\_1 | TGTGATAGTGGCAAGCGTGT | TGCCCTGCGATTGTAACAGT | 5 |
| SSR 166 | C1029794\_1 | ACAGGCTTTCCCAAACGAGT | ATGGGTTCTGAGCATCTGGC | 7 |
| SSR 167 | C1063524\_2 | CCTGCAGATGGATGTGTGGT | ACAAGCACCCTCAAACCACA | 8 |
| SSR 168 | C1070772\_2 | AGTACACACACAGCGCATGA | GCCACACTCGGGAATTACCA | 7 |
| SSR 169 | C765232\_2 | CGCTTGCAATGGGGTTTCAA | TCCCAAAGCATTGACAGCCT | 6 |
| SSR 170 | C824722\_1 | AAGCCGGTTTTGCAATTCCC | CCAGCTGGAAGACGGGAATT | 2 |
| SSR 171 | C857824\_1 | TGCGAAGAAACCCACCATCA | TGTCCTTTCGGCAGTGATCC | 1 |
| SSR 172 | C880110\_1 | GGGCGACAACAAGACACAAC | GAACTCACTGGAGGTGTGCA | 5 |
| SSR 173 | scaffold67638\_1 | ACAGGTTGGTCACAAAGCCA | GCATCTTTGGCCATAGCTGC | 3 |
| SSR 174 | scaffold74141\_2 | TAGGGGGAGGACCTTGAAGG | TAGCTCTGCCCCAACAAAGG | 3 |
| SSR 175 | C778296\_1 | TCCATCAATGACGCATCGGT | GCCCTAGCACAGTCACTGAA | 7 |
| SSR 176 | C807008\_1 | AGGACGTGCTAGCGCTATTC | CGTCAGGTGTTGTCCTTCGA | 6 |
| SSR 177 | C984362\_1 | AACACCTTCCCAAACACGGT | GGTGGATGGTGCGAGAGAAA | 5 |
| SSR 178 | scaffold26048\_1 | TGGTTGCCAGATGACCTACG | TTTTTCTGTTGAAGCCGCCC | 3 |
| SSR 179 | scaffold35292\_1 | CTGCCACCGAACCAATCTCT | AGAAAGTTTGGTTGTTGGGGG | 5 |
| SSR 180 | C692866\_1 | CAGCCACTTCCTCTTCCTGG | CCAAATCTGCAGGGTTTGGC | 8 |
| SSR 181 | C717180\_1 | CGCAGGTGTGTGAGTTTGTG | ATGTTGTTGGGTTGTGCTGC | 1 |
| SSR 182 | C764610\_1 | TACCCGTGAGCCTCTTTGTG | AACACTGGACGGCCATGATT | 1 |
| SSR 183 | C952116\_1 | GCAATCGCTGGTGTTGGTTT | CGCGACCTTAGCTGAGAGAG | 7 |
| SSR 184 | scaffold16931\_4 | GTTGCTTGGCTCTGTGGTTG | ATCCACTGCAGTTGCGTACA | 4 |
| SSR 185 | scaffold30981\_1 | TGCTTTGTTTCAGTGCATGCA | GCCATGTTGGACAGCACAAA | 1 |
| SSR 186 | C489334\_1 | TTAAGGAGGTGGTCGTGTGC | CATGTGTGACAAAGGCGCAC | 4 |
| SSR 187 | C666296\_1 | GGGACTGGAATCAAGTGCCA | TACCCAATCAAGGCATGGGC | 7 |
| SSR 188 | C812518\_1 | GCTGAACAAGGTGACCAGCT | TGGGGCCAGAACGATCAAAT | 7 |
| SSR 189 | C948934\_2 | AAGTGTGCACGTGTGTTTGG | AAGCGTTACGGAAGCTTTGC | 1 |
| SSR 190 | C960970\_1 | TGCAGTGTGCTCTTCCTCTG | AACCCAACCGAACAGGGAAA | 10 |
| SSR 191 | scaffold12098\_1 | CCCAGATAGCAGCACTCGAG | TTTGCAAGGCTGACACATGC | 4 |
| SSR 192 | scaffold32099\_1 | GCCATCTTCGATCCTCCCTG | GGTCAACAGGGGGTCTTAGC | 1 |
| SSR 193 | scaffold3474\_1 | CTTGCAGCTTGGGATTGCTC | TCCACAACCGCAGAACAAGT | 7 |
| SSR 194 | scaffold37077\_3 | GCGTCGTACTGTTGTTACGC | ATAAGCTCCTCCATGCCGAC | 2 |
| SSR 195 | scaffold39685\_1 | TTCTCGCTGAGTGTGCATGT | AACAAGACTCCTTCGCCTCG | 8 |
| SSR 196 | scaffold58745\_1 | TTCGCACACAGCTCACCTAG | CCATGCAAGGGACCAGCTAA | 5 |
| SSR 197 | scaffold59576\_1 | GCAATCGCTGGTGTTGGTTT | CGCGACCTTAGCTGAGAGAG | 7 |
| SSR 198 | C1032054\_1 | TTTTGGAGGGAGTGTGGTGG | CTTGGCGACCCTTTCACTCA | 8 |
| SSR 199 | C778380\_1 | GTGAGAACGCAACATGCTCC | TCAAAGCTCCCAGAAGTGGC | 7 |
| SSR 200 | C855988\_1 | CCGCCCTCAAGTGAGTTGAT | CGCCCTGACAGAACAGTCAT | 10 |
| SSR 201 | C905010\_1 | AGGGGTCTGGTTGTGAGAGT | GCACAACAAAATCCGCACCT | 3 |
| SSR 202 | scaffold12487\_1 | GAGGTGGCATGGTGATGTGA | GCTGCAACTTTCAATGCCCA | 9 |
| SSR 203 | scaffold63693\_3 | GCGACGATGCTGTGAATCAC | TGGAAACCGGGATTGCTCTC | 11 |
| SSR 204 | scaffold72927\_3 | CTCGAGATGGAGTCTGTGCC | GCCTGCCTGTTGGTAGTTCT | 6 |
| SSR 205 | C1071314\_2 | CGGAGGAGGAGTGAGAGGAA | GAACTCGTCCAGCCCTTCAA | 10 |
| SSR 206 | C1073520\_2 | TGCTATGCAGTTCTGTGGCA | GGGATTCCACCATCCAAGGG | 11 |
| SSR 207 | C952810\_2 | GCCAGCACTTTGAGATGGGA | TTTAGAGGCTCGTGCGTTGT | 2 |
| SSR 208 | scaffold2581\_1 | TCTACCAACTGCCACACGAC | GACAGTATGTGCCAGCTCGT | 10 |
| SSR 209 | scaffold29929\_1 | GTCGTAAATGCCGTCTTCGC | GCGTCCCATTGTCCACTTGA | 2 |
| SSR 210 | scaffold38561\_2 | AGTACACACACAGCGCATGA | GCCACACTCGGGAATTACCA | 7 |
| SSR 211 | scaffold43170\_1 | TCATGTGCTCTGTTAGGCCA | TGTTCTTGTTCCTGCACCTT | 6 |
| SSR 212 | scaffold51868\_2 | CTGCAAAAGCCAAAGGGTGT | GGCAAGGCTTCCACTAACCT | 7 |
| SSR 213 | scaffold63300\_1 | CTATCGTGCCGCATGAGAGT | TCTTTGCATCCTCCACGGAC | 6 |
| SSR 214 | C1005078\_2 | GAGAACGGTGACAGGCTGAA | ATGAGCATGCAACGTGGAGA | 7 |
| SSR 215 | C1027906\_1 | CTGTCCATGCTTCGTTCCCT | TTTCCATGCACGTAACCCGA | 5 |
| SSR 216 | C502966\_1 | GCCGTGGAGATGAGGTGAAT | CTGTGACCTGTGGTGTGGTT | 11 |
| SSR 217 | C937880\_2 | TTGAGAGGGAATCACGCGTG | CATGGTGAGGCAGAAGCAGA | 2 |
| SSR 218 | scaffold42458\_1 | TTCTGATCCGTGGTGTGGTG | GGTTGGTTTTGGGGTGCATC | 5 |
| SSR 219 | scaffold65604\_2 | GAACGGAGGAGAACAGGTGG | CACACCAATGAGGCTGGAGT | 11 |
| SSR 220 | scaffold70217\_1 | CCGTCCTCCACTTTTCAGCT | CGGTACCCCTCTCACCTACA | 8 |
| SSR 221 | C1003650\_2 | AGAGACCAATGCATGTGGGG | CATCACATGCTGAGGAGGCA | 8 |
| SSR 222 | C1014384\_1 | GAGGGATGGGTCCTGAGTCT | TGAAAGCAGTGGTTGGGTGT | 7 |
| SSR 223 | C660736\_1 | GGATGAGAGAAAAAGCGCGTC | CAGGACCACGCTAACACTGT | 3 |
| SSR 224 | C812786\_1 | TTCAACCGTCTGTGGCAGAA | TGTGACACGGACAAATGGCT | 7 |
| SSR 225 | C887364\_2 | GCCATGATTCGCTGTTCTGC | AAAGGTTGGGTTCTGTGCCA | 9 |
| SSR 226 | C942950\_2 | TGGAGATGTACCGTGGGAGT | GCATCTGTCAGCTCTCGTGA | 7 |
| SSR 227 | scaffold12894\_1 | GTGGAGAGGAGGTTTGCGAA | GAAGCCATGCAACGGGAATC | 8 |
| SSR 228 | scaffold37538\_2 | AGGCAGTTCATGATGGTGGG | AACACGCATGGGTCAGTAGG | 8 |
| SSR 229 | scaffold42990\_2 | AGCAGTTCCCTCAACCCAAG | AGCAATATGGGGTCCCGTTG | 1 |
| SSR 230 | C1002648\_1 | CCTAGATTCACACGCTGCCA | TCAAGGTTCCATGCACGTGA | 8 |
| SSR 231 | C1047492\_3 | TGGCTTCACTTTGTTGGGGT | TTCGCGGTGACCAAAAGAGA | 7 |
| SSR 232 | C1092372\_3 | GAAGCAAGCTAAGGCCAGGA | TCCCTGATGGCCATGTAGGA | 9 |
| SSR 233 | C643226\_1 | CGAGACCCATTTGCTTCTGC | TAACCCCACACAGCATCTCC | 5 |
| SSR 234 | C973112\_1 | AAGCTATGAGACCTACGCGC | AAAGAAACCGCCGAAACGAC | 11 |
| SSR 235 | scaffold53020\_1 | AGCGTGAGTAAGAGACGTCT | TCCCACCCTTAAGGCACAGA | 5 |
| SSR 236 | scaffold553\_2 | AAGTCAAGTAACGCAGGCGA | GGCTTCTCTGTAAAAGCGCG | 6 |
| SSR 237 | scaffold66044\_4 | CGACGGGACAGGGAAGAAAA | ACGAATGGAAGGACACCTGG | 4 |
| SSR 238 | C683810\_1 | GTCCCATCCACTCCTCCTCT | CGAACCCCAACAAGACGGTA | 11 |
| SSR 239 | scaffold53224\_1 | GCAACAAGCTTTACGTCGCA | CAACACCACTCCTCCCTTCC | 6 |
| SSR 240 | scaffold53367\_2 | GTTCGGAAAAGCACCACCAC | TTCAACTCAACCGGCCCTAC | 5 |
| SSR 241 | scaffold61141\_3 | GGAGTGTACATGGGTTGGGG | AACTCCCTCCCATAGGTCCC | 7 |
| SSR 242 | scaffold75120\_1 | TCTCTAGCTGGGGATGGCTT | TATGCATGCATGGCCGGTAT | 7 |
| SSR 243 | C970242\_2 | TGAGGAGGGGAATCTCTGGG | AGACGGCCAGAAACAACGAT | 5 |
| SSR 244 | scaffold44535\_2 | AAAGGGATCGACAGTGGCAG | CAGAACTCCTTCCGGCTGTT | 7 |
| SSR 245 | scaffold50573\_1 | TACGAGAACGGTGGCAACAA | AGATGGAGCGCATGAGAAGG | 8 |
| SSR 246 | scaffold61793\_1 | ACAAATACCGCATCACCCGT | AAATGCCTGCCAGATGGGTT | 7 |
| SSR 247 | scaffold72462\_3 | CCCACCCCTTCACTAACACC | TCCACAGTGGAATCCAAGCC | 4 |
| SSR 248 | C1033596\_3 | TCCAACCATGAGAGAACCGC | CTTTTGCTGACGGCCTTCAC | 4 |
| SSR 249 | C1043072\_1 | ATTGGTGGATCCCGAAACGT | GGCGGTGATTTTCCAGAACG | 2 |
| SSR 250 | C1082394\_5 | ATTTCTGCACGCAACACACC | AAGTGTGTCCCTGCTATGCC | 5 |
| SSR 251 | C1091538\_4 | CCAACTTCCACAAGTGCAGC | CATCGTCGGAGTCATCCTGG | 8 |
| SSR 252 | C871240\_1 | GTTCGACCTTTCAAACGGGC | AGACACACGCGGACATCTTT | 8 |
| SSR 253 | C915990\_1 | TGAAGCAGCCAAAAACGCTC | GGCATCCATGGACAACAGGA | 5 |
| SSR 254 | scaffold16915\_1 | TGGCGAGAGTAAAACCGGAT | ACAAGAATGGATTCCTTCCCTGT | 1 |
| SSR 257 | scaffold68189\_4 | GTTGGAGGTGGTGTAGGTGG | CTCCACCACCAAATCCAGCA | 5 |
| SSR 258 | scaffold70576\_1 | TTCAGCAAGGTCTCGGCAAT | CGTCCCTGTCACCAGAACTC | 1 |
| SSR 259 | C1039612\_2 | GCCCCGCAATTGATTTTGGT | GCATGGACGGCAGAGACATA | 3 |
| SSR 260 | C542338\_1 | TGGGTCATGAACGTACCAACT | CCATTCTCACGCCAAGGTCT | 4 |
| SSR 261 | C744988\_1 | ATCTTTGGACGCTTCTGGGG | TCGTCAACATTGTCTCCACGA | 5 |
| SSR 262 | C826142\_1 | GTTCAGCATCTGGACAGCCT | AAACGCGTACGGTAGAAGGT | 7 |
| SSR 263 | scaffold18913\_1 | TGCTAACTGCTCCAGACAGC | AAGGCCACTGCAATGCAAAG | 6 |
| SSR 264 | scaffold61667\_2 | TGGATGACGAAATCCCAGCA | GAAGGGCACGAACGGAAAAC | 1 |
| SSR 265 | C666314\_1 | CAACTCACACCACCTCCCTC | GGCAGCGCGAACACTTAAAT | 8 |
| SSR 266 | C692838\_1 | TCTTTCTTTCTTCTGCTGTCCCA | GGAAACTCCTTCATGGCAGC | 3 |
| SSR 267 | scaffold1589\_5 | GCAGCTGCAATGTCCTCAAC | GAGGGTGTGACCATGCAAGA | 8 |
| SSR 268 | C810522\_1 | TGCCATGACGGTGCTAATGT | TGGTCCTCACTCCCTTCCAT | 5 |
| SSR 269 | scaffold44631\_2 | GGCACAGTGCTGTTTCCTTG | TGTGTGGAATCTGCGTACCC | 6 |
| SSR 270 | C1064756\_2 | CACCTCAGCCAAACTTTGCC | AGCTACGTTGGAAGCAGGAC | 1 |
| SSR 271 | C776968\_1 | TAACTGCTCCACGCTCATCC | GGTGTGGGTTGAGTTGAGGT | 8 |
| SSR 272 | scaffold19733\_1 | GATCCCTCTCTCGCAGCTTC | AGAAAGCCGAAACCAAACGC | 7 |
| SSR 273 | C1078540\_2 | CAACCGCCACCACTTTTCAG | TCTGATCGTGGTGGTTGTGG | 7 |
| SSR 274 | C812540\_3 | AACCACCACGAACACCAACT | CAAAGGCTCTGGAGAGGGTG | 6 |
| SSR 275 | C1073068\_1 | AGACGCTAGTTGGTGTGGTG | ACCGAGCTTCTGTCTATGCG | 3 |
| SSR 276 | C983628\_1 | GGAGTTCATGGTCTGGGTCC | GACAAGCCGACTCCTACAGC | 1 |
| SSR 277 | scaffold65274\_1 | ATGCCACTCCCCTCCCTATT | GAGTCCTTCGCCTTCAACGA | 4 |
| SSR 278 | C713156\_1 | TTGGGGTCAAGCGAAGAGTG | GTCAACAAACACTTGCGGCT | 7 |
| SSR 281 | C693556\_2 | ACACTTGTCTTGGCCATTGA | CCCTCTGCCTCAATCTTCACA | 7 |
| SSR 282 | scaffold27568\_1 | AGCATCTGCGAGTCAGCATT | AATCTGTGGGGGCATGTCAG | 8 |
| SSR 283 | scaffold29075\_1 | AGTCCTAGGCTCGGATGAGG | GAACCTGAGAATAGGGGTGCA | 9 |
| SSR 284 | C858780\_2 | CTTAGTGGGCGGTCACCATT | GGGCAAAAGGGGTTGTAGGA | 5 |
| SSR 285 | scaffold26238\_1 | ACGACGTTTGCTTATAAGAGTTGA | GGCCCCACTATGATAAGGGC | 8 |
| SSR 286 | scaffold52384\_1 | AGGTCCTGGATGGGGCTAAT | CCAGCCACACTTGAAGGACT | 7 |
| SSR 287 | C1069184\_1 | GCCTTGCCAGCATTCCTTTC | GGGCTGAACTCTTGGCATCT | 6 |
| SSR 288 | C1041636\_2 | CTCTCACTGCCACCGAAAGT | CGTACGACCCTGCTGACATT | 10 |
| SSR 289 | C573452\_1 | CAACCAGCTCACTCTCCCAG | CTAGGTTGGCAGCCATGGAA | 11 |
| SSR 290 | scaffold11870\_1 | CCCAAAGGGCAAGAGGTTGA | ACATTACGGTGTGAATGGGAA | 6 |
| SSR 291 | scaffold68768\_4 | ACCAGTAACTCTCGTGCTGC | AAGTGTTCGGATCTGCGGTT | 5 |
| SSR 292 | C1058518\_2 | ACCGCGTCTCTTCCAACAAT | GCAAAGCTGGACACAGTTGG | 7 |
| SSR 293 | C794840\_1 | GCACGAGTGAATGCAAAGGT | CTCCACCGGCTTCTACACAT | 7 |
| SSR 294 | C943504\_1 | ATGTATGCACCTATCCGCCG | GCATATTGCTCCCTCTCCCC | 5 |

**Supplementary Table 2: Amplification of WGS based SSR markers in the 25 *Vigna* accessions**

| **Marker designation** | **Amplicon size (bp)** | **Number of alleles amplified** | ***Vigna* accessions exhibiting marker amplification** | **Marker designation** | **Amplicon size (bp)** | **Number of alleles amplified** | ***Vigna* accessions exhibiting marker amplification** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SSR 90 | 250-280 | 09 | 09 | SSR 130 | 300 | 17 | 17 |
| SSR 91 | 120-150 | 09 | 09 | SSR 131 | 180-200 | 19 | 19 |
| SSR 92 | 200 | 13 | 13 | SSR 132 | 100 | 19 | 19 |
| SSR 94 | 180-200 | 17 | 15 | SSR 133 | 280-400 | 14 | 13 |
| SSR 95 | 200 | 13 | 13 | SSR 134 | 180-200 | 09 | 9 |
| SSR 96 | 180 | 17 | 17 | SSR 135 | 190-200 | 17 | 17 |
| SSR 97 | 210-280 | 15 | 14 | SSR 136 | 200-410 | 13 | 11 |
| SSR 98 | 210 | 12 | 12 | SSR 137 | 190-300 | 18 | 15 |
| SSR 99 | 150-200 | 15 | 15 | SSR 138 | 200-210 | 14 | 13 |
| SSR 100 | 200 | 12 | 12 | SSR 139 | 200 | 12 | 12 |
| SSR 101 | 100-180 | 19 | 17 | SSR 140 | 150 | 14 | 14 |
| SSR 102 | 200 | 11 | 11 | SSR 141 | 250 | 14 | 14 |
| SSR 103 | 180 | 14 | 14 | SSR 142 | 150 | 14 | 14 |
| SSR 104 | 200-300 | 13 | 13 | SSR 143 | 200 | 15 | 15 |
| SSR 105 | 130 | 08 | 8 | SSR 144 | 200 | 13 | 13 |
| SSR 106 | 150 | 10 | 10 | SSR 145 | 250 | 14 | 14 |
| SSR 107 | 250-310 | 11 | 11 | SSR 146 | 250 | 14 | 14 |
| SSR 108 | 180 | 18 | 18 | SSR 147 | 150-400 | 14 | 10 |
| SSR 109 | 150-200 | 19 | 17 | SSR 148 | 290-300 | 13 | 13 |
| SSR 110 | 200-210 | 15 | 15 | SSR 149 | 180 | 14 | 14 |
| SSR 111 | 210-250 | 13 | 13 | SSR 150 | 220 | 14 | 14 |
| SSR 112 | 240-300 | 14 | 13 | SSR 151 | 300-210 | 15 | 14 |
| SSR 113 | 280-300 | 13 | 13 | SSR 152 | 290 | 12 | 12 |
| SSR 114 | 280-300 | 13 | 13 | SSR 153 | 250-500 | 17 | 14 |
| SSR 115 | 220-300 | 16 | 16 | SSR 154 | 180-200 | 13 | 13 |
| SSR 116 | 100 | 14 | 14 | SSR 155 | 150-200 | 14 | 14 |
| SSR 117 | 280 | 16 | 16 | SSR 156 | 240-250 | 14 | 14 |
| SSR 118 | 200-700 | 16 | 16 | SSR 157 | 190-400 | 16 | 16 |
| SSR 119 | 100 | 17 | 17 | SSR 158 | 180-200 | 13 | 13 |
| SSR 120 | 150-200 | 16 | 14 | SSR 159 | 200 | 10 | 10 |
| SSR 121 | 100-150 | 16 | 16 | SSR 160 | 220-260 | 14 | 14 |
| SSR 122 | 200 | 16 | 16 | SSR 161 | 280-290 | 11 | 11 |
| SSR 123 | 100-200 | 23 | 20 | SSR 162 | 180 | 12 | 12 |
| SSR 124 | 220-250 | 15 | 15 | SSR 163 | 140 | 15 | 15 |
| SSR 125 | 200-210 | 19 | 19 | SSR 164 | 140 | 18 | 18 |
| SSR 126 | 290-310 | 16 | 16 | SSR 165 | 250 | 10 | 10 |
| SSR 127 | 100-150 | 18 | 18 | SSR 166 | 220 | 14 | 14 |
| SSR 128 | 250-400 | 16 | 13 | SSR 167 | 100 | 19 | 19 |
| SSR 129 | 300 | 17 | 17 | SSR 168 | 230-250 | 16 | 16 |
| SSR 169 | 200-250 | 13 | 13 | SSR 209 | 180 | 17 | 17 |
| SSR 170 | 180 | 17 | 17 | SSR 210 | 200-250 | 17 | 17 |
| SSR 171 | 180 | 10 | 10 | SSR 211 | 200-600 | 12 | 12 |
| SSR 172 | 300-800 | 13 | 12 | SSR 212 | 200-230 | 14 | 14 |
| SSR 173 | 250 | 10 | 10 | SSR 213 | 240-250 | 15 | 15 |
| SSR 174 | 190 | 9 | 9 | SSR 214 | 250-260 | 15 | 15 |
| SSR 175 | 280 | 17 | 17 | SSR 215 | 180-200 | 17 | 17 |
| SSR 176 | 200 | 11 | 11 | SSR 216 | 190-200 | 19 | 19 |
| SSR 177 | 180-300 | 18 | 18 | SSR 217 | 200-220 | 19 | 19 |
| SSR 178 | 400-1000 | 14 | 14 | SSR 218 | 190-500 | 8 | 8 |
| SSR 179 | 250-300 | 15 | 15 | SSR 219 | 250 | 16 | 16 |
| SSR 180 | 180 | 18 | 18 | SSR 220 | 220-240 | 14 | 14 |
| SSR 181 | 290-300 | 16 | 15 | SSR 221 | 250-270 | 17 | 17 |
| SSR 182 | 170-200 | 17 | 16 | SSR 222 | 220-250 | 17 | 17 |
| SSR 183 | 190-200 | 18 | 18 | SSR 223 | 160 | 14 | 14 |
| SSR 184 | 300 | 16 | 16 | SSR 224 | 140 | 11 | 11 |
| SSR 185 | 200-220 | 17 | 17 | SSR 225 | 250-290 | 13 | 13 |
| SSR 186 | 170-180 | 12 | 12 | SSR 226 | 180-190 | 17 | 17 |
| SSR 187 | 280-300 | 15 | 15 | SSR 227 | 180-210 | 14 | 14 |
| SSR 188 | 280-300 | 16 | 15 | SSR 228 | 190-210 | 15 | 15 |
| SSR 189 | 250 | 14 | 14 | SSR 229 | 170-190 | 16 | 16 |
| SSR 190 | 200-210 | 14 | 14 | SSR 230 | 230-250 | 16 | 16 |
| SSR 191 | 200 | 18 | 18 | SSR 231 | 250-260 | 11 | 11 |
| SSR 192 | 190-200 | 18 | 18 | SSR 232 | 200-220 | 16 | 16 |
| SSR 193 | 250 | 16 | 16 | SSR 233 | 250-900 | 22 | 19 |
| SSR 194 | 250 | 15 | 15 | SSR 234 | 270-280 | 15 | 15 |
| SSR 195 | 170-400 | 16 | 16 | SSR 235 | 220 | 11 | 11 |
| SSR 196 | 280 | 15 | 15 | SSR 236 | 190 | 20 | 19 |
| SSR 197 | 180-200 | 18 | 18 | SSR 237 | 140-150 | 19 | 19 |
| SSR 198 | 150-180 | 16 | 15 | SSR 238 | 200 | 15 | 15 |
| SSR 199 | 100 | 17 | 17 | SSR 239 | 300 | 19 | 19 |
| SSR 200 | 100 | 17 | 17 | SSR 240 | 190-210 | 20 | 19 |
| SSR 201 | 220 | 18 | 18 | SSR 241 | 240-250 | 12 | 12 |
| SSR 202 | 190-210 | 14 | 13 | SSR 242 | 210-290 | 15 | 15 |
| SSR 203 | 150 | 20 | 20 | SSR 243 | 270-300 | 19 | 18 |
| SSR 204 | 200 | 18 | 18 | SSR 244 | 250-310 | 17 | 15 |
| SSR 205 | 160-170 | 18 | 18 | SSR 245 | 250 | 15 | 15 |
| SSR 206 | 230-240 | 16 | 16 | SSR 246 | 200-220 | 13 | 13 |
| SSR 207 | 280-310 | 15 | 15 | SSR 247 | 220-240 | 18 | 18 |
| SSR 208 | 100-150 | 21 | 21 | SSR 248 | 190-200 | 18 | 18 |
| SSR 249 | 240-250 | 18 | 18 | SSR 272 | 220 | 20 | 20 |
| SSR 250 | 190-210 | 16 | 16 | SSR 273 | 180-200 | 21 | 20 |
| SSR 251 | 200-210 | 16 | 16 | SSR 274 | 150-180 | 7 | 7 |
| SSR 252 | 240-250 | 17 | 17 | SSR 275 | 120-150 | 20 | 20 |
| SSR 253 | 180-200 | 15 | 15 | SSR 276 | 150-170 | 20 | 20 |
| SSR 254 | 150 | 15 | 15 | SSR 277 | 240-350 | 17 | 17 |
| SSR 257 | 150-160 | 17 | 17 | SSR 278 | 230-250 | 16 | 16 |
| SSR 258 | 140-200 | 15 | 15 | SSR 281 | 200-230 | 19 | 16 |
| SSR 259 | 250-260 | 16 | 16 | SSR 282 | 220 | 17 | 17 |
| SSR 260 | 250-280 | 19 | 17 | SSR 283 | 190-210 | 16 | 16 |
| SSR 261 | 150-120 | 20 | 20 | SSR 284 | 160-205 | 20 | 20 |
| SSR 262 | 100-120 | 21 | 21 | SSR 285 | 140-150 | 19 | 19 |
| SSR 263 | 240-260 | 17 | 17 | SSR 286 | 100 | 20 | 20 |
| SSR 264 | 220-250 | 18 | 18 | SSR 287 | 120-150 | 21 | 21 |
| SSR 265 | 210 | 19 | 19 | SSR 288 | 140-280 | 16 | 16 |
| SSR 266 | 190 | 20 | 20 | SSR 289 | 200-240 | 21 | 21 |
| SSR 267 | 190 | 19 | 19 | SSR 290 | 170-200 | 19 | 19 |
| SSR 268 | 170-180 | 20 | 18 | SSR 291 | 180-280 | 16 | 16 |
| SSR 269 | 160-250 | 22 | 19 | SSR 292 | 50-110 | 20 | 20 |
| SSR 270 | 280 | 20 | 20 | SSR 293 | 90-160 | 19 | 18 |
| SSR 271 | 150-160 | 24 | 20 | SSR 294 | 170-200 | 17 | 17 |

**Supplementary Table 3: Performance of WGS based SSR markers on a panel of *Vigna* species**

| **Marker** | **PIC** | **TA** | **PA** | **MA** | **PPB** | **EMR** | **MI** | **RP** | **Na** | **Ne** | **I** | **Ho** | **He** | **uHe** | **F** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SSR 90 | 0.35 | 09 | 2 | 7 | 22.22 | 1.0 | 0.35 | 0.72 | 2.000 | 1.528 | 0.530 | 0.000 | 0.346 | 0.366 | 1.000 |
| SSR 91 | 0.20 | 09 | 2 | 7 | 22.22 | 1.0 | 0.20 | 0.72 | 2.000 | 1.246 | 0.349 | 0.000 | 0.198 | 0.209 | 1.000 |
| SSR 92 | **–** | 13 | 0 | 13 | **–** | **–** | **–** | 1.04 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 94 | 0.36 | 17 | 2 | 15 | 11.76 | 1.0 | 0.36 | 1.36 | 2.000 | 1.471 | 0.500 | 0.133 | 0.320 | 0.331 | 0.583 |
| SSR 95 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 96 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 97 | 0.12 | 15 | 2 | 13 | 13.33 | 1.0 | 0.12 | 1.20 | 2.000 | 1.074 | 0.154 | 0.071 | 0.069 | 0.071 | -0.037 |
| SSR 98 | **–** | 12 | 0 | 12 | **–** | **–** | **–** | 0.96 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 99 | 0.63 | 15 | 3 | 12 | 20.00 | 1.5 | 0.95 | 1.20 | 1.500 | 1.037 | 0.077 | 0.036 | 0.034 | 0.036 | 0.000 |
| SSR 100 | **–** | 12 | 0 | 12 | **–** | **–** | **–** | 0.96 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 101 | 0.27 | 19 | 2 | 17 | 10.53 | 1.0 | 0.27 | 1.52 | 2.000 | 1.205 | 0.311 | 0.188 | 0.170 | 0.175 | -0.103 |
| SSR 102 | **–** | 12 | 0 | 12 | **–** | **–** | **–** | 0.96 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 103 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 104 | 0.50 | 14 | 3 | 11 | 21.43 | 1.5 | 0.75 | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 105 | **–** | 08 | 0 | 8 | **–** | **–** | **–** | 0.64 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 106 | **–** | 10 | 0 | 10 | **–** | **–** | **–** | 0.80 | 2.000 | 2.000 | 0.693 | 0.000 | 0.500 | 0.526 | 1.000 |
| SSR 107 | 0.43 | 13 | 2 | 11 | 15.38 | 1.0 | 0.43 | 1.04 | 2.000 | 1.704 | 0.604 | 0.083 | 0.413 | 0.431 | 0.798 |
| SSR 108 | **–** | 18 | 0 | 18 | **–** | **–** | **–** | 1.44 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 109 | 0.19 | 19 | 2 | 17 | 10.53 | 1.0 | 0.19 | 1.52 | 2.000 | 1.125 | 0.224 | 0.118 | 0.111 | 0.114 | -0.063 |
| SSR 110 | 0.23 | 15 | 2 | 13 | 13.33 | 1.0 | 0.23 | 1.20 | 2.000 | 1.301 | 0.393 | 0.000 | 0.231 | 0.239 | 1.000 |
| SSR 111 | 0.14 | 13 | 2 | 11 | 15.38 | 1.0 | 0.14 | 1.04 | 2.000 | 1.166 | 0.271 | 0.000 | 0.142 | 0.148 | 1.000 |
| SSR 112 | 0.73 | 14 | 5 | 9 | 35.71 | 2.5 | 1.84 | 1.20 | 2.000 | 1.197 | 0.296 | 0.039 | 0.161 | 0.167 | 0.646 |
| SSR 113 | 0.47 | 13 | 2 | 11 | 15.38 | 1.0 | 0.47 | 1.04 | 2.000 | 1.899 | 0.666 | 0.000 | 0.473 | 0.492 | 1.000 |
| SSR 114 | 0.26 | 13 | 2 | 11 | 15.38 | 1.0 | 0.26 | 1.04 | 2.000 | 1.352 | 0.429 | 0.000 | 0.260 | 0.271 | 1.000 |
| SSR 115 | 0.70 | 16 | 4 | 12 | 25.00 | 2.0 | 1.39 | 1.28 | 2.000 | 1.625 | 0.548 | 0.000 | 0.367 | 0.382 | 1.000 |
| SSR 116 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 117 | **–** | 16 | 0 | 16 | **–** | **–** | **–** | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 118 | 0.38 | 16 | 2 | 14 | 12.50 | 1.0 | 0.38 | 1.28 | 2.000 | 1.508 | 0.520 | 0.143 | 0.337 | 0.349 | 0.576 |
| SSR 119 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 120 | 0.12 | 16 | 2 | 14 | 12.50 | 1.0 | 0.12 | 1.28 | 2.000 | 1.133 | 0.234 | 0.000 | 0.117 | 0.121 | 1.000 |
| SSR 121 | 0.12 | 15 | 2 | 14 | 13.33 | 1.0 | 0.12 | 1.28 | 2.000 | 1.133 | 0.234 | 0.000 | 0.117 | 0.121 | 1.000 |
| SSR 122 | **–** | 16 | 0 | 16 | **–** | **–** | **–** | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 123 | 0.73 | 23 | 5 | 18 | 21.74 | 2.5 | 1.82 | 1.84 | 1.667 | 1.088 | 0.156 | 0.000 | 0.078 | 0.081 | 0.000 |
| SSR 124 | 0.12 | 15 | 2 | 13 | 13.33 | 1.0 | 0.12 | 1.20 | 2.000 | 1.142 | 0.245 | 0.000 | 0.124 | 0.129 | 1.000 |
| SSR 125 | 0.44 | 18 | 2 | 16 | 11.11 | 1.0 | 0.44 | 1.44 | 2.000 | 1.800 | 0.637 | 0.000 | 0.444 | 0.457 | 1.000 |
| SSR 126 | 0.55 | 16 | 3 | 13 | 18.75 | 1.5 | 0.83 | 1.28 | 2.000 | 1.471 | 0.441 | 0.000 | 0.284 | 0.293 | 1.000 |
| SSR 127 | 0.57 | 18 | 3 | 15 | 16.67 | 1.5 | 0.85 | 1.44 | 2.000 | 1.636 | 0.539 | 0.000 | 0.364 | 0.375 | 1.000 |
| SSR 128 | 0.54 | 16 | 3 | 13 | 18.75 | 1.5 | 0.81 | 1.28 | 2.000 | 1.553 | 0.490 | 0.000 | 0.324 | 0.334 | 1.000 |
| SSR 129 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 130 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 131 | 0.27 | 19 | 2 | 17 | 10.53 | 1.0 | 0.27 | 1.52 | 2.000 | 1.362 | 0.436 | 0.000 | 0.266 | 0.273 | 1.000 |
| SSR 132 | **–** | 19 | 0 | 19 | **–** | **–** | **–** | 1.52 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 133 | 0.53 | 14 | 4 | 10 | 28.57 | 2.0 | 1.06 | 1.12 | 1.500 | 1.181 | 0.218 | 0.000 | 0.133 | 0.137 | 0.000 |
| SSR 134 | **–** | 09 | 0 | 9 | **–** | **–** | **–** | 0.72 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 135 | 0.46 | 17 | 2 | 15 | 11.76 | 1.0 | 0.46 | 1.36 | 2.000 | 1.932 | 0.675 | 0.063 | 0.482 | 0.498 | 0.870 |
| SSR 136 | 0.65 | 13 | 5 | 8 | 38.46 | 2.5 | 1.63 | 1.04 | 1.500 | 1.371 | 0.298 | 0.021 | 0.205 | 0.212 | 0.000 |
| SSR 137 | 0.67 | 22 | 5 | 17 | 22.73 | 2.5 | 1.67 | 1.76 | 1.500 | 1.434 | 0.324 | 0.028 | 0.229 | 0.236 | 0.000 |
| SSR 138 | 0.13 | 14 | 2 | 12 | 14.29 | 1.0 | 0.13 | 1.12 | 2.000 | 1.080 | 0.163 | 0.077 | 0.074 | 0.077 | -0.040 |
| SSR 139 | **–** | 12 | 0 | 12 | **–** | **–** | **–** | 0.96 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 140 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 141 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 142 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 143 | **–** | 16 | 0 | 16 | **–** | **–** | **–** | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 144 | **–** | 13 | 0 | 13 | **–** | **–** | **–** | 1.04 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 145 | **–** | 13 | 0 | 13 | **–** | **–** | **–** | 1.04 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 146 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 147 | 0.54 | 14 | 4 | 10 | 28.57 | 2.0 | 1.08 | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 148 | 0.47 | 13 | 2 | 11 | 15.38 | 1.0 | 0.47 | 1.04 | 2.000 | 1.899 | 0.666 | 0.000 | 0.473 | 0.492 | 1.000 |
| SSR 149 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 150 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 151 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 152 | **–** | 12 | 0 | 12 | **–** | **–** | **–** | 0.96 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 153 | 0.60 | 17 | 4 | 13 | 23.53 | 2.0 | 1.20 | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 154 | 0.54 | 13 | 3 | 10 | 23.08 | 1.5 | 0.82 | 1.04 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 155 | 0.24 | 14 | 2 | 12 | 14.29 | 1.0 | 0.24 | 1.12 | 2.000 | 1.324 | 0.410 | 0.000 | 0.245 | 0.254 | 1.000 |
| SSR 156 | 0.49 | 14 | 2 | 12 | 14.29 | 1.0 | 0.49 | 1.12 | 2.000 | 1.960 | 0.683 | 0.000 | 0.490 | 0.508 | 1.000 |
| SSR 157 | 0.54 | 16 | 3 | 13 | 18.75 | 1.5 | 0.81 | 1.28 | 2.000 | 1.642 | 0.547 | 0.000 | 0.367 | 0.381 | 1.000 |
| SSR 158 | 0.66 | 13 | 3 | 10 | 23.08 | 1.5 | 0.99 | 1.04 | 2.000 | 1.801 | 0.615 | 0.000 | 0.429 | 0.444 | 1.000 |
| SSR 159 | **–** | 10 | 0 | 10 | **–** | **–** | **–** | 0.80 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 160 | 0.66 | 14 | 4 | 10 | 28.57 | 2.0 | 1.33 | 1.12 | 1.500 | 1.401 | 0.307 | 0.000 | 0.214 | 0.222 | 0.000 |
| SSR 161 | 0.46 | 11 | 2 | 9 | 18.18 | 1.0 | 0.46 | 0.88 | 2.000 | 1.862 | 0.655 | 0.000 | 0.463 | 0.485 | 1.000 |
| SSR 162 | **–** | 12 | 0 | 12 | **–** | **–** | **–** | 0.96 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 163 | **–** | 15 | 0 | 15 | **–** | **–** | **–** | 1.20 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 164 | **–** | 18 | 0 | 18 | **–** | **–** | **–** | 1.44 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 165 | **–** | 10 | 0 | 10 | **–** | **–** | **–** | 0.80 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 166 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 167 | **–** | 19 | 0 | 19 | **–** | **–** | **–** | 1.52 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 168 | 0.53 | 16 | 3 | 13 | 18.75 | 1.5 | 0.80 | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 169 | 0.70 | 14 | 4 | 10 | 28.57 | 2.0 | 1.41 | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 170 | **–** | 18 | 0 | 18 | **–** | **–** | **–** | 1.44 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 171 | **–** | 10 | 0 | 10 | **–** | **–** | **–** | 0.80 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 172 | 0.27 | 13 | 3 | 10 | 23.08 | 1.5 | 0.41 | 1.04 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 173 | **–** | 10 | 0 | 10 | **–** | **–** | **–** | 0.80 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 174 | **–** | 09 | 0 | 9 | **–** | **–** | **–** | 0.72 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 175 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 176 | **–** | 11 | 0 | 11 | **–** | **–** | **–** | 0.88 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 177 | 0.65 | 25 | 3 | 22 | 12.00 | 1.5 | 0.97 | 2.00 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 178 | 0.67 | 09 | 4 | 5 | 44.44 | 2.0 | 1.33 | 0.72 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 179 | 0.70 | 15 | 5 | 10 | 33.33 | 2.5 | 1.76 | 1.20 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 180 | **–** | 18 | 0 | 18 | **–** | **–** | **–** | 1.44 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 181 | 0.23 | 15 | 2 | 13 | 13.33 | 1.0 | 0.23 | 1.20 | 2.000 | 1.301 | 0.393 | 0.000 | 0.231 | 0.239 | 1.000 |
| SSR 182 | 0.48 | 16 | 3 | 13 | 18.75 | 1.5 | 0.71 | 1.28 | 1.500 | 1.150 | 0.196 | 0.000 | 0.116 | 0.120 | 0.000 |
| SSR 183 | 0.19 | 19 | 2 | 17 | 10.53 | 1.0 | 0.19 | 1.52 | 2.000 | 1.232 | 0.336 | 0.000 | 0.188 | 0.193 | 1.000 |
| SSR 184 | **–** | 16 | 0 | 16 | **–** | **–** | **–** | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 185 | 0.66 | 17 | 3 | 14 | 17.65 | 1.5 | 0.99 | 1.36 | 1.500 | 1.116 | 0.168 | 0.000 | 0.094 | 0.097 | 0.000 |
| SSR 186 | 0.44 | 12 | 2 | 10 | 16.67 | 1.0 | 0.44 | 0.96 | 2.000 | 1.800 | 0.637 | 0.000 | 0.444 | 0.464 | 1.000 |
| SSR 187 | 0.48 | 15 | 2 | 13 | 13.33 | 1.0 | 0.48 | 1.20 | 2.000 | 1.923 | 0.673 | 0.000 | 0.480 | 0.497 | 1.000 |
| SSR 188 | 0.55 | 15 | 3 | 12 | 20.00 | 1.5 | 0.83 | 1.20 | 2.000 | 1.862 | 0.655 | 0.000 | 0.462 | 0.480 | 1.000 |
| SSR 189 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 190 | 0.23 | 15 | 2 | 13 | 13.33 | 1.0 | 0.23 | 1.20 | 2.000 | 1.301 | 0.393 | 0.000 | 0.231 | 0.239 | 1.000 |
| SSR 191 | **–** | 19 | 0 | 19 | **–** | **–** | **–** | 1.52 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 192 | 0.46 | 20 | 2 | 18 | 10.00 | 1.0 | 0.46 | 1.60 | 2.000 | 1.835 | 0.647 | 0.000 | 0.455 | 0.467 | 1.000 |
| SSR 193 | **–** | 16 | 0 | 16 | **–** | **–** | **–** | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 194 | **–** | 15 | 0 | 15 | **–** | **–** | **–** | 1.20 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 195 | 0.58 | 16 | 4 | 12 | 25.00 | 2.0 | 1.16 | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 196 | **–** | 15 | 0 | 15 | **–** | **–** | **–** | 1.20 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 197 | 0.29 | 18 | 3 | 15 | 16.67 | 1.5 | 0.44 | 1.44 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 198 | 0.49 | 16 | 2 | 14 | 12.50 | 1.0 | 0.49 | 1.28 | 2.000 | 1.969 | 0.685 | 0.000 | 0.492 | 0.508 | 1.000 |
| SSR 199 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 200 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 201 | **–** | 18 | 0 | 18 | **–** | **–** | **–** | 1.44 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 202 | 0.26 | 14 | 3 | 11 | 21.43 | 1.5 | 0.38 | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 203 | **–** | 20 | 0 | 20 | **–** | **–** | **–** | 1.60 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 204 | **–** | 18 | 0 | 18 | **–** | **–** | **–** | 1.44 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 205 | 0.40 | 18 | 2 | 16 | 11.11 | 1.0 | 0.40 | 1.44 | 2.000 | 1.670 | 0.591 | 0.000 | 0.401 | 0.413 | 1.000 |
| SSR 206 | 0.47 | 16 | 2 | 14 | 12.50 | 1.0 | 0.47 | 1.28 | 2.000 | 1.882 | 0.662 | 0.000 | 0.469 | 0.484 | 1.000 |
| SSR 207 | 0.50 | 15 | 3 | 12 | 20.00 | 1.5 | 0.75 | 1.20 | 2.000 | 1.776 | 0.626 | 0.000 | 0.435 | 0.448 | 1.000 |
| SSR 208 | 0.54 | 21 | 3 | 18 | 14.29 | 1.5 | 0.81 | 1.68 | 2.000 | 1.829 | 0.644 | 0.000 | 0.452 | 0.466 | 1.000 |
| SSR 209 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 210 | 0.11 | 17 | 2 | 15 | 11.76 | 1.0 | 0.11 | 1.36 | 2.000 | 1.125 | 0.224 | 0.000 | 0.111 | 0.114 | 1.000 |
| SSR 211 | 0.40 | 12 | 3 | 9 | 25.00 | 1.5 | 0.60 | 0.96 | 1.500 | 1.062 | 0.112 | 0.000 | 0.055 | 0.057 | 0.000 |
| SSR 212 | 0.41 | 14 | 2 | 12 | 14.29 | 1.0 | 0.41 | 1.12 | 2.000 | 1.690 | 0.598 | 0.000 | 0.408 | 0.423 | 1.000 |
| SSR 213 | 0.46 | 14 | 2 | 12 | 14.29 | 1.0 | 0.46 | 1.12 | 2.000 | 1.849 | 0.652 | 0.000 | 0.459 | 0.476 | 1.000 |
| SSR 214 | 0.34 | 14 | 2 | 12 | 14.29 | 1.0 | 0.34 | 1.12 | 2.000 | 1.508 | 0.520 | 0.000 | 0.337 | 0.349 | 1.000 |
| SSR 215 | 0.54 | 18 | 3 | 15 | 16.67 | 1.5 | 0.81 | 1.44 | 2.000 | 1.678 | 0.586 | 0.000 | 0.398 | 0.413 | 1.000 |
| SSR 216 | 0.39 | 19 | 2 | 17 | 10.53 | 1.0 | 0.39 | 1.52 | 2.000 | 1.633 | 0.576 | 0.000 | 0.388 | 0.398 | 1.000 |
| SSR 217 | 0.63 | 19 | 3 | 16 | 15.79 | 1.5 | 0.95 | 1.52 | 2.000 | 1.656 | 0.581 | 0.000 | 0.393 | 0.405 | 1.000 |
| SSR 218 | 0.72 | 08 | 4 | 4 | 50.00 | 2.0 | 1.44 | 0.64 | 2.000 | 1.645 | 0.579 | 0.000 | 0.390 | 0.402 | 1.000 |
| SSR 219 | **–** | 16 | 0 | 16 | **–** | **–** | **–** | 1.28 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 220 | 0.13 | 14 | 2 | 12 | 14.29 | 1.0 | 0.13 | 1.12 | 2.000 | 1.153 | 0.257 | 0.000 | 0.133 | 0.138 | 1.000 |
| SSR 221 | 0.59 | 18 | 3 | 15 | 16.67 | 1.5 | 0.89 | 1.44 | 1.500 | 1.076 | 0.129 | 0.000 | 0.066 | 0.069 | 0.000 |
| SSR 222 | 0.59 | 18 | 3 | 15 | 16.67 | 1.5 | 0.88 | 1.44 | 1.750 | 1.115 | 0.193 | 0.000 | 0.099 | 0.103 | 0.000 |
| SSR 223 | **–** | 14 | 0 | 14 | **–** | **–** | **–** | 1.12 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 224 | **–** | 11 | 0 | 11 | **–** | **–** | **–** | 0.88 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 225 | 0.70 | 13 | 5 | 8 | 38.46 | 2.5 | 1.75 | 1.04 | 1.250 | 1.038 | 0.064 | 0.000 | 0.033 | 0.034 | 0.000 |
| SSR 226 | 0.46 | 17 | 2 | 15 | 11.76 | 1.0 | 0.46 | 1.36 | 2.000 | 1.841 | 0.649 | 0.000 | 0.457 | 0.471 | 1.000 |
| SSR 227 | 0.50 | 14 | 3 | 11 | 21.43 | 1.5 | 0.75 | 1.12 | 1.625 | 1.439 | 0.357 | 0.000 | 0.245 | 0.252 | 0.000 |
| SSR 228 | 0.42 | 15 | 3 | 12 | 20.00 | 1.5 | 0.63 | 1.20 | 1.813 | 1.640 | 0.503 | 0.000 | 0.351 | 0.362 | 0.000 |
| SSR 229 | 0.32 | 16 | 3 | 13 | 18.75 | 1.5 | 0.48 | 1.28 | 1.719 | 1.540 | 0.430 | 0.000 | 0.298 | 0.307 | 0.000 |
| SSR 230 | 0.60 | 16 | 4 | 12 | 25.00 | 2.0 | 1.20 | 1.28 | 1.766 | 1.590 | 0.466 | 0.000 | 0.324 | 0.334 | 0.000 |
| SSR 231 | 0.17 | 11 | 2 | 9 | 18.18 | 1.0 | 0.17 | 0.88 | 2.000 | 1.198 | 0.305 | 0.000 | 0.165 | 0.173 | 1.000 |
| SSR 232 | 0.53 | 16 | 3 | 13 | 18.75 | 1.5 | 0.80 | 1.28 | 1.883 | 1.394 | 0.386 | 0.000 | 0.245 | 0.254 | 0.000 |
| SSR 233 | 0.68 | 22 | 5 | 17 | 22.73 | 2.5 | 1.70 | 1.76 | 1.883 | 1.394 | 0.386 | 0.000 | 0.245 | 0.254 | 0.000 |
| SSR 234 | 0.50 | 15 | 2 | 13 | 13.33 | 1.0 | 0.50 | 1.20 | 2.000 | 2.000 | 0.693 | 0.000 | 0.500 | 0.519 | 1.000 |
| SSR 235 | 0.30 | 11 | 2 | 9 | 18.18 | 1.0 | 0.30 | 0.88 | 2.000 | 1.424 | 0.474 | 0.000 | 0.298 | 0.312 | 1.000 |
| SSR 236 | **–** | 19 | 0 | 19 | **–** | **–** | **–** | 1.52 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 237 | 0.64 | 19 | 3 | 16 | 15.79 | 1.5 | 0.96 | 1.52 | 1.500 | 1.212 | 0.237 | 0.000 | 0.149 | 0.156 | 0.000 |
| SSR 238 | **–** | 15 | 0 | 15 | **–** | **–** | **–** | 1.20 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 239 | **–** | 19 | 0 | 19 | **–** | **–** | **–** | 1.52 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 240 | 0.49 | 20 | 3 | 17 | 15.00 | 1.5 | 0.73 | 1.60 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 241 | 0.49 | 12 | 2 | 10 | 16.67 | 1.0 | 0.49 | 0.96 | 2.000 | 1.946 | 0.679 | 0.000 | 0.486 | 0.507 | 1.000 |
| SSR 242 | 0.56 | 15 | 4 | 11 | 26.67 | 2.0 | 1.12 | 1.20 | 1.500 | 1.473 | 0.340 | 0.000 | 0.243 | 0.254 | 0.000 |
| SSR 243 | 0.29 | 18 | 3 | 15 | 16.67 | 1.5 | 0.44 | 1.44 | 1.750 | 1.709 | 0.509 | 0.000 | 0.365 | 0.380 | 0.000 |
| SSR 244 | 0.76 | 17 | 6 | 11 | 35.29 | 3.0 | 2.28 | 1.36 | 1.750 | 1.709 | 0.509 | 0.000 | 0.365 | 0.380 | 0.000 |
| SSR 245 | 0.23 | 15 | 2 | 13 | 13.33 | 1.0 | 0.23 | 1.20 | 2.000 | 1.301 | 0.393 | 0.000 | 0.231 | 0.239 | 1.000 |
| SSR 246 | 0.60 | 13 | 3 | 10 | 23.08 | 1.5 | 0.91 | 1.04 | 1.875 | 1.505 | 0.451 | 0.000 | 0.298 | 0.310 | 0.000 |
| SSR 247 | 0.48 | 18 | 2 | 16 | 11.11 | 1.0 | 0.48 | 1.44 | 2.000 | 1.906 | 0.668 | 0.000 | 0.475 | 0.489 | 1.000 |
| SSR 248 | 0.48 | 18 | 2 | 16 | 11.11 | 1.0 | 0.48 | 1.44 | 2.000 | 1.906 | 0.668 | 0.000 | 0.475 | 0.489 | 1.000 |
| SSR 249 | 0.48 | 18 | 2 | 16 | 11.11 | 1.0 | 0.48 | 1.44 | 2.000 | 1.906 | 0.668 | 0.000 | 0.475 | 0.489 | 1.000 |
| SSR 250 | 0.60 | 16 | 3 | 13 | 18.75 | 1.5 | 0.90 | 1.28 | 2.000 | 1.906 | 0.668 | 0.000 | 0.475 | 0.489 | 1.000 |
| SSR 251 | 0.49 | 16 | 2 | 14 | 12.50 | 1.0 | 0.49 | 1.28 | 2.000 | 1.969 | 0.685 | 0.000 | 0.492 | 0.508 | 1.000 |
| SSR 252 | 0.49 | 18 | 2 | 16 | 11.11 | 1.0 | 0.49 | 1.44 | 2.000 | 1.976 | 0.687 | 0.000 | 0.494 | 0.508 | 1.000 |
| SSR 253 | 0.56 | 15 | 3 | 12 | 20.00 | 1.5 | 0.84 | 1.20 | 2.000 | 1.972 | 0.686 | 0.000 | 0.493 | 0.508 | 1.000 |
| SSR 254 | **–** | 15 | 0 | 15 | **–** | **–** | **–** | 1.20 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 257 | 0.71 | 17 | 4 | 13 | 23.53 | 2.0 | 1.43 | 1.36 | 1.500 | 1.486 | 0.343 | 0.000 | 0.247 | 0.254 | 0.000 |
| SSR 258 | 0.43 | 15 | 3 | 12 | 20.00 | 1.5 | 0.64 | 1.20 | 1.250 | 1.243 | 0.172 | 0.000 | 0.123 | 0.127 | 0.000 |
| SSR 259 | 0.12 | 16 | 2 | 14 | 12.50 | 1.0 | 0.12 | 1.28 | 2.000 | 1.133 | 0.234 | 0.000 | 0.117 | 0.121 | 1.000 |
| SSR 260 | 0.73 | 18 | 4 | 14 | 22.22 | 2.0 | 1.47 | 1.44 | 1.625 | 1.188 | 0.203 | 0.000 | 0.120 | 0.124 | 0.000 |
| SSR 261 | 0.68 | 20 | 4 | 16 | 20.00 | 2.0 | 1.35 | 1.60 | 1.813 | 1.160 | 0.218 | 0.000 | 0.119 | 0.122 | 0.000 |
| SSR 262 | 0.09 | 21 | 2 | 19 | 9.52 | 1.0 | 0.09 | 1.68 | 2.000 | 1.100 | 0.191 | 0.000 | 0.091 | 0.093 | 1.000 |
| SSR 263 | 0.53 | 17 | 3 | 14 | 17.65 | 1.5 | 0.79 | 1.36 | 1.906 | 1.130 | 0.205 | 0.000 | 0.105 | 0.108 | 0.000 |
| SSR 264 | 0.71 | 18 | 4 | 14 | 22.22 | 2.0 | 1.42 | 1.44 | 1.953 | 1.115 | 0.198 | 0.000 | 0.098 | 0.100 | 0.000 |
| SSR 265 | **–** | 19 | 0 | 19 | **–** | **–** | **–** | 1.52 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 266 | **–** | 20 | 0 | 20 | **–** | **–** | **–** | 1.60 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 267 | **–** | 20 | 0 | 20 | **–** | **–** | **–** | 1.60 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 268 | 0.32 | 20 | 2 | 18 | 10.00 | 1.0 | 0.32 | 1.60 | 2.000 | 1.385 | 0.451 | 0.111 | 0.278 | 0.286 | 0.600 |
| SSR 269 | 0.84 | 23 | 8 | 15 | 34.78 | 4.0 | 3.34 | 1.84 | 1.250 | 1.096 | 0.113 | 0.028 | 0.069 | 0.071 | 0.000 |
| SSR 270 | **–** | 20 | 0 | 20 | **–** | **–** | **–** | 1.60 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 271 | 0.43 | 24 | 3 | 21 | 12.50 | 1.5 | 0.65 | 1.92 | 1.125 | 1.048 | 0.056 | 0.014 | 0.035 | 0.036 | 0.000 |
| SSR 272 | **–** | 20 | 0 | 20 | **–** | **–** | **–** | 1.60 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 273 | 0.68 | 21 | 6 | 15 | 28.57 | 3.0 | 2.03 | 1.68 | 1.042 | 1.016 | 0.019 | 0.005 | 0.012 | 0.012 | 0.000 |
| SSR 274 | 0.57 | 07 | 3 | 4 | 42.86 | 1.5 | 0.86 | 0.56 | 1.021 | 1.008 | 0.009 | 0.002 | 0.006 | 0.006 | 0.000 |
| SSR 275 | 0.62 | 20 | 5 | 15 | 25.00 | 2.5 | 1.55 | 1.60 | 1.021 | 1.008 | 0.009 | 0.002 | 0.006 | 0.006 | 0.000 |
| SSR 276 | 0.46 | 20 | 2 | 18 | 10.00 | 1.0 | 0.46 | 1.60 | 2.000 | 1.835 | 0.647 | 0.000 | 0.455 | 0.467 | 1.000 |
| SSR 277 | 0.75 | 17 | 6 | 11 | 35.29 | 3.0 | 2.24 | 1.36 | 1.347 | 1.284 | 0.222 | 0.002 | 0.156 | 0.160 | 0.000 |
| SSR 278 | 0.63 | 16 | 4 | 12 | 25.00 | 2.0 | 1.27 | 1.28 | 1.674 | 1.559 | 0.435 | 0.001 | 0.305 | 0.313 | 0.000 |
| SSR 281 | 0.76 | 19 | 5 | 14 | 26.32 | 2.5 | 1.90 | 1.52 | 1.674 | 1.559 | 0.435 | 0.001 | 0.305 | 0.313 | 0.000 |
| SSR 282 | **–** | 17 | 0 | 17 | **–** | **–** | **–** | 1.36 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 283 | 0.64 | 17 | 4 | 13 | 23.53 | 2.0 | 1.29 | 1.36 | 1.337 | 1.280 | 0.217 | 0.000 | 0.153 | 0.157 | 0.000 |
| SSR 284 | 0.75 | 20 | 5 | 15 | 25.00 | 2.5 | 1.86 | 1.60 | 1.337 | 1.280 | 0.217 | 0.000 | 0.153 | 0.157 | 0.000 |
| SSR 285 | 0.26 | 20 | 2 | 18 | 10.00 | 1.0 | 0.26 | 1.60 | 2.000 | 1.342 | 0.423 | 0.000 | 0.255 | 0.262 | 1.000 |
| SSR 286 | **–** | 20 | 0 | 20 | **–** | **–** | **–** | 1.60 | 1.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| SSR 287 | 0.44 | 21 | 3 | 18 | 14.29 | 1.5 | 0.67 | 1.68 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| SSR 288 | 0.63 | 18 | 5 | 13 | 27.78 | 2.5 | 1.58 | 1.44 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| SSR 289 | 0.75 | 21 | 7 | 14 | 33.33 | 3.5 | 2.63 | 1.68 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| SSR 290 | 0.56 | 19 | 4 | 15 | 21.05 | 2.0 | 1.12 | 1.52 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| SSR 291 | 0.79 | 16 | 6 | 10 | 37.50 | 3.0 | 2.37 | 1.28 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| SSR 292 | 0.61 | 19 | 5 | 14 | 26.32 | 2.5 | 1.54 | 1.52 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| SSR 293 | 0.70 | 19 | 6 | 13 | 31.58 | 3.0 | 2.11 | 1.52 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| SSR 294 | 0.37 | 18 | 3 | 15 | 16.67 | 1.5 | 0.56 | 1.44 | 1.500 | 1.171 | 0.211 | 0.000 | 0.128 | 0.131 | 0.000 |
| **Average** | **0.31** |  | | | **12.69** | **1.01** | **0.54** | **1.27** | **1.596** | **1.374** | **0.321** | **0.016** | **0.216** | **0.235** | **0.905** |

PIC= Polymorphic Index Content, TA= Total Alleles, PA= Polymorphic Alleles, MA= Monomorphic Alleles, PPB= Percentage Polymorphic Bands, EMR= effective Multiplex Ratio, MI= Marker Index, RP= Resolving Power, Na= Number of observed alleles, Ne= Number of effective alleles, I= Shannon’s Information Index, Ho= Observed Heterozygosity, He= Expected Heterozygosity, UHe= Unbiased Heterozygosity, F= Fixation Index