

Table S6. Summary of primers for identification of sex-specific SNP markers in *Amolops* species

Locus	Primer sequence (5'–3')	T (°C)	length (bp)	SNP (X/Y)	SNP (Location)
CH_1058318	Forward: ATTGAAACTTGATTACCG	58	245	C/T	76
	Reverse: ATTACTGATGGAGCCTGT				
CH_2909840	Forward: TGAGATAAATGCCCAGGTG	58	211	A/G	105
	Reverse: GCAGATAGAGCAAAACAGGA				
JI_483348	Forward: ACAGCATGTGACTGAAATC	58	271	A/G	83
	Reverse: CTGGTATCATCCAAGAAAA				
JI_1184383	Forward: ATGGTTCATTTAGTCTAAGGGGATA	58	203	T/A	36
	Reverse: CCCGCAACATCTTCTCCC				
LI_174627	Forward: GTATGCTTTGGGTCGTT	58	234	C/A	171
	Reverse: GAATGTGGTTCAGGCTAT				
LI_375069	Forward: ATTGTGGAACCCGACG	58	282	G/T	195
	Reverse: ACCCCTGTGGGACTGT				
LI_430733	Forward: TCTCCAGCAGTTTTTCATT	58	221	G/C	83_130
	Reverse: TCCCCTTCTTTTATTGTC				
LO_550969	Forward: GGGGATTTTCAGCAACACTTAGG	58	222	C/T	61
	Reverse: GTCCGTTCCAGCCCACCT				
MA_85869	Forward: CTCCTGGCAACTCCTTTCTG	58	189	G/A	228
	Reverse: GAGCCCATATTCAATTCACC				
SP_110086	Forward: GGGAAACGGCCCTTGATA	58	248	A/G	227
	Reverse: GAAGCACATCTCCCAGTCC				
SP_208821	Forward: CGCTTTACACTTCATGCCCA	58	211	C/T_C/G	193_217
	Reverse: AGAGTTGGGGAAGATGCCAA				

SP_271488	Forward: CGCCAATCCCTTCACCTC Reverse: TACAAACAAAGCACTTCCA	58	225	C/T	248
SP_476103	Forward: ATTGACTTTATGCTGTTGGGCTGCTA Reverse: TATTGTTGTAGGGGATTGCAGAGCG	58	253	C/A	265
SP_1399857	Forward: AGATTTCTTCCCGCACTACTTT Reverse: TAATTACAAGTACCTGAATGTGACC	58	284	C/T	271
TU_1007365	Forward: CCCACCAGACAGGAAACAC Reverse: CCGCAGCAATGCCTAAAC	58	222	T/G_A/T	239_251
TU_1150683	Forward: CAGATTTTGGGGTGTAGA Reverse: ATATTAGATAGATCAGCTTGG	58	265	C/A_G/A	230_242
TU_1390631	Forward: GGAAAGAACCAGATGACA Reverse: AGAGTTGAACTCCAGCCT	58	176	T/C	186
TU_1950702	Forward: ATACCAGAGCTCCAGACC Reverse: ATGACCCAATGTAGATGC	58	273	A/G	77
TU_2024518	Forward: ATCTTTGTGCAATCTTTGAT Reverse: CACCCTCTTCCAGTCCAG	58	253	G/A_T/G	202_253
TU_2049833	Forward: TGTCTTCCTGAGTATCTGC Reverse: AATAGTGCCACAACCTTT	58	257	G/A_A/T	238_249
WU_117656	Forward: TGCCTGTGAAATACGAC Reverse: GAACACCCAGTTTGATAA	58	250	C/T	105
WU_120446	Forward: AGCCTACAAATAAAACAC Reverse: ATACTACATCAAATAACAGAG	58	271	C/A	193
WU_177528	Forward: GCAGTAAAATATGCATCTAAC Reverse: CTAAACACCTTCACTTGGA	58	234	G/A	160

WU_321845	Forward: CTACCGCCAAGACGGAAAG Reverse: CGGCTGACAGAAAAGCAGAGT	58	266	G/A	136
WU_375485	Forward: TAACAATGTCCCGAATG Reverse: TATGCGGAGATGAGAAA	58	288	G/A	115
WU_450377	Forward: GGAATGTGCTTGTATGCT Reverse: ACTAATCAAAGTGCCAGG	58	218	A/G	82
WU_1146109	Forward: GAAACCCTCACGATTCTATT Reverse: AGCCAGTCTCCCTCCAT	58	230	A/C	233
XI_106254	Forward: GCGCATACGCTCTGAAGG Reverse: TCCAACTGCCAGCCACCA	58	215	G/A	173
XI_746953	Forward: AAGTGGATGTAAACCCGATTC Reverse: AGATGATGCCCTCCAGACC	58	229	G/A	82
XI_1266715	Forward: ACCTTGGAACGAAGCCCTCA Reverse: GCATGACTCCCAAAGGCAGAG	58	261	G/A	176

Note: The forward and reverse primers were designed at conserved region. T (°C) indicates the annealing temperature of PCR thermal cycling. Length indicates PCR product size. SNP (Location) represents the nucleotide site within the locus, reported using a zero-based offset (first nucleotide is enumerated as 0). In the Locus column, CH for *A. chunganensis*, JI for *A. jinjiangensis*, LI for *A. lifanensis*, LO for *A. loloensis*, MA for *A. mantzorum*, SP for *A. sp.*, TU for *A. tuberodepressus*, WU for *A. wuyiensis*, XI for *A. xinduiqiao*, and the number represents the locus ID in the catalog.