

ADDITIONAL FILES

Supplementary Material 1. Information on microsatellites and primers.

MS ¹ Name	MS ¹ Type	Allele Size ²	Location on CFA03	Forward /Reverse Primer Sequences	label ³	PCR Final Concentration of Forward/ Reverse Primers	Multiplex Groups ⁴
CamC03.040	di	319, 371 322	41.9 Mb	CACAGGAAACAGCTATGACCGGTCTT GCTAGGAAAGAGTACAGG/ GCCAGCAAGGTAATGAGGAATGG	pet	0.05 μM/0.1 μM	1
ZUBECA4	tetra	408, 415 419, 425 427, 432 436, 453 457	42.87 Mb	TAAAACGACGGCCAGTGCAGGGCA GGAGTCATAAAATCAT/ GCCAGGGACAAACAATCTT	ned	0.05 μM/0.1 μM	1
REN92B17	di	155, 225 229, 231 255	48.67 Mb	TTTCCCAGTCACGACGTTGCCATGGC GCACCTACTAT/ CAGCCTGCCAAACCACT	fam	0.05 μM/0.1 μM	1
CamC03.046	di	376, 378 384, 388	44.60 Mb	TTTCCCAGTCACGACGTTGGGAGTAG AGGCACTTAACAGAATG/ CATTTTGATGGCTCTTCATAGG	fam	0.15 μM/0.3 μM	1
FH2320	tetra	240, 243 244, 245 247, 249 251, 253 254, 255 257, 261	44.78 Mb	TAAAACGACGGCCAGTGCTTAGTTAG GGTTTTGGTTTGGG/ AGCCACTGCAATAAGGCAAG	ned	0.025 μM/0.05 μM	1
CamC03.045	Tri-tetra	392, 406 414, 422 425	43.52 Mb	TTTCCCAGTCACGACGTTGACCATTC AAAGCAGGACAGG/ CACCAACACTACTAGGGATATTTGC	fam	0.05 μM/0.1 μM	2
REN02G13	tri	359, 360 573	41.61 Mb	GCGGATAACAATTTACACAGGTGGA CGATTCAGGGTATAAA/ TACCAGCCAGCAGTCAGATG	vic	0.05 μM/0.1 μM	2
CamC03.041	Tri-di	335, 337 352, 354	41.84 Mb	TAAAACGACGGCCAGTGCTCGTCAGA AGATAGGCACTTCTC/ GGGTCTTGCTGGAACCTTTC	ned	0.05 μM/0.1 μM	2
CamC03.047	tetra	535, 569 573, 577 580	42.34 Mb	CACAGGAAACAGCTATGACCATGCA GCTCCAAAATGTGTG/ CTTCTTTGGAGGGATTGCTG	pet	0.05 μM/0.1 μM	2
CamC03.042	di	306, 308 310, 314 317	39.05 Mb	CACAGGAAACAGCTATGACCGGCTGT ATTTAAAAGGGGAGGAG/ ATTCGGTCCTAACCCCTTG	pet	0.05 μM/0.1 μM	2
FH2541	tetra	161, 168 172, 179 180, 184 298	41.56 Mb	TTTCCCAGTCACGACGTTGCGTATGA GTTGGTATAATCTCAGG/ TGCTTTTCACCTCCCTCTTG	fam	0.05 μM/0.1 μM	3
REN233H01	di	216, 220 343	36.8 Mb	TAAAACGACGGCCAGTGCCCAATTC CCGATCCTAC/ GTGGTGGTGGTGACACAGAT	ned	0.05 μM/0.1 μM	3
FH3738	tetra	216, 290 294, 298 301, 312 317, 319 328	35.8 Mb	CACAGGAAACAGCTATGACCGGTTT TATTGCACTCTTTTCC/ CTCAATATAGGCTTTGGTTTTC	pet	0.05 μM/0.1 μM	3

Suppl Material 1. contd....

MS ¹ Name	MS ¹ Type	Allele Size ²	Location on CFA03	Forward /Reverse Primer Sequences	label ³	PCR Final Concentration of Forward/ Reverse Primers	Multiplex Groups ⁴
REN296H17	di	314, 341 343, 348	49.87 Mb	TTTCCCAGTCACGACGTTGTAATGCTT CTTCCACCAGGG/ GCCAACAGATCTCTGCTTCC	fam	0.05 μM/0.1 μM	3
CamC03.043	di	184, 291 299, 307	40.05 Mb	GCGGATAACAATTTACACAGGTGTT GTCACACTTATGAACATCAC/ TGCTCTTTGACTCTATAAACACTTCC	vic	0.05 μM/0.1 μM	3
G07006	di	171, 172 173, 181	45.37 Mb	GCGGATAACAATTTACACAGGCAGT GGGGAATCTGCTTGAG/ CATTTACTACATATACAGGTGTC	vic	0.05 μM/0.1 μM	4
CamC03.044	di	223, 306 308, 312 314	40.99 Mb	GCGGATAACAATTTACACAGGTCCT CAAATGAGGCAATGTTAC/ TGGAAAATGAATTTCAACATTTAAC	vic	0.05 μM/0.1 μM	4
REN75G13	di	181, 141 183, 329	47.27 Mb	TTTCCCAGTCACGACGTTGATAATGA TGAAACCCAACG/ ACATCTTACACCGTCATCAA	fam	0.05 μM/0.1 μM	4
FH2984	tetra	173, 219 220, 223 224, 228	44.50 Mb	CACAGGAAACAGCTATGACCAGCCTC TATATCAAGGATGC/ AGCTGAGCCTTATTCCCAAC	pet	0.05 μM/0.1 μM	4
FH3377	tetra	211, 216 250, 255 259, 264	78.2 Mb	TTTCCCAGTCACGACGTTGGAGGAAT TAAGAAAGATACGAGACC/ TTGGAATACGTTTATTTTCAGC	fam	0.1 μM/0.1 μM	5
FH2302	tetra	250, 254 325, 327 329, 333 364	99.5 Mb	TAAAACGACGGCCAGTGCAGTATTTT CACAAATGCTCAGTGC/ TTTTGGCCTATCTTAAAGAGTCC	ned	0.1 μM/0.1 μM	5
FH3464	tetra	256, 268 269, 298	46.5 Mb	GCGGATAACAATTTACACAGGAGCA AAGAATCCAGTCAAGC/ AGCTCACAGTCCATTTTATGC	vic	0.1 μM/0.1 μM	5
FH3115	di	245, 247 251	8.1 Mb	TTTCCCAGTCACGACGTTGGCCTATC CCGGTGTATGAC/ TGAAAAGGGCTTGTATCTG	fam	0.1 μM/0.1 μM	6
C03.629	di	223, 227 229	20.2 Mb	TAAAACGACGGCCAGTGCTTGATTCC TGGACCCAATTC/ GACCTCTAACTGGAGGGTGG	ned	0.1 μM/0.1 μM	6
FH3252	tetra	452, 456 457, 458 463, 465 499, 500 514	26.4 Mb	GCGGATAACAATTTACACAGGAGCC TGGAGCCTCTAAAG/ TGACATGTGTCCACCATTAGTATC	vic	0.1 μM/0.1 μM	6
FH2145	tetra	285, 296 299, 301	37.4 Mb	TAAAACGACGGCCAGTGCCAGTCGG GTTTAGGGTCTCA/ CAGAGCCCCTGACTGCAT	ned	0.1 μM/0.1 μM	7
FH3396	tetra	399, 402 418, 430 433, 438 440, 441 442, 445 449, 456	3.8 Mb	TTTCCCAGTCACGACGTTGGGGTGTG GAGCCTGTTAAG/ AGTCCTATGCACTGAGTTCC	fam	0.1 μM/0.1 μM	7

MS ¹ Name	MS ¹ Type	Allele Size ²	Location on CFA03	Forward /Reverse Primer Sequences	label ³	PCR Final Concentration of Forward/ Reverse Primers	Multiplex Groups ⁴
REN161A12	di	301, 307 309, 310	13.5 Mb	TTTCCCAGTCACGACGTTGGCCAAATG TCTCAGATGGGT/ TGTCCACAGCTCATGAAAGG	fam	0.1 μM/0.1 μM	7
REN260I04	di	207, 301 307, 309	58.5 Mb	GCGGATAACAATTTACACAGGCTGTC AGATGCTCTGTCCCA/ CCACACAAAGACACACACC	vic	0.1 μM/0.1 μM	7
FH2316	di	338, 354 451, 455 475, 479 484, 488 492	67.7 Mb	GCGGATAACAATTTACACAGGAAAT GGCCTGACGAATATGC/ GTGCCATGGCATATGGTAAA	vic	0.1 μM/0.1 μM	7

¹ MS; microsatellite² Size of the alleles in base pairs in our study population³ Flourescent labels used to detect PCR-amplified microsatellite markers⁴ Which multiplex group the microsatellite was amplified in. There were 7 multiplex PCR groups used in this study