

PERMANENT GENETIC RESOURCES NOTE

Permanent Genetic Resources added to Molecular Ecology Resources Database 1 October 2011 – 30 November 2011

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Abstract

This article documents the addition of 139 microsatellite marker loci and 90 pairs of single-nucleotide polymorphism sequencing primers to the Molecular Ecology Resources Database. Loci were developed for the following species: *Aglaoctenus lagotis*, *Costus pulverulentus*, *Costus scaber*, *Culex pipiens*, *Dascyllus marginatus*, *Lupinus nanus* Benth, *Phloeomyzus passerini*, *Podarcis muralis*, *Rhododendron rubropilosum* Hayata var. *taivanalpinum* and *Zoarcas viviparus*. These loci were cross-tested on the following species: *Culex quinquefasciatus*, *Rhododendron pseudochrysanthum* Hay. ssp. *morii* (Hay.) Yamazaki and *R. pseudochrysanthum* Hayata. This article also documents the addition of 48 sequencing primer pairs and 90 allele-specific primers for *Engraulis encrasicolus*.

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This article documents the addition of 139 microsatellite marker loci and 90 single-nucleotide polymorphism (SNP) genotyping primers to the Molecular Ecology Resources Database. Table 1 contains information on the focal species, the number of loci developed, any other species the loci were tested in and the accession numbers for the loci in both the Molecular Ecology Resources Database and GenBank. The authors responsible for each set of loci are listed in the final column. Table 2 presents information on SNP genotyping resources added to the MER database

and presents data on the focal species, the number of sequencing primer pairs, the number of SNPs genotyped, other species the loci were tested in and the number of SNP genotyping assays, which include a primer pair for each SNP amplification and reporters/probes for each allele detection. The MER database and GenBank accession numbers and the authors responsible are also listed. A full description of the development protocol for the loci presented here can be found on the Molecular Ecology Resources Database (<http://tomato.biol.trinity.edu/>).

Table 1 Information on the focal species, the number of loci developed, any other species the loci were tested in and the accession numbers for the loci in both the Molecular Ecology Resources Database and GenBank. The authors responsible for each set of loci are listed in the final column.

Species	No. primers developed	Other species tested	MER database no.	GenBank accession no.	Authors
<i>Aglaoctenus lagotis</i>	8	n/a	47472–47479	JF436856–JF436863	Macrini, Camila M. T.; Schwarcz, Kaiser D.; Abreu, Aluana G.; Solferini, Vera N.
<i>Costus scaber</i> and <i>Costus pulverulentus</i>	30	n/a	47498–47527	JK216161, JK216242, JK216253, JK216305, JK216330, JK216336, JK216382, JK216440, JK216441, JK216473, JK216680, JK216871, JK216985, JK217056, JK217202	Kay, Kathleen M.; Apkenas, Vanessa E.; Yost, Jennifer M.
<i>Culex pipiens</i>	11	<i>Culex quinquefasciatus</i>	47270–47291	JN571581–JN571602	Kothera, Linda; Savage, Harry M.
<i>Dascyllus marginatus</i>	27	n/a	47636–47662	JN816405–JN816423, JN816425–JN816429, JN816431–JN816433	Alpermann, Tilman J.; Wicker, Florian; Nanninga, Gerrit; Plieske, Jörg; Berumen, Michael L.
<i>Lupinus nanus</i> Benth	15	n/a	47223–47237	GU232510–GU232515, GU232517, GU232518, GU232521, GU232522, GU232524–GU232527, GU232529	Morris, Veronica R. F.; Shade, Jessica; Simms, Ellen L.
<i>Phloeomyzus passerini</i>	12	n/a	47624–47635	JN230544–JN230555	Pointeau, S.; Martin, C.; De Feraudy, D.; Lieutier, F.
<i>Podarcis muralis</i>	14	n/a	47409–47422	JN634493–JN634506	Bankhead-Dronnet, S. Richard, Murielle; Stevens, Virginie M.; Le Hénanff, Maxime; Coulon, Aurélie; Lourdais, Olivier; Clobert, Jean
<i>Rhododendron rubropilosum</i> Hayata var. <i>taiwanalpinum</i>	12	<i>Rhododendron pseudochrysanthum</i> Hay. ssp. <i>morii</i> (Hay.) Yamazaki, <i>R. pseudochrysanthum</i> Hayata	47481–47492	HQ700914–HQ700925	Huang, Tsurng-Juhn; Wen, Mei-Juan; Hsu, Tsai-Wen; Cho, Chang-Hung

Table 1 (Continued)

Species	No. primers developed	Other species tested	MER database no.	GenBank accession no.	Authors
<i>Zoarces viviparus</i>	10	n/a	47238–47247	JN033776–JN033781, JN033783, JN033784, JN033786, JN033787	Kinitz, Tim; Quack, Markus; Hochkirch, Axel; Hankeln, Thomas; Bergek, Sara; Prestegaard, Tore; Veith, Michael

Table 2 Information on the focal species, the sequencing primer pairs developed, the number of single-nucleotide polymorphisms genotyped and any other species the loci were tested in. The next columns contain the number of SNP genotyping assays developed, and the Molecular Ecology Resources database and GenBank accession numbers, respectively. The authors responsible for each set of loci are listed in the final column.

Species	No. of SNP amplification primer pairs	No. of SNPs genotyped	Other species tested	No. of SNP genotyping assays	Target gene(s)	MER database numbers	GenBank accession no	Authors
<i>Engraulis encrasicolus</i>	41	90	n/a	90	See ms for details	47423, 47424, 47429–47433, 47436–47440, 47442, 47443, 47445, 47447–47451, 47454–47460, 47462, 47466, 47468–47471, 47741–47769, 47776, 47778, 47780, 47783, 47789–47812, 47814	AP009137, AY486342.1–AY486345.1, AY486346.1–AY486347.1, EU224151–EU224152.1, EU264033.1–EU264034, JJ726335–JJ726383, JJ747354–JJ747362	Zarraonaindia, I.; Albaina, A.; Iriondo, M.; Manzano, C.; Pardo, M. A.; Irigoien, X.; Estonba, A.