

PERMANENT GENETIC RESOURCES NOTE

Permanent Genetic Resources added to Molecular Ecology Resources Database 1 February 2012 – 31 March 2012

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Abstract

This article documents the addition of 171 microsatellite marker loci and 27 pairs of single nucleotide polymorphism (SNP) sequencing primers to the Molecular Ecology Resources Database. Loci were developed for the following species: *Bombus pauloensis*, *Cephalorhynchus heavisidii*, *Cercospora sojina*, *Harpyhaliaetus coronatus*, *Hordeum vulgare*, *Lachnolaimus maximus*, *Oceanodroma monteiroi*, *Puccinia striiformis* f. sp. *tritici*, *Rhea americana*, *Salmo salar*, *Salmo trutta*, *Schistocephalus solidus*, *Sousa plumbea* and *Tursiops aduncus*. These loci were cross-tested on the following species: *Aquila heliaca*, *Bulweria bulwerii*, *Buteo buteo*, *Buteo swainsoni*, *Falco rusticolus*, *Haliaeetus albicilla*, *Halobaena caerulea*, *Hieraaetus fasciatus*, *Oceanodroma castro*, *Puccinia graminis* f. sp. *Tritici*, *Puccinia triticina*, *Rhea pennata* and *Schistocephalus pungitii*. This article also documents the addition of 27 sequencing primer pairs for *Puffinus baroli* and *Bulweria bulwerii* and cross-testing

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of these loci in *Oceanodroma castro*, *Pelagodroma marina*, *Pelecanoides georgicus*, *Pelecanoides urinatrix*, *Thalassarche chrystostoma* and *Thalassarche melanophrys*.

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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>Bombus pauloensis</i>	12	n/a	48673–48684	JN997460–JN997471	Françoso, E.; Arias, M.C.
<i>Cephalorhynchus heavisidii</i> , <i>Sousa plumbea</i> and <i>Tursiops aduncus</i>	16	n/a	48724–48728, 48730–48763	See article for details	Gopal, Keshni; Tolley, Krystal A.; Karczmarski, Leszek
<i>Cercospora sojina</i>	8	n/a	48716–48723	JQ624627–JQ624634	Kim, Hun; Newell, Annakay D.; Bluhm, Burton H.
<i>Harpyhaliaetus coronatus</i>	17	<i>Aquila heliaca</i> , <i>Buteo buteo</i> , <i>Buteo swainsoni</i> , <i>Falco rusticolus</i> , <i>Haliaeetus albicilla</i> , <i>Hieraetus fasciatus</i>	48793–48798, 48800–48810	JQ309945–JQ309948, JQ309950–JQ309961, JQ321581	Sarasola, J. H.; Canal, D.; Solaro, C.; Galmes, M. A.; Zanón–Martínez, J. I.; Negro, J. J.
<i>Hordeum vulgare</i>	10	n/a	48783–48792	AF043090, AY008692, AY156992, AY785849, AY785885, DQ297407, DQ539338, EU331872, X99973	Raggi, Lorenzo; Negri, Valeria
<i>Lachnolaimus maximus</i>	29	n/a	48940–48967, 48983	FJ844445–FJ844456, FJ844458–FJ844474	Seyoum, Seifu; Tringali, Michael D.; Barthel, Brandon L.; Puchulutegui, Cecilia; Davis, Michelle C.; Collins, Angela B.; Mcbride, Richard S.
<i>Oceanodroma monteiroi</i>	18	<i>Bulweria bulwerii</i> , <i>Halobaena caerulea</i> , <i>Oceanodroma castro</i>	48764–48781	JQ303226–JQ303243	Bried, Joël; Andris, Malvina; Dubois, Marie-Pierre; Jarne, Philippe
<i>Puccinia striiformis</i> f. sp. <i>tritici</i>	17	<i>Puccinia graminis</i> f. sp. <i>tritici</i> , <i>Puccinia triticina</i>	48906–48922	EG374292.1, GH737707.1, GH737337.1, GH737942.1, GH737347.1, GH737353.1, GH737872.1, GH737984.1, GH737893.1, JK479800, JK479801, JK479803, JK479804, JK479808, JK479809, JK479813	Cheng, P.; Chen, X. M.; Xu, L. S.; See, D. R.
<i>Rhea americana</i>	8	<i>Rhea pennata</i>	48685–48692	JQ067657–JQ067664	Chiappero, Marina B.; Martella, Mónica B.
<i>Salmo salar</i> and <i>Salmo trutta</i>	22	n/a	48923–48939, 48968–48982	EF427381, EF210363, EU008541, FJ969488–FJ969490, GQ505858–GQ505860	Dash, M.; Vasemägi, A.
<i>Schistocephalus solidus</i>	14	<i>Schistocephalus pungitii</i>	48811–48824	JQ619705–JQ619718	Samonte, Irene E.; Kalbe, Martin

Table 2 Information on the focal species, the sequencing primer pairs developed, the number of single nucleotide polymorphisms observed and any other species the loci were tested in. The next columns contain the number of allele-specific primers and probes 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. primer pairs	No. SNPs in sequence	Other species tested	No. allele specific primers/probe	Target gene(s)	MER database numbers	GenBank accession no	Authors
<i>Bulweria bulwerii</i> and <i>Puffinus baroli</i>	27	123	<i>Oceanodroma castro</i> , <i>Pelagodroma marina</i> , <i>Pelecanoides georgicus</i> , <i>Pelecanoides urinatrix</i> , <i>Thalassarche chrysostoma</i> , <i>Thalassarche melanophrys</i>	n/a	n/a	48693–48715	JS799780– JS799802	Silva, Mónica C.; Duarte, Margarida; Piedade, Ana F.; Coelho, M. Manuela

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 observed number of SNPs, other species the loci were tested in and the

number of allele-specific primers or probes. 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/>).