



PERMANENT GENETIC RESOURCES NOTE

# Permanent Genetic Resources added to Molecular Ecology Resources Database 1 December 2011 – 31 January 2012

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## Abstract

This article documents the addition of 473 microsatellite marker loci and 71 pairs of single-nucleotide polymorphism (SNP) sequencing primers to the Molecular Ecology Resources Database. Loci were developed for the following species: *Barteria fistulosa*, *Bombus morio*, *Galaxias platei*, *Hematodinium perezii*, *Macrocentrus cingulum* Brischke (a.k.a. *M. abdominalis*)

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Fab., *M. grandii* Goidanich or *M. gifuensis* Ashmead), *Micropogonias furnieri*, *Nerita melanotragus*, *Nilaparvata lugens* Stål, ***Sciaenops ocellatus***, *Scomber scombrus*, *Spodoptera frugiperda* and *Turdus lherminieri*. These loci were cross-tested on the following species: *Barteria dewevrei*, *Barteria nigritana*, *Barteria solida*, *Cynoscion acoupa*, *Cynoscion jamaicensis*, *Cynoscion leiarchus*, *Cynoscion nebulosus*, *Cynoscion striatus*, *Cynoscion virescens*, *Macrodon ancylodon*, *Menticirrhus americanus*, *Nilaparvata muiri* and *Umbrina canosai*. This article also documents the addition of 116 sequencing primer pairs for *Dicentrarchus labrax*.

This article documents the addition of 473 microsatellite marker loci and 71 pairs of 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

**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>Barteria fistulosa</i>   | 17                    | <i>B. dewevrei</i> ,<br><i>B. nigritana</i> ,<br><i>B. solida</i>   | 48615–48631                 | JQ289126–JQ289128,<br>JQ289130–JQ289143  | Sauve, M.;<br>Garcia, M.;<br>Djipto-Lordon, C.;<br>Peccoud, J.;<br>Piatscheck, F.;<br>Dubois, M. P.;<br>McKey, D.;<br>Harris, D. J.;<br>Blatrix, R.          |
| <i>Bombus morio</i>   | 13                    | n/a   | 47715–47722,<br>47724–47728 | JN701023–JN701035  | Françoso, E.;<br>Francisco, F. O.;<br>Arias, M. C.   |
| <i>Galaxias platei</i>  | 9                     | n/a   | 47692–47700                 | JQ043430–JQ043438  | Zemlak, Tyler S.;<br>Carrea, Cecilia;<br>Newton, Erica;<br>Paterson, Ian;  |
| <i>Hematodinium perezii</i>   | 11                    | n/a   | 47681–47691                 | JN403077–JN403087  | Ruzzante, Daniel E.<br>Pagenkopp Lohan, Katrina M.;<br>McDowell, Jan R.;<br>Shields, Jeffrey D.;<br>Xiao, Jie;<br>Miller, Terrence L.;<br>Reece, Kimberly S. |
| <i>Macrocentrus cingulum</i><br>Brischke (a.k.a.<br><i>M. abdominalis</i> Fab.,<br><i>M. grandii</i> Goidanich or<br><i>M. gifuensis</i> Ashmead) | 13                    | n/a   | 47202–47222                 | JN703391–JN703395,<br>JN703399, JN703401,<br>JN703403–JN703405,<br>JN703409–JN703411 | Clamens, Anne-Laure;<br>Bernadou, Abel;<br>Ponsard, Sergine;<br>Bourguet, Denis  |
| <i>Micropogonias furnieri</i>   | 16                    | <i>C. acoupa</i> ,<br><i>C. jamaicensis</i> ,<br><i>C. leiarchus</i> ,<br><i>C. striatus</i> ,<br><i>C. virescens</i> ,<br><i>M. ancylodon</i> ,<br><i>M. americanus</i> ,<br><i>U. canosai</i> | 48472–48487                 | JF798645–JF798650,<br>JF798652–JF798656,<br>JF798660–JF798664                        | Vasconcellos, Anderson;<br>Cunha, Haydée A.;<br>Solé-Cava, Antonio   |
| <i>Nerita melanotragus</i>  | 10                    | n/a   | 48579–48588                 | JQ364728–JQ364737  | Reisser, Céline M. O.;<br>Bell, James J.;<br>Gardner, Jonathan P. A.   |

Table 1 (Continued)

| Species                        | No. primers developed | Other species tested       | MER database no.  | GenBank accession no.                                | Authors   |
|--------------------------------|-----------------------|----------------------------|---|--|---|
| <i>Nilaparvata lugens</i> Stål | 17                    | <i>N. muiri</i>            | 47663–47677,<br>47679, 47680  | JN834077–JN834091                                    | Jing, Shengli;<br>Zhang, Chunxiao;<br>Wang, Shuzhen;<br>Zhou, Xi;<br>Yu, Hangjin;<br>Peng, Xinxin;<br>Liu, Bingfang;<br>Zhao, Yan;<br>Zhu, Lili;<br>Ding, Yi;<br>He, Guangcun |
| <i>Sciaenops ocellatus</i>     | 323                   | <i>Cynoscion nebulosus</i> | 47770–47772,<br>47774, 47775,<br>47777, 47779,<br>47781, 47782,<br>47784–47788,<br>47813, 47815–47890,<br>48016–48043,<br>48082–48108,<br>48295–48471 | EU726996,<br>JF509110–JF509136,<br>JQ235209–JQ235503 | Renshaw, Mark A.;<br>Hollenbeck, Christopher M.;<br>Gold, John R.   |
| <i>Scomber scombrus</i>        | 15                    | n/a                        | 48512, 48514,<br>48515, 48517,<br>48520, 48522,<br>48525, 48527–48534   | JQ219865–JQ219879                                    | Papetti, Chiara;<br>Bino, Giorgia;<br>Zannato, Barbara;<br>Zane, Lorenzo  |
| <i>Spodoptera frugiperda</i>   | 17                    | n/a                        | 48552–48568   | JN790256–JN790271,<br>JN796474                       | Dumas, P.;<br>Clamens, A.-L.;<br>Kergoat, G. J.;<br>Gimenez, S.;<br>d'Alençon, E.   |
| <i>Turdus lherminieri</i>      | 12                    | n/a                        | 47729–47740   | JQ001753–JQ001762,<br>JQ001764, JQ001765             | Arnoux, E.;<br>Faivre, B.;<br>Eraud, C.;<br>Garnier, S.   |

**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>Dicentrarchus labrax</i> | 116              | 71                   | n/a                  | See MS for details                 | See MS for details | 48237–48294          | JM497134–<br>JM497249 | Souche, E. L.;<br>Hellemans, B.;<br>Van Houdt, J. K. J.;<br>Volckaert, F. A. M. |

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/>).

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