

PERMANENT GENETIC RESOURCES NOTE

**Permanent Genetic Resources added to Molecular Ecology
Resources Database 1 October–30 November 2010**

MOLECULAR ECOLOGY RESOURCES PRIMER DEVELOPMENT CONSORTIUM, CECILIA AGOSTINI,¹ P. A. AGUDELO,² K. BÂ,³ P. A. BARBER,⁴ PAOLO MARIA BISOL,¹ C. BROUAT,⁵ TREENA I. BURGESS,⁴ I. CALVES,⁶ MAURICIO CARRILLO AVILA,⁷ S. CHOW,⁸ LISA CORDES,⁹ D. DA SILVA,¹⁰ A. DALECKY,⁵ L. DE MEESTER,¹¹ IGNACIO DOADRIO,¹² G. DOBIGNY,^{13,5} J. M. DUPLANTIER,⁵ SOPHIE E. F. EVISON,¹⁴ REBECCA FORD,¹⁵ DOMINIQUE FRESNEAU,¹⁴ PEDRO M. GALETTI JR,¹⁶ P. GAUTHIER,⁵ S. GELDOF,¹¹ L. GRANJON,^{3,5} F. GUÉRIN,¹⁰ GILES E. StJ. HARDY,⁴ CARLOS HERNANDEZ ESCOBAR,^{17,18} K. HIMA,^{13,19} JUAN HU,²⁰ LUQI HUANG,²⁰ L. HUMEAU,¹⁰ B. JANSEN,¹¹ S. JAQUEMET,²¹ ZHI-QIANG JIANG,²² SUNG-JU JUNG,²³ BONG-SEOK KIM,²⁴ CHEOL-HEE KIM,²⁵ JONG-OH KIM,²³ CHOAY-HOONG LAI,²⁶ J. LAROCHE,⁶ E. LAVERGNE,^{27,28,6} A. LAWTON-RAUH,² M. LE CORRE,²¹ M. M. LEACH,² JEHEE LEE,²⁹ AUDREY E. LEO,¹⁵ JUDITH LICHTENZVEIG,³⁰ LIN LIN,^{31,32} CELESTE C. LINDE,³³ SHU-FANG LIU,³² ILARIA A. M. MARINO,¹ NIALL J. McKEOWN,³⁴ K. NOHARA,³⁵ MYUNG-JOO OH,²³ H. OKAMOTO,³⁵ RICHARD OLIVER,³⁰ MARTHA OLIVERA ANGEL,¹⁸ CLAUDIA PATRICIA ORNELAS-GARCÍA,¹² L. ORSINI,¹¹ HENRY OSTOS ALFONSO,¹⁷ A. S. OTHMAN,²⁶ CHIARA PAPETTI,¹ TOMASO PATARNELLO,³⁶ CARLOS PEDRAZA-LARA,¹² KYLE R. PILLER,⁹ CHANTAL POTEAUX,¹⁴ J.-B. REQUIER,³⁷ M. K. ROZIANA,²⁶ Y. SEMBA,³⁵ M. SEMBENE,³ RAMISAH M. SHAH,^{38,30} A. R. SHAHRIL,²⁶ AIJUAN SHAO,²⁰ PAUL W. SHAW,³⁴ LIANGKE SONG,³⁹ RONARA SOUZA FERREIRA,¹⁴ YONG-QUAN SU,³¹ N. SUZUKI,⁴⁰ C. TATARD,⁵ KATHERINE M. TAYLOR,⁴ PAUL W. J. TAYLOR,¹⁵ M. THIAM,^{41,3} RUBEN VALBUENA,⁷ HE WANG,^{22,32} BYUNG-GYOO YANG,⁴² QINGJUN YUAN,²⁰ U. ZAJONZ,^{28,27} LORENZO ZANE,¹ LING ZHU,³² ZHI-MENG ZHUANG³² and A. R. ZULAIHA²⁶

¹Department of Biology-University of Padova, via U. Bassi 58/b, I-35121 Padova, Italy; ²114 Long Hall, Clemson University, ESPS, Clemson, SC 29634, USA; ³IRD, CBGP (UMR IRD/INRA/CIRAD/MontpellierSupAgro), Campus de Bel-Air, BP 1386, Dakar, CP 18524, Senegal; ⁴Biological Science and CRC for Forestry, Murdoch University, South St, Murdoch, 6150, Australia;

⁵IRD, CBGP (UMR IRD/INRA/CIRAD/MontpellierSupAgro), Campus International de Baillarguet, CS 30016, 34988 Montferrier-sur-Lez Cedex, France; ⁶UMR 6539 CNRS/UBO/IRD, LEMAR (Laboratoire des Sciences de l'Environnement Marin), IUEM (Institut Universitaire Européen de la Mer), Université de Bretagne Occidentale, Technopôle Brest Iroise, Rue Dumont d'Urville 29280 Plouzané, France; ⁷Departamento de Acuicultura, Universidad Surcolombiana, Huila, Colombia; ⁸National Research Institute of Fisheries Science, 6-3-1 Nagai, Yokosuka, Kanagawa 238-0316, Japan; ⁹Southeastern Louisiana University, Department of Biological Sciences, Hammond, LA 70402, USA; ¹⁰Université de La Réunion, UMR PVBMT, 15 avenue René Cassin, 97715 Saint-Denis, Réunion, France; ¹¹Laboratory of Aquatic Ecology and Evolutionary Biology Ch. Deberiotstraat 32, 3000 Leuven, Belgium;

¹²Departamento de Biodiversidad y Biología Evolutiva, Museo Nacional de Ciencias Naturales, CSIC, José Gutiérrez Abascal 2, 28006 Madrid, Spain; ¹³IRD, Centre Régional Agrhymet, BP 11011, Niamey, Niger; ¹⁴Laboratoire d'Ethologie Expérimentale et Comparée, EA 4443, Université Paris 13, Paris, France; ¹⁵Department of Agriculture and Food Systems, Melbourne School of Land and Environment, The University of Melbourne, Victoria 3010, Australia; ¹⁶Departamento de Genética e Evolução, Universidade Federal de São Carlos, SP, Brazil; ¹⁷Laboratorio de Medicina Genomica, Universidad Surcolombiana, Huila, Colombia; ¹⁸Grupo Biogénesis, Universidad de Antioquia, Medellín, Colombia; ¹⁹Université Abdou Moumouni, BP 10662, Niamey, Niger; ²⁰Institute of Chinese Materia Medica, China Academy of Chinese Medicinal Sciences, Beijing 100700, China; ²¹Université de La Réunion, Eco-mar, 15 avenue René Cassin, 97715 Saint-Denis, Réunion, France; ²²Key Laboratory of Mariculture and Biotechnology, Ministry of Agriculture, Dalian Ocean University, Dalian 116023, China; ²³Department of Aqualife Medicine, Chonnam National University, Yeosu 550-749, Korea; ²⁴Biotechnology Research Division, National Fisheries Research and Development Institute, Busan 619-902, Korea; ²⁵Department of Biology and GRAST, Chungnam National University, Daejeon 305-764, Korea; ²⁶School of Biological Sciences, Universiti Sains Malaysia, 11800 Minden, Penang, Malaysia; ²⁷Senckenberg Forschungsinstitut und Naturmuseum, Sektion Ichthyologie, Senckenberganlage 25, 60325 Frankfurt am Main, Germany; ²⁸Biodiversität und Klima Forschungszentrum (BiK-F), Senckenberganlage 25, 60325 Frankfurt am Main, Germany; ²⁹Department of Aquatic Biomedical Sciences, Jeju National University, JeJu 690-756, Korea; ³⁰Department of Environment and Agriculture, Australian Centre for Necrotrophic Fungal

Correspondence: Molecular Ecology Resources Primer Development Consortium, E-mail: editorial.office@molecol.com

*Pathogens, Curtin University, Bentley, WA 6102, Australia;*³¹College of Oceanography and Environmental Science, Xiamen University, Xiamen 361005, China; ³²Key Laboratory for Fishery Resources and Eco-environment, Shandong Province, Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Qingdao 266071, China; ³³Evolution, Ecology and Genetics, Research School of Biology, 116 Daley Rd, The Australian National University, Canberra, ACT 0200, Australia; ³⁴School of Biological Sciences, Royal Holloway University of London, Egham TW20 0EX, UK; ³⁵National Research Institute of Far Seas Fisheries, 7-1, Shimizu-Orido 5 chome, Shizuoka, 424-8633, Japan; ³⁶Department of Public Health, Comparative Pathology and Veterinary Hygiene-University of Padova, Agripolis, via Romea 16, I-35020 Legnaro (PD), Italy; ³⁷Société d'Etudes Ornithologiques de La réunion, 13 rue des Orchidées, Cambuston, 97440 Saint-André, Réunion, France; ³⁸Division of Health Sciences, Murdoch University, Murdoch, WA 6150, Australia; ³⁹Department of Life sciences and Engineering, Southwest Jiaotong University, Chengdu, 610031, China; ⁴⁰Ishigaki Tropical Station, Seikai National Fisheries Research Institute, Ishigaki, Okinawa 907-0451, Japan; ⁴¹Université Cheikh Anta Diop (UCAD) de Dakar, BP5005, Dakar-Fann, Senegal; ⁴²Jeju Special Self-Governing Province Fisheries Resources Research Institute, Jeju 697-914, Korea

Abstract

This article documents the addition of 277 microsatellite marker loci to the Molecular Ecology Resources Database. Loci were developed for the following species: *Ascochyta rabiei*, *Cambarellus chapalanus*, *Chionodraco hamatus*, *Coptis omeiensis*, *Cynoscion nebulosus*, *Daphnia magna*, *Gerbillus nigeriae*, *Isurus oxyrinchus*, *Lates calcarifer*, *Metacarcinus magister*, *Oplegnathus fasciatus*, *Pachycondyla verenae*, *Phaethon lepturus*, *Pimelodus grosskopfti*, *Rotylenchulus reniformis*, *Scomberomorus niphonius*, *Sepia esculenta*, *Terapon jarbua*, *Teratosphaeria cryptica* and *Thunnus obesus*. These loci were cross-tested on the following species: *Austropotamobius italicus*, *Cambarellus montezumae*, *Cambarellus puer*, *Cambarellus shufeldtii*, *Cambarellus texanus*, *Chionodraco myersi*, *Chionodraco rastrospinosus*, *Coptis chinensis*, *Coptis chinensis* var. *breviseptala*, *Coptis deltoidea*, *Coptis teeta*, *Orconectes virilis*, *Pacifastacus leniusculus*, *Pimelodus bochii*, *Procambarus clarkii*, *Pseudopimelodus bufo*, *Rhamdia quelen*, *Sepia andreana*, *Sepiella maindroni*, *Thunnus alalunga*, *Thunnus albacares*, *Thunnus maccoyii*, *Thunnus orientalis*, *Thunnus thynnus* and *Thunnus tongol*.

This article documents the addition of 277 microsatellite marker loci 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. 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>Ascochyta rabiei</i>	15	n/a	45147–45161	HQ328558, HQ328560–HQ328573	Leo, Audrey E.; Ford, Rebecca; Linde, Celeste C.; Shah, Ramisah M.; Oliver, Richard; Taylor, Paul W. J.; Lichtenzveig, Judith
<i>Cambarellus chapalanus</i>	9	<i>Cs. montezumae</i> , <i>Cs. shufeldtii</i> , <i>Cs. puer</i> , <i>Cs. texanus</i> , <i>Procambarus clarkii</i> , <i>Orconectes virilis</i> , <i>Pacifastacus leniusculus</i> , <i>Austropotamobius italicus</i>	44925, 44926, 44947–44953	HQ529264–HQ529272	Pedraza-Lara, Carlos; Ornelas-García, Claudia Patricia; Doadrio, Ignacio

Table 1 Continued

Species	No. primers developed	Other species tested	MER database no.	GenBank accession no.	Authors
<i>Chionodraco hamatus</i>	11	<i>C. myersi</i> , <i>C. rastrospinosus</i>	44847–44857	HQ395761–HQ395771	Marino, Ilaria A. M.; Agostini, Cecilia; Papetti, Chiara; Bisol, Paolo Maria; Zane, Lorenzo; Patarnello, Tomaso
<i>Coptis omeiensis</i>	11	<i>C. deltoidea</i> , <i>C. chinensis</i> , <i>C. chinensis</i> var. <i>brevise-pala</i> , <i>C. teeta</i>	44858–44868	GU350459–GU350465, GU350467–GU350470	Hu, Juan; Shao, Aijuan; Song, Liangke; Yuan, Qingjun; Huang, Luqi
<i>Cynoscion nebulosus</i>	12	n/a	44890–44901	HQ540634–HQ540645	Piller, Kyle R.; Cordes, Lisa
<i>Daphnia magna</i>	14	n/a	44967, 44969–44981	HQ234154, HQ234155, HQ234160, HQ234168, HQ234170, HQ234172– HQ234174, HQ234178, HQ234181, HQ234190, HQ234193, HQ234200, HQ234205	Jansen, B.; Geldof, S.; De Meester, L.; Orsini, L.
<i>Gerbillus nigeriae</i>	12	n/a	45006–45017	HM469952–HM469963	Thiam, M.; Hima, K.; Gauthier, P.; Tatard, C.; Duplantier, J. M.; Dobigny, G.; Granjon, L.; Dalecky, A.; Bâ, K.; Sembene, M.; Brouat, C.
<i>Isurus oxyrinchus</i>	8	n/a	45053–45060	AB587293–AB587300	Semba, Y.; Nohara, K.
<i>Lates calcarifer</i>	39	n/a	45071–45109	CX790298, CX791413, CX791514, CX791569, CX791662, CX791780, CX792342, CX792377, CX792405, CX792465, CX792515, CX792820, CX792969, CX793058, CX793140, EX465458, EX465602, EX465732, EX465944, EX466220, EX466320, EX466867, EX467054, EX467257, EX467324, EX467501, EX467577, EX468421, EX469333, EX469817, EX469842, EX469994, EX470087, EX470132, EX470140, EX470394, EX470598, EX470678, EX470681	Zulaiha, A. R.; Lai, Choay-Hoong; Roziana, M. K.; Shahril, A. R.; Othman, A. S.
<i>Metacarcinus magister</i>	10	n/a	44880–44889	FG309694.1, FG309725.1, FG310017.1, FG310114.1, FG310176.1, FG310404.1, FG310502.1, FG310537.1, FG310609.1	McKeown, Niall J.; Shaw, Paul W.
<i>Oplegnathus fasciatus</i>	17	n/a	45018–45034	HQ130411–HQ130419, HQ130421–HQ130423, HQ130425–HQ130429	Kim, Jong-Oh; Jung, Sung-Ju; Lee, Jehee; Kim, Cheol-Hee; Yang, Byung-Gyoo; Kim, Bong-Seok; Oh, Myung-Joo

Table 1 Continued

Species	No. primers developed	Other species tested	MER database no.	GenBank accession no.	Authors
<i>Pachycondyla verenae</i>	8	n/a	44996, 44999–45005	HQ263030–HQ263037	Evison, Sophie E. F.; Souza Ferreira, Ronara; Fresneau, Dominique; Poteaux, Chantal
<i>Phaethon lepturus</i>	11	n/a	44869–44879	HM638063–HM638073	Humeau, L.; Da Silva, D.; Guérin, F.; Jaquemet, S.; Requier, J.-B.; Le Corre, M.
<i>Pimelodus grosskopfii</i>	10	<i>Pseudopimelodus bufonius, Rhamdia quelen, P. bochii</i>	45121–45130	HQ148176–HQ148185	Hernandez Escobar, Carlos; Carrillo Avila, Mauricio; Ostos Alfonso, Henry; Valbuena, Ruben; Olivera Angel, Martha; Galetti Jr., Pedro M.
<i>Rotylenchulus reniformis</i>	10	n/a	44837–44846	HQ158013, HQ158015–HQ158021, GU471236, GU471239	Leach, M. M.; Agudelo, P. A.; Lawton-Rauh, A.
<i>Scomberomorus niphonius</i>	22	n/a	44903–44924	HQ317466–HQ317487	Lin, Lin; Zhu, Ling; Liu, Shu-Fang; Su, Yong-Quan; Zhuang, Zhi-Meng
<i>Sepia esculenta</i>	20	<i>S. andreana, Sepiella maindroni</i>	44927–44946	HQ015717–HQ015736	Wang, He; Lin, Lin; Liu, Shu-Fang; Jiang, Zhi-Qiang; Zhuang, Zhi-Meng
<i>Terapon jarbua</i>	10	n/a	45061–45070	FR719958–FR719967	Lavergne, E.; Calves, I.; Zajonz, U.; Laroche, J.
<i>Teratosphaeria cryptica</i>	11	n/a	45110–45120	GU250785–GU250795	Taylor, Katherine M.; Barber, Paul A.; Hardy, Giles E. StJ.; Burgess, Treena I.
<i>Thunnus obesus</i>	17	<i>T. albacares, T. alalunga, T. tonggol, T. maccoyii, T. orientalis, T. thynnus</i>	45036–45052	AB557493–AB557509	Nohara, K.; Suzuki, N.; Chow, S.; Semba, Y.; Okamoto, H.