

Monophyly, Interrelationships and Description of Three New Genera in the Dottyback Fish Subfamily Pseudoplesiopinae (Teleostei: Perciformes: Pseudochromidae)

ANTHONY C. GILL¹ AND ALASDAIR J. EDWARDS²

¹ Department of Zoology, The Natural History Museum, Cromwell Road, London SW7 5BD, United Kingdom
t.gill@nhm.ac.uk

² Centre for Tropical and Coastal Management Studies, Department of Marine Sciences and Coastal
Management, University of Newcastle, Newcastle upon Tyne NE1 7RU, United Kingdom
a.j.edwards@newcastle.ac.uk

ABSTRACT. Within the Pseudochromidae, the subfamily Pseudoplesiopinae is diagnosed by six unequivocal autapomorphies: single tubed lateral-line scale; posterior part of pelvic bone with triangular or hook-shaped lateral process; base of anterior process on pelvic bone posteriorly positioned; coracoid articulates ventrally with medial face of lateral lamina of cleithrum; basihyal bound to anterior face of basibranchial 1; and urohyal with prominent dorsally directed process. Five genera are recognised in the subfamily. *Pseudoplesiops* Bleeker (*Nematochromis* Weber is a junior synonym), with seven nominal species, is diagnosed by a single autapomorphy: medial laminae of pelvic bones expanded dorsally. *Chlidichthys* Smith (*Wamizichthys* Smith is a junior synonym), with 10 nominal species, is diagnosed by two autapomorphies: lower lip incomplete; and second infraorbital bone absent. *Pectinochromis* n.gen. (type species *Pseudoplesiops lubbocki* Edwards & Randall), with a single nominal species, is diagnosed by five autapomorphies: second dorsal-fin pterygiophore inserting between neural spine 3 and 4; second supraneural bone absent; first dorsal-fin pterygiophore expanded anteriorly; first dorsal-fin pterygiophore with lateral processes; and gill rakers relatively numerous. *Amsichthys* n.gen. (type species *Pseudoplesiops knighti* Allen), with a single nominal species, is diagnosed by a single autapomorphy: upper preopercular pore usually absent. *Lubbockichthys* n.gen. (type species *Pseudoplesiops multisquamatus* Allen), with a single nominal species, is diagnosed by four autapomorphies: scales small; scales cycloid at all stages of ontogeny; some head bones with weakly honeycombed surface; and parietal enclosing dorsal part of supratemporal laterosensory canal. A parsimony analysis of various characters of the laterosensory system, caudal skeleton, dorsal-fin osteology, and fin-ray branching supports the following relationships: (*Lubbockichthys* ((*Amsichthys* + *Pseudoplesiops*) (*Chlidichthys* + *Pectinochromis*))).

GILL, ANTHONY C., & ALASDAIR J. EDWARDS, 1999. Monophyly, interrelationships and description of three new genera in the dottyback fish subfamily Pseudoplesiopinae (Teleostei: Perciformes: Pseudochromidae). *Records of the Australian Museum* 51(2): 141–160.