



<http://dx.doi.org/10.11646/zootaxa.3857.4.9>

<http://zoobank.org/urn:lsid:zoobank.org:pub:4E3A603D-11D5-4C1D-9318-9563E3976C98>

***Serranus magnificus* Macleay 1882, a junior synonym of *Epinephelus lanceolatus* (Bloch 1790) (Teleostei: Serranidae)**

ANTHONY C. GILL^{1,2}

¹*Macleay Museum and School of Biological Sciences, A12 – Macleay Building, The University of Sydney, New South Wales 2006, Australia. Email: anthony.c.gill@sydney.edu.au*

²*Ichthyology, Australian Museum, 6 College Street, Sydney, New South Wales 2010, Australia.*

William John Macleay (1882) described *Serranus magnificus* from the holotype collected by Andrew Goldie in Port Moresby, Papua New Guinea. The holotype was originally in the Macleay Museum, but was subsequently transferred to the Australian Museum (AMS) in 1907, along with around 500 additional lots of mostly Goldie New Guinea and “Chevert” expedition fishes (AMS series I.9039–I.9198, I.9200–I.9241, I.9457–I.9476, I.9620–I.9726, I.9739–I.9802 and I.13356–I.13456), and was duly registered there (registration number I.9460). The specimen was subsequently misplaced, and could not be located by J.E. Randall and P.C. Heemstra for their revision of Indo-Pacific Epinephelinae (Heemstra & Randall 1991). They were unable to associate the name with any known species, and listed the species as a *nomen dubium* (also indicated as such by Heemstra & Randall 1993). This is surprising as Macleay’s description mostly agrees with *Epinephelus lanceolatus* (Bloch 1790), with the exception of the number of anal-fin rays (III,9 versus III,8). His description is reproduced here (Macleay 1882, p. 229):

***Serranus magnificus*, n. sp.**

D. 11/16. A. 3/9.

Of a broad slightly compressed form, the height of the body is comprised three and a half times in the total length, the length of the head three times; the snout is short, broad and rounded, distant from the eye, which is small, about one diameter of the orbit; the space between the eyes is broad and almost flat; the maxillary bone reaches to beyond the vertical from the posterior margin of the eye, and is triangular behind with rounded angles; the canine teeth are rather small; the praeoperculum is rounded, raggedly serrated, and densely covered with very minute scales; the opercular spines are obtuse, the middle one large and flat; the spines of the dorsal fin are strong, and excepting the first two, are of nearly equal height, the soft dorsal is much higher and is rounded posteriorly; the caudal fin is large and expanded, densely covered with minute scales and rounded at the apex; the anal fin is more pointed-looking behind than the soft dorsal, the spines are short, the third largest; the pectorals are large, round and expanded; the ventrals are much shorter. The general colour seems to have been of an olive-green, with numerous lighter patches all over, turning yellow on the belly; all the fins are of a yellowish-ground-colour, with very numerous large brown spots presenting as Mr. Goldie observes the appearance of tortoiseshell, the pectorals have two cross bars of the same colour at their base before the commencement of the spots.

I have only one specimen of this very handsome fish. It measures 18 inches in length and is of a heavy bulky appearance

"Balala" of the natives.

The holotype of *S. magnificus* was recently rediscovered in the Australian Museum and brought to my attention, as I am working on fishes described by Macleay. The specimen is clearly the holotype, as it has a metal tag with the registration number (I.9460), and a large, notched, wooden tag inscribed “*Serranus magnificus* Port Moresby.” Such wooden tags were apparently applied to large specimens by Goldie, presumably because they were shipped in communal containers. These tags usually have Goldie’s field codes. Thus the inscribed name must have been subsequently added by Macleay.

The specimen, which measures 362 mm SL, agrees well with Macleay’s description, including total length (455 mm versus 18 inches = 457 mm). It is clearly referable to *Epinephelus lanceolatus* and agrees with diagnoses for that species provided by Randall and Heemstra (1991) and Heemstra and Randall (1993). Macleay’s count of III,9 anal-fin rays is in error, as the specimen has the typical *E. lanceolatus* count of III,8. Presumably Macleay counted the terminal “split-to-

the-base” ray as two rays. Other details are as follows (methods of counting and measuring after Heemstra & Randall 1993): dorsal-fin rays XI,16; pectoral-fin rays 19; lateral-line scales 59, with branched tubes; longitudinal scales series 100; scales on body cycloid; auxiliary scales present on body; very small scales on maxilla; very small imbedded scales on snout; body depth 3.1 in SL (32.4% SL); head length 2.4 in SL (41.0% SL); orbit diameter 8.9 in head length (4.6% SL); interorbital space flat to slightly convex, least width 4.4 in head length (9.4% SL); maxilla extending well past posterior margin of orbit, upper jaw length 2.2 in head length (18.9% SL); small canine teeth at front of jaws; teeth on midside of lower jaw in about 4 rows; last dorsal spine longest, 4.1 in head length (9.9% SL); dorsal fin spines much shorter than soft rays (longest soft ray 2.7 in head length; 15.5% SL); caudal fin rounded; pectoral fins 2.0 in head length (20.4% SL); pelvic fins short, not reaching anus, 2.6 in head length (15.7% SL).

The colour pattern described by Macleay is still evident—though the body markings are less so (Figure 1)—and agrees well with *E. lanceolatus* individuals of comparable size (e.g., Randall & Heemstra 1991: fig. 87; Heemstra & Randall 1999: 2505; Allen & Erdmann 2012: 274). I therefore regard *Serranus magnificentus* Macleay (1882) to be a junior subjective synonym of *Holocentrus lanceolatus* Bloch 1790 (currently *Epinephelus lanceolatus*).



FIGURE 1. *Epinephelus lanceolatus*, holotype of *Serranus magnificentus* Macleay, AMS I.9460, 362 mm SL, Port Moresby, Papua New Guinea (photo by S. Humphreys).

Acknowledgements

I thank Amanda Hay (AMS) for bringing the holotype to my attention, and for providing records concerning the 1907 transfer of Macleay Museum specimens to the Australian Museum. Stuart Humphreys provided the photo in Figure 1.

References

- Allen, G.R. & Erdmann, M.V. (2012) *Reef Fishes of the East Indies*, Volume. 1. Tropical Reef Research, Perth, 424 pp.
- Bloch, M.E. (1790) *Naturgeschichte der ausländischen Fische*. Berlin, Volume. 4. i–xii, pp. 1–128, pls. 217–252.
- Heemstra, P.C. & Randall, J.E. (1993) *Groupers of the world*. FAO Fisheries Synopsis number 25, Volume. 16. i–viii, pp. 1–382, pls. I–XXXI.
- Heemstra, P.C. & Randall, J.E. (1999) Family Serranidae. In: Carpenter, K.E. & Niem, V.H. (Eds), *The Living Marine Resources of the Western Central Pacific*, Vol. 4. Food and Agriculture Organization of the United Nations, Rome, pp. 2442–2548, pls. I–VII.
- Macleay, W. (1882) Contribution to a knowledge of the fishes of New Guinea. *Proceedings of the Linnean Society of New South Wales*, 7, 224–250.
- Randall, J.E. & Heemstra, P.C. (1991) Revision of Indo-Pacific groupers (Perciformes: Serranidae: Epinephelinae), with descriptions of five new species. *Indo-Pacific Fishes*, 20, 1–332.