

ON A NEW SPECIES OF *PLATYCEPHALUS*

by L. F. DE BEAUFORT, *De Hooge Kley, Amesfoort, Netherlands*

(Communicated by B. S. Bhimachar, F.N.I.)

(Received July 9; approved for reading on August 3, 1956)

The genus *Platycephalus* comprises many species of bottom fishes from coastal and moderately deep waters in India and West Pacific. They have been split up into at least a dozen genera, but the general habits of all species are so alike that I prefer to keep them in one genus; also because not all groups can be clearly distinguished, for instance, a group characterized by rather large scales. Regan (1908) described three of them from Stanley Gardiner's collections in the Indian Ocean: *P. oligolepis*, *P. pedimacula* and *P. grandisquamis* from Cargados Carajos, Seychelles and Maldives, all of them from depths of 20 to 30 fathoms, commenting on these species as follows: 'The three preceding species are allied to the Japanese *P. spinosus* Schlegel and *P. macrolepis* Bleeker and differ from others of the genus in the large size of the scales'.

Max Weber collected specimens belonging to the same group during the Siboga expedition in the eastern part of the Indo-Australian Archipelago and described them (1913) as the new species of *P. macrocephalus* (S. coast of Timor, at a depth of 30 m.), and *P. grandisquamis* (off New Guinea, at a depth of 32 m.), apparently unaware of Regan's paper, for Weber's *grandisquamis* is identical with Regan's *oligolepis* and differs from *P. grandisquamis* Regan. Max Weber too laid stress on their affinity to *P. spinosus* and *P. macrolepis*.

Weber records 6 specimens of his *P. grandisquamis* (*oligolepis*), but re-examining them I found that two specimens differ considerably from the others and represent a new species which I have the pleasure to name after my friend, the late Dr. Sunder Lal Hora, F.N.I., Director, Zoological Survey of India, Calcutta.

This new species is of interest, because, although certainly belonging to the group now under consideration, it differs from the others in having the suborbital ridge not serrated and in having somewhat smaller scales, hence showing affinity to other species of the genus. This is again a proof that it is impossible to establish clear cut genera inside *Platycephalus*.

Before giving the description it will be necessary to explain some of the terms used. The bony ridges and their spines on the head of the *Platycephalidae*, and of the *Scleroparei* in general, to which order the *Platycephalidae* belong, are of taxonomic importance. I have denominated them as follows:

Supraorbital ridge on the frontal along the superior orbital rim, often continued on the parietal as superior postorbital ridge which is flanked by the inferior postorbital ridge on the preotic and ending on the post-temporal. Suborbital ridge on the suborbitals which form the characteristic 'preopercular stay' of the *Scleroparei*.

***Platycephalus horai* n. sp.**

D¹. VIII. D². 12. A. 12. P. 2. 10. 4. V. 1. 5. LI. 50. Ltr. $\frac{2\ 1/2}{1}$
11

Height 8.3 in length, 10.4 in length with caudal. Head 2.6 in length, 3.3 in length with caudal. Eye with a minute, simple tentacle above pupil, 3.7 in head, 1.2 in snout

and 5.5 times the concave interorbital space. Maxillary reaching to below anterior border of pupil. Bands of villiform teeth in the jaws, in two small triangular patches on the vomer, and in narrow bands on palatines. Anterior nostril with a short flap. Two spines between the anterior nostrils. One strong spine on elevated anterior orbital rim. Supraorbital ridges each with 12 or 13 crowded spines, diverging behind eyes and continued as superior postorbital ridges, which have 3-5 spines, the last one or the two posterior ones somewhat separated from the others. Anterior part of inferior postorbital ridge with 4 spines, the first immediately behind eye and more erect than the others, separated from the posterior part, which is more medial,

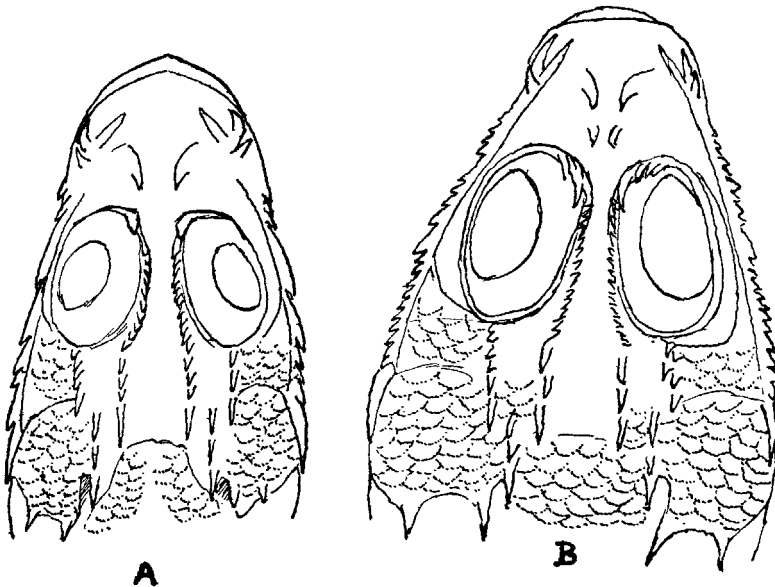


FIG. 1. Dorsal view of head of (A) *P. horai* and (B) *P. oligolepis*. $\times 4/5$.

and has three spines, the last in line with the lateral line, the two anterior scales of which have a spine. Preorbital with three diverging, flat spines, directed forward. Suborbital ridge with three small spines in front of eye, one below middle of eye, and five behind eye, the last of which at the base of the rather strong preopercular spine which is as long as pupil; below it two spines, the inferior one very small. Opercle with two strong spines. Opercle and preopercle scaly, head otherwise naked. About seven rows of scales before dorsal. First dorsal spine small, third longest, almost one-third of diameter of eye longer than postorbital part of head. Anterior longest dorsal rays as long as longest spine. Anal less deep than second dorsal. Pectorals as long as postorbital part of head. Ventrals almost as long as head without snout. Caudal slightly rounded. Scales ctenoid above, cycloid below. Colour of preserved specimens yellowish above, lighter below. Back and sides with traces of brown transverse bands, one below first dorsal more distinct. First dorsal with a broad subterminal, longitudinal band, other fins more or less spotted with dark. Length of two specimens 41 and 68 mm. Habitat: Off New Guinea, 32 m.

The relationship between this and the other species mentioned above is shown in the following key.

- A. Supraorbital ridge spiny in its entire length.
- a. Suborbital ridge entirely serrated. 1 to 4 spines on anterior orbital rim.
- a¹. Ll. 29-34, two anterior scales spiny *P. oligolepis*
 b¹. Ll. 40. Scales of anterior third of Ll. spiny *P. spinosus*
- b. Suborbital ridge with 3 spines in front of eye, one below middle of eye, and 5 behind eye. Ll. 50, the two anterior scales spiny *P. horai*
- B. Posterior part of supraorbital ridge only serrated. Suborbital ridge entirely serrated.
- a. Four spines on anterior orbital rim. Ll. about 30 *P. pedimacula*
 b. One spine on anterior orbital rim. Ll. 33-36, two anterior scales spiny *P. macrocephalus*
 c. One or two spines on anterior orbital rim. LL. 30, 3 or 4 anterior scales spiny *P. grandisquamis*
 d. One spine on anterior orbital rim. LL. 38-40, none of the scales spiny *P. macrolepis*

SUMMARY

Fishes of the genus *Platycephalus* have similar habits. As such, no division of the fishes into genera is possible. A new species *P. horai* is described based on two specimens out of a lot labelled *P. grandisquamis* Weber.

REFERENCES

- Regan, C. T. (1908). Report on the marine fishes collected by Mr. J. Stanley Gardiner in the Indian Ocean. *Trans. Linn. Soc. London*, (2) 12, 217-255, pls. 23-32.
 Weber, M. (1913). *Die Fische der Siboga Expedition*, E. J. Brill & Co., Leiden, 57, 1-710, pls. 1-12.

Issued February 11, 1957.