

NEW AUSTRALIAN FISHES. PART 5.
A NEW SPECIES OF *ACANTHURUS* (ACANTHURIDAE).

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Abstract

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A new species of surgeonfish, *Acanthurus albipectoralis* is described on the basis of two specimens collected on the Great Barrier Reef and Coral Sea. It is most similar to *A. mata*, but differs in colour, most notably that of the pectoral fins, which are blackish basally and abruptly white on the distal half.

Introduction

The surgeonfish family Acanthuridae contains 10 genera with about 78 species. Australia is represented by seven genera and 31 species, including a new *Acanthurus* which is described herein. The genus *Acanthurus* was revised by Randall (1956). Type specimens of the new taxon are deposited at the Queensland Museum, Brisbane (QM) and Western Australian Museum, Perth (WAM).

***Acanthurus albipectoralis* sp. nov.**

Figure 1

Material examined. Holotype: Queensland, Swains Reefs, Great Barrier Reef (20°57'S, 152°15'E), 5 m, spear, A.M. Ayling, 13 Dec 1985, QM I.223541 (212 mm SL).

Paratype: Coral Sea Territory, W. side of West Herald Cay (17°00'S, 149°07'E), 20 m, spear, G.R. Allen, 17 Nov 1985, WAM P28537-001 (261 mm SL).

Description. (counts and proportions in parentheses refer to the paratype if different from holotype). Dorsal rays IX, 33; anal rays III, 23; pectoral rays 16 (17); gill rakers on first arch 5 + 9 + 14 (4 + 10 = 14); body oblong and laterally compressed, snout rounded; greatest body depth 2.3 (2.4), head length 3.8, predorsal distance 3.0, preanal distance 2.0 (2.1), length of dorsal fin base 1.5, of anal fin base 1.9 (2.2), all in standard length; greatest width of body 2.5 (2.8) in greatest depth; snout length 2.0, eye di-

ameter 4.0 (4.4), interorbital width 3.0 (2.8), length of maxillary 4.7 (5.3); least depth of caudal peduncle 3.1 (3.3), length of caudal peduncle 2.3; of pectoral fin 1.0, of pelvic fin 1.7 (1.8), of tallest dorsal fin ray 2.0 (2.1), of tallest anal fin ray 2.6 (2.7), of caudal spine 5.8, of caudal fin 0.9 (1.0); dorsal and anal fins relatively long and low, their posterior profiles, angular; caudal fin lunate with pointed tips; entire head and body covered with small ctenoid scales, those of head partially embedded; a shallow groove, about equal to eye diameter in length, present in front of eye; teeth of jaws uniserial, club-shaped or spatulate with serrated edges, about 20-24 in each jaw.

Colour in life, overall blackish including fins except outer half of pectorals white.

Colour in alcohol, overall dark brown including fins except outer half of pectorals white.

Distribution. Swains Reefs Queensland, and Herald Cays (Coral Sea Territory).

Etymology. From the Latin *albus* (white) and *pectoralis* (pectoral), referring to the distinctive fin coloration which is highly visible underwater and served to distinguish it from the similar *A. mata*.

Remarks. This species resembles *Acanthurus mata* Valenciennes which has a similar slender shape (compared to other *Acanthurus*) and is also a plankton feeder. The latter has usually been



Figure 1. *Acanthurus albipectoralis*, paratype (WAM P28537-001), 212 mm SL, Swains Reefs, Queensland.

referred to as *A. bleekeri* Günther but Randall (in press) has ascertained that *A. mata* is the correct name. They differ mainly in colouration. *Acanthurus mata* is generally brown overall with numerous fine bluish or purple striations on the sides. It has a prominent yellow area extending forward from the eye and pale pectoral fins. Both species were observed at Swains Reefs. *Acanthurus albipectoralis* was observed adjacent to steep outer reef drop-offs at depths between about 5

and 20 m. It was generally seen in aggregations containing about 5-30 individuals, which swam high above the bottom while apparently feeding on plankton.

References

- Randall, J.E., 1956. A revision of the surgeon fish genus *Acanthurus*. *Pacif. Sci.* 10(2): 159-235.
Randall, J.E., (in press). Three nomenclatorial changes in Indo-Pacific surgeonfishes (Acanthuridae). *Pacif. Sci.*



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