

# REVIEW OF THE SHARPNOSE PUFFERFISHES (SUBFAMILY CANTHIGASTERINAE) OF THE INDO-PACIFIC

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## SUMMARY

Twenty-two species of *Canthigaster* (Tetraodontidae; Canthigasterinae), including seven which are described as new, are recognized from the tropical Indo-Pacific: *C. amboinensis* (widespread Indo-Pacific), *C. bennetti* (widespread Indo-W. Pacific), *C. callisterna* (New South Wales; Lord Howe, Norfolk, and Kermadec islands; northern New Zealand), *C. compressa* (E. Indies; Melanesia; Philippine Islands), *C. coronata* (widespread Indo-W. Pacific), *C. epilampra* (W. Pacific), *C. inframacula* n. sp. (Hawaiian Islands), *C. investigatoris* (Andaman Islands), *C. jactator* (Hawaiian Islands), *C. janthinoptera* (widespread Indo-W. Pacific), *C. margaritata* (Red Sea), *C. marquesensis* n. sp. (Marquesas Islands), *C. natalensis* (Mauritius; South Africa), *C. ocellicineta* n. sp. (Melanesia; Great Barrier Reef), *C. punctatissima* (eastern Pacific), *C. pygmaea* n. sp. (Red Sea), *C. rapaensis* n. sp. (Rapa), *C. rivulata* (widespread Indo-W. Pacific), *C. smithae* n.sp. (Mauritius, and South Africa), *C. solandri* (widespread Indo-W. Pacific), *C. tyleri* n. sp. (Indian Ocean), and *C. valentini* (widespread Indo-W. Pacific). Notes are included on the ecology and distribution, and food habit data are presented for five species. Tables of meristic and morphometric characters, colour illustrations of 20 species, black-and-white photographs of three species, synonymies, and a diagnosis or description for each species are included.

## INTRODUCTION

The tetraodontid subfamily Canthigasterinae is composed of the single genus, *Canthigaster*, which contains 23 species. These small (usually under 12 cm SL) fishes, commonly known as sharpnose puffers, are for the most part inhabitants of tropical reefs. The present paper deals with the taxonomy of the 22 species which inhabit the vast Indo-Pacific faunal region. Dr. James C. Tyler is investigating the systematics of the multi-patterned *C. rostratus* (Bloch) from the Atlantic Ocean. Seven species, including six which were recently collected by the authors at widely scattered localities in the Indian and Pacific Oceans, are herein described as new.

Traditionally the Canthigasteridae has been separated from the Tetraodontidae on the basis of its inconspicuous nostrils and characteristic body shape, which includes a laterally compressed form, an elongate and relatively pointed snout, and a carinate back. We supported this opinion until Dr. Tyler, who is studying the higher systematics of plectognaths, informed us of the discovery of a "missing link" of sorts between the canthigasterids and tetraodontids in the form of *Carinotetraodon somphongi* (Klausewitz),