



## Two new species of the scorpionfish genus *Trachyscorpia* (Sebastidae: Sebastolobinae) from the southern Indo–West Pacific, with comments on the distribution of *T. eschmeyeri*

HIROYUKI MOTOMURA<sup>1,3</sup>, PETER R. LAST<sup>2</sup> & GORDON K. YEARSLEY<sup>2</sup>

<sup>1</sup>The Kagoshima University Museum, 1–21–30 Korimoto, Kagoshima 890–0065, Japan. E-mail: motomura@kaum.kagoshima-u.ac.jp <sup>2</sup>CSIRO Marine Research, GPO Box 1538, Hobart, Tasmania 7001, Australia.

E-mail: PRL, peter.last@csiro.au; GKY, gordon.yearsley@csiro.au

<sup>3</sup>Corresponding author

## **Abstract**

Two new species of the scorpionfish genus *Trachyscorpia* are described on the basis of 20 and 7 specimens collected from Australasia at depths of 731–1020 m and the southwestern Indian Ocean at depths of 620–1080 m respectively. The two new species, classified into the subgenus *Mesoscorpia*, are distinguished from the only other member of the subgenus, *T. (M.) eschmeyeri*, by the following characters: the tympanic spines absent (vs. usually present in the latter), the upper-jaw lip well developed, covering the premaxillary tooth band laterally (vs. lip poorly developed, the premaxillary teeth exposed laterally), scales absent on the lateral surface of the maxilla (vs. scales present), and 4 blackish saddles on the body in preserved specimens (vs. no blackish saddles). *Trachyscorpia (M.) carnomagula* **sp. nov.** differs from *T. (M.) longipedicula* **sp. nov.** in having 57–63 scale rows in longitudinal series (vs. 50–53 in the latter). They are also distinguished by several morphometric characters, including lengths of pelvic-fin spine and soft ray, and first anal-fin spine. The subgenus *Mesoscorpia* is redefined. A key to the species of *Trachyscorpia* and comments on distribution of *T. (M.) eschmeyeri* are also provided.

Key words: Scorpionfish, Sebastidae, Trachyscorpia, Mesoscorpia, new species

## Introduction

Species of the scorpionfish genus *Trachyscorpia* are deepwater, bottom dwelling, relatively large fishes, attaining at least 35 cm standard length. The genus was originally proposed for *Scorpaena cristulata* Goode & Bean, 1896 by Ginsburg (1953) who simultaneously included *Scorpaena echinata* Koehler, 1896 in the genus. Subsequently, Eschmeyer (1969) added *Scorpaena capensis* Gilchrist & von Bonde, 1924 to *Trachyscorpia*. Eschmeyer (1969) tentatively regarded *T. cristulata* and *T. echinata* as the subspecies, *T. cristulata cristulata* and *T. c. echinata*. He also separated the species of *Trachyscorpia* into two subgenera, *Trachyscorpia* (type species: *T. cristulata*) and *Mesoscorpia* (*T. capensis*), the latter being his new subgenus.

The genus *Trachyscorpia* is characterized by the following combination of characters: occiput flat, lacking pit; first preopercular spine largest; head bones strongly ossified; suborbital ridge well developed, with usually 5 or more spines; palatine teeth present; dorsal-fin spines 12 or 13; vertebrae 25 or 26; pectoral-fin margin bilobed; lateral line complete, extending onto caudal-fin base; and scales on the body ctenoid (Eschmeyer, 1969; this study).

*Trachyscorpia capensis* was described as a new species of *Scorpaena* from the west coast of South Africa from three specimens (whereabouts of the syntypes currently unknown; e.g., Eschmeyer, 1998). Although the name *T. capensis* has been used in many publications since Eschmeyer (1969) (e.g., Eschmeyer, 1986; Ishida,