



**Parasitic copepods of the family Taeniacanthidae (Crustacea)  
from triggerfishes (Teleostei, Balistidae) and filefishes  
(Teleostei, Monacanthidae) collected in the Indo-West Pacific region,  
with descriptions of two new species of *Taeniacanthus* Sumpf, 1871**

DANNY TANG<sup>1,3,5</sup>, DAISUKE UYENO<sup>2,4</sup> & KAZUYA NAGASAWA<sup>2</sup>

<sup>1</sup>Department of Zoology (M092), The University of Western Australia, 35 Stirling Highway, Crawley, Western Australia 6009, Australia

<sup>2</sup>Laboratory of Aquaculture, Graduate School of Biosphere Science, Hiroshima University, 1-4-4 Kagamiyama, Higashi-Hiroshima, Hiroshima 739-8528, Japan. E-mails: daisuke.uyeno@gmail.com; ornatus@hiroshima-u.ac.jp

<sup>3</sup>Current address: Laboratory of Aquaculture, Graduate School of Biosphere Science, Hiroshima University, 1-4-4 Kagamiyama, Higashi-Hiroshima, Hiroshima 739-8528, Japan. Email: copepods@gmail.com

<sup>4</sup>Current address: Department of Chemistry, Biology and Marine Science, Faculty of Science, University of the Ryukyus, 1 Senbaru, Nishihara, Okinawa 903-0213, Japan

<sup>5</sup>Corresponding author

**Abstract**

Two new species of *Taeniacanthus* Sumpf, 1871 (Copepoda, Taeniacanthidae) are described from filefishes (Monacanthidae) caught in the Indo-West Pacific region: *T. brayae* **n. sp.** from *Pervagor melanocephalus* (Bleeker) collected from five localities within the Central Indo-Pacific realm and *T. mcgrouteri* **n. sp.** from *Monacanthus chinensis* (Osbeck) and *Paramonacanthus choirocephalus* (Bleeker) caught off the Australian coast. *Taeniacanthus brayae* **n. sp.** and *T. mcgrouteri* **n. sp.** are distinguished from their congeners by the presence of an elongate terminal endopodal segment of the antenna, a spinulated terminal process and one seta on the maxillary basis, six elements on the terminal exopodal segment of legs 2–4 and an armature of II, I, 2 and II, I, 1 on the terminal endopodal segments of legs 2 and 3, respectively. *Taeniacanthus brayae* **n. sp.** can be readily distinguished from *T. mcgrouteri* **n. sp.** by having one row (rather than multiple rows) of spinules on the large pectinate process of the antenna, four setae (rather than three) on the maxillule and a 3-segmented (rather than 2-segmented) endopod on legs 2–4. New host and/or locality records for the taeniacanthids *Cirracanthus monacanthi* (Yamaguti, 1939), *C. spinosus* Dojiri & Cressey, 1987, *Nudisodalis acicula* Dojiri & Cressey, 1987 and *Taeniacanthus aluteri* (Avdeev, 1977) parasitic on triggerfishes and filefishes, as well as supplementary morphological information for the females and the first descriptions of the males of *C. monacanthi*, *C. spinosus* and *N. acicula*, are also included.

**Key words:** Copepoda, Tetraodontiformes, host-specificity, ectoparasite

**Introduction**

Representatives of the tetraodontiform fish families Balistidae (triggerfishes) and Monacanthidae (filefishes) occur in the Atlantic, Indian and Pacific Oceans (Nelson 2006). The former family contains 12 genera and 42 species whilst the latter comprises 26 genera and 106 species (Froese & Pauly 2011). Although both families are speciose, fewer than 25 triggerfish and filefish species combined are known to host only seven parasitic copepod species from the family Taeniacanthidae C. B. Wilson, 1911. These are: *Cirracanthus monacanthi* (Yamaguti, 1939) from the monacanthids *Monacanthus chinensis* (Osbeck), *Stephanolepis cirrhifer* (Temminck & Schlegel), *S. setifer* Bennett and *Stephanolepis* sp.; *C. spinosus* Dojiri & Cressey, 1987 from the monacanthid *Chaetodermis penicilligerus* (Cuvier); *Nudisodalis acicula* Dojiri & Cressey, 1987 from the monacanthid *Pervagor spilosoma* (Lay & Bennett) (as *P. spilosomus*); *Taeniacanthus aluteri* (Avdeev, 1977) from “*Alutera seriola*” and the balistid *Abalistes stellatus* (Anonymous); *T. balistae* (Claus, 1864) from the balistids *Balistes caprisus* Gmelin (as *Balistes carolin-*