





Three new species of *Microbrotula* (Teleostei: Ophidiiformes: Bythitidae) from the Indo-West Pacific

M. ERIC ANDERSON

South African Institute of Aquatic Biodiversity (J.L.B. Smith Institute of Ichthyology), Private Bag 1015, Grahamstown, 6140, South Africa

Abstract

Three new species of the rare Indo-Pacific fish genus *Microbrotula* are described. *Microbrotula bentleyi* sp. n. is known in the western Indian Ocean from the Gulf of Aqaba, Red Sea, and South Africa. Two species occur off Queensland, Australia, *M. polyactis* sp. n. and *M. queenslandica* sp. n. The species of *Microbrotula* are distinguished mainly on the basis of counts of the axial skeleton, scale rows and pectoral-fin rays, but some morphometric characters are also diagnostic, such as orbit diameter, predorsal length and fleshy interorbital width. All species live in coral-reef or rubble areas to depths of about 50 m. New material of *M. randalli* Cohen and Wourms, 1976 was studied and *Microbrotula* is re-diagnosed.

Key words: Bythitidae, Bythitinae, Microbrotula, Indo-West Pacific

Introduction

Gosline (1953) established the genus *Microbrotula* for two species of livebearing brotulas from coral reef and rubble areas in Hawaii, with *M. rubra* the type species. The second species, *M. nigra*, was transferred to *Oligopus* Risso where it was a homonym and renamed *O. waikiki*, now *Grammonus waikiki* (Cohen, 1964; Nielsen and Cohen, 1999). Within their redefined subfamily Bythitinae, family Bythitidae, Cohen and Nielsen (1978) suggested *Microbrotula* might be a shallow-water derivative of the bathyal genus *Cataetyx*. Machida (2000) considered his new genus *Acarobythites* close to *Microbrotula* which it resembles in many characters, but differs from it in its lack of scales, 11–12 caudal-fin rays, morphology of the anteriormost neural spines, vomerine teeth arranged in a single row, indistinct lateral line and short pectoral and pelvic fins.

Cohen and Wourms (1976) described *Microbrotula randalli* from five specimens taken on reefs at Efate Island, Vanuatu, and American Samoa. Additional material I have