

Descriptions of Six New Species of Jawfishes (Opistognathidae: *Opistognathus*) from Australia

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ABSTRACT. Descriptions of six new species of Australian jawfishes (genus *Opistognathus*) are presented: *O. alleni* n.sp. (Western Australia), *O. seminudus* n.sp. (Great Barrier Reef), *O. stigmosus* n.sp. (Great Barrier Reef and Coral Sea Plateau), *O. elizabethensis* n.sp. (Tasman Sea, Elizabeth Reef), *O. verecundus* n.sp. (northern Australia), and *O. reticeps* n.sp. (northern Australia). The nominal genus *Tandya* Whitley is discussed and provisionally synonymized with *Opistognathus* Cuvier. An identification key to all Australian jawfishes is provided.

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The jawfishes, family Opistognathidae, known from tropical waters of Australian seas include two species of *Stalix* Jordan & Snyder (Smith-Vaniz, 1989) and 15 species of *Opistognathus* Cuvier. Adults of Australian species range in size from about 30 to 409 mm SL (50 cm TL) and have been taken in depths of 0.3–66 m. These diurnal fishes are obligatory burrow-dwellers and all species appear to orally incubate their eggs, which may account for the relatively high incidence of endemism (including 12 of the 17 known Australia species) in the family. Six of these endemic Australian jawfishes are new species, all of which are described below.

Materials and methods

Methods follow Smith-Vaniz (1997) and abbreviations for institutional depositories follow Leviton *et al.* (1985). The last two elements in the dorsal and anal fins have their bases

in close approximation (“split to base” condition) and were counted as one ray in accord with the general practice of most authors, although the ultimate element has a separate rudimentary pterygiophore or stay. The short, dorsalmost element in the pectoral fin is included in the ray counts. The pattern of insertion of supraneural (= predorsal) bones and anterior dorsal-fin pterygiophores referred to as “insertion pattern” in descriptions is modified from the “predorsal formula” of Ahlstrom *et al.* (1976). Neural spines are indicated by slashes, a “0” indicates an empty interneural space; supraneurals are represented by an “S” and pterygiophores bearing a single serially associated spine are represented by a “1”. In material examined: cleared and stained specimens are indicated as “C&S”; unless otherwise specified, specimen sizes are given as mm standard length (SL); parenthetical expressions present number of specimens, if more than one, followed by size range.