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## Two new species of *Coryogalops* (Perciformes: Gobiidae) from the Red Sea

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### Abstract

Two new species of the gobiid genus *Coryogalops*, *C. guttatus* **sp. nov.** and *C. pseudomonospilus* **sp. nov.**, are described from the Red Sea. *Coryogalops guttatus* **sp. nov.** is distinguished from its congeners by having dorsal-fin rays VI + I,12; anal-fin rays I,10–11; pectoral-fin rays 17, three upper rays with free tips; pelvic fins I,5, joined to form a disc, weakly emarginate, with pelvic frenum reduced; longitudinal scale series 33–35; transverse scale rows 9–10; circumpeduncular scales 10–11; seven transverse suborbital rows of sensory papillae on cheek; no tentacle above upper eye margin; anterior nostril tubular, with triangular lappet extending from posterior rim, posterior nostril slightly raised; dark orange spots on many of the scales below body midline form a longitudinal pattern, each spot covering one scale; two distinct dark spots behind edge of preopercle, and similar pair of spots at pectoral-fin base. *Coryogalops pseudomonospilus* **sp. nov.** is distinguished from congeners by having dorsal-fin rays VI + I,11; anal-fin rays I,10; pectoral-fin rays 16–17, two upper rays with free tips; pelvic fins I,5, joined to form a disc, moderately emarginate, with pelvic frenum well-developed; longitudinal scale series 33–35; transverse scale rows 9; circumpeduncular scales 12; seven transverse suborbital rows of sensory papillae on cheek; no tentacle above upper eye margin; anterior nostril tubular, without lappet from posterior rim, posterior nostril slightly raised; and irregular dark maroon mark covering lower part of the first three membranes between spines of first dorsal fin. The distribution of species restricted to the western Indian Ocean is discussed, and a key to the species of the genus is provided.

**Key words:** *Coryogalops guttatus*, *Coryogalops pseudomonospilus*, systematics, coral reef fishes, Saudi Arabia, Farasan Archipelago

### Introduction

*Coryogalops* Smith, 1958 is a genus of small-sized, shallow water benthic gobies distributed in the western Indian Ocean, created by Smith (1958) to accommodate his new species, *Coryogalops anomolus*. Goren (1979) described another species of *Coryogalops*, *C. sufensis*, but Randall *et al.* (1994) concluded that it was a junior synonym of *C. anomolus*. Goren (1985) revised the genus *Monishia* Smith, 1959 and recognized the following six species in the genus: *M. adamsoni* Goren, 1985, *M. bulejiensis* Hoda, 1983, *M. ochetica* (Norman, 1927), *M. oculata* Smith, 1959, *M. sordida* Smith, 1959, and *M. william* (Smith, 1948), and placed *Cabillus anchialinae* Klausewitz, 1975 in synonymy with *M. ochetica*. Hoese (1986) placed *Monishia oculata* in synonymy with *Heteroleotris zanzibarensis* (Smith, 1958), based on having the lower limb of the first gill arch joined to the gill cover by membrane, a unique character for the genus *Heteroleotris*. Later Goren (1991) considered the genus *Monishia* a junior synonym of *Coryogalops*, since he considered that the separate pelvic fins of the type species *C. anomolus* vs. the united pelvic fins in the genus *Monishia* was insufficient as the main difference for keeping the genera separate. Therefore Goren (1991) assigned all known species of *Monishia* and the new *Coryogalops bretti* Goren, 1991, to the genus *Coryogalops*. Randall (1994) described two more species of *Coryogalops*, *C. monospilus* and *C. tessellatus*, and to date a total of nine valid species of *Coryogalops* is known. Miller (1978) redescribed *C. ocheticus* (as a species of *Monishia*) in detail, including lectotype and paralectotypes, and noted that *Ctenogobius godavariensis* Visweswara

Suez, and is also an immigrant to the Mediterranean Sea via the Suez Canal (our data; Kovačić & Golani 2007); *C. sordidus* was recorded from Kenya, Tanzania, Mozambique, and South Africa (Goren 1985; Hoese 1986; latter record from material in SAIAB); *C. tessellatus* was collected from Bahrain and Saudi Arabia in the Arabian Gulf and central coast of Oman (Randall 1994); *C. william* was reported from Mozambique to South Africa (Hoese 1986). Only *C. anomolus* has a broad distribution in the western Indian Ocean, from the Red Sea, Oman and Arabian Gulf to Madagascar, Mozambique, and South Africa (Randall 1995; SAIAB collection). The easternmost record for the genus is possibly the species *Ctenogobius godavariensis* from the Godavary estuary, Bay of Bengal, but the taxonomic status of this species is still uncertain.

Species of the genus *Coryogalops* occur in tidepools, reef flats, in shallow lagoons, and at base of the reefs, often hidden in holes and under stones, with a deepest record of 16 m for *C. anomolus* (Randall *et al.* 1994).

Among 11 species of the genus, 8 species are known from the north-western Indian Ocean i.e. from the Red Sea and along the Arabian Peninsula to the Arabian Gulf. Randall (1995) summarized data for 5 species known from Oman and the Arabian Gulf and illustrated them in color photographs. With the description of two new species, the number of species known from the Red Sea has increased to 4: three of them appears to be endemics (*C. ocheticus*, *C. pseudomonospilus*, and *C. guttatus*) and widespread in the western Indian Ocean *C. anomolus* where first recorded from the Red Sea as *C. sufensis*.

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