



Ocellus-bearing *Neobythites* species (Teleostei: Ophidiidae) from the West Atlantic with description of a new species

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Abstract

Three species of the ophidiid genus *Neobythites* containing ocelli in the dorsal fin are known from the West Atlantic: *Neobythites gilli* Goode and Bean 1885, *N. ocellatus* Günther 1887 and *N. monocellatus* Nielsen 1999. In the year 2000, 18 specimens of *Neobythites* were caught on the upper continental slope off eastern Brazil. This is the first documented record of a *Neobythites* specimen off Brazil since the holotype of *N. ocellatus* was caught in 1873. Seventeen of the specimens are referable to *N. ocellatus* and one to *N. monocellatus*. Until now the distribution of *N. ocellatus* was considered to be from off Atlantic Florida, the Caribbean Sea and then a gap of 4500 km to the type locality off Brazil. However, the holotype and the 17 specimens differ from the more northerly recorded specimens in pattern and number of spots and ocelli on the dorsal fin. The 18 Brazilian specimens have two distinct ocelli, one near the origin of the dorsal fin and one above the midpoint of the fish, and further back occasionally a small, black spot, while the northern specimens occasionally have a small, black spot near the origin of the fin, a distinct ocellus above the midpoint and up to three ocelli further posteriorly. Consequently a new species, *N. multiocellatus*, is described based on 59 specimens from the Caribbean Sea to off Atlantic Florida. The record of the *N. monocellatus* specimen extends its distribution about 3000 km southwards. A comparison of the four ocellus-bearing species from the West Atlantic is made.

Key words: *Neobythites*, Ophidiidae, Ophidiiformes, West Atlantic, new species

Introduction

Neobythites Goode and Bean 1885 is the most species-rich of all ophidiiform genera with 50 species found in all warm waters except for the East Atlantic (Nielsen 2002). Eight species are reported from the West Atlantic of which the following three have 1–4 ocelli on the dorsal fin: *Neobythites gilli* Goode and Bean 1885, *N. monocellatus* Nielsen 1999 and *N. ocellatus* Günther 1887 (Fig. 1).

During the preparation of an annotated list of ophidiiform fishes from Brazilian waters (Mincarone *et al.* 2008) we noticed that most of the 18 specimens of *Neobythites* caught in 2000 off eastern Brazil by the RV THALASSA, did not fit any of the descriptions of the West Atlantic *Neobythites* spp. published by Nielsen (1999). Until 1999 almost all authors had considered *N. ocellatus* a junior synonym of *N. gilli* (the type species of *Neobythites*). However, Nielsen (1999) showed that the two species could be separated by the number of ocelli in the dorsal fin and the number of fin rays in the dorsal and anal fins. Furthermore, *N. gilli* was restricted to the Gulf of Mexico while *N. ocellatus* was found from off the Atlantic coast of Florida to Brazil, but not in the Gulf of Mexico. His conclusion was based on an examination of 178 specimens of *N. gilli* from the Gulf of Mexico and 308 specimens of *N. ocellatus* found from Florida to Venezuela. There was one additional specimen, namely the holotype of *N. ocellatus* that was caught by the “Challenger” expedition in 1873 off northeastern Brazil at 9°05’S, ca. 4500 km from the closest locality of *N. ocellatus* in the