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Field Note

First Observation of the Slow Dragonet Callionymus aagilis Fricke, 1999 in Its Natural Environment

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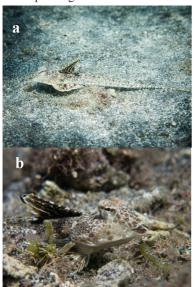




Figure 1. *Callionymus aagilis* in its natural environment at Reunion Island: a) the fish in its natural habitat, b) close-up of the head and c) face.

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The slow dragonet is a rare marine species of the family Callionymidae, and is endemic to Reunion and Mauritius and possibly the other Mascarene Islands. It is grey in colour with small round white spots aligned on the flanks and a honeycomb pattern on the cheeks and the snout (Fig. 1a-c). The apices of the first dorsal spines are yellow and the tail is about one-third of the total length. It was described from preserved material and presumed to occur on sand, probably adjacent to rocks and corals, at depths of around 30 m, possibly also deeper (Fricke et al., 2009). It was classed as near-threatened, with populations probably declining due to human activities (Fricke et al., 2009). This little-known species has never been previously observed in its natural environment. Here, we report upon an adult male of C. aagilis (total length: 12 cm), found in the company of females and photographed at sunset on 20 April 2013 in very shallow water (<1.5 m), within the reef and lagoon complex of Etang Salé (west coast of Reunion Island). The fish was found amongst detritus, with coarse coral sand and debris largely overgrown by coralline algae. This environment is typical of coral reef areas that are heavily disturbed by trampling, eutrophication and siltation (Tessier et al., 2008). This observation supports the threatened status of C. aagilis populations, since much of their natural habitat in the Mascarene Islands has been compromised (Tessier et al., 2008). Tropical dragonets are territorial: they live in harems of a male and several females, and are confined to a home range of a few square meters during their adult life. Their distribution at very shallow depths exposes them to direct (disturbance, pollution) and indirect (habitat degradation) anthropogenic influence. This rare species merits better conservation and should be included in the species checklist for protection in the "natural marine areas of ecological, faunal and floral interest" (ZNIEFF) at Reunion Island.

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References

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