

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

Mathieu Pinault, A Daydé, R Fricke

▶ **To cite this version:**

Mathieu Pinault, A Daydé, R Fricke. First Observation of the Slow Dragonet Callionymus aagilis Fricke, 1999 in Its Natural Environment. Western Indian Ocean Journal of Marine Science, 2014, 12 (1), pp.87. hal-01306714

HAL Id: hal-01306714

https://hal.univ-reunion.fr/hal-01306714

Submitted on 26 Apr 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Western Indian Ocean J. Mar. Sci. Vol. 12, No. 1, p. 87, 2013
© 2014 WIOMSA

Field Note

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

M. Pinault[1,2], A. Daydé[3], R. Fricke[4]

[1]USR 3278 CNRS-EPHE, CRIOBE & CBETM, University of Perpignan. 66860 Perpignan, France; [2]Laboratory of Marine Ecology (ECOMAR), University of Reunion Island, FRE3560 INEE-CNRS, 15 Avenue René Cassin, BP 7151, 97715 Saint-Denis, Reunion; [3]Vie Océane Association, 16 avenue d'Aquitaine, 97427 Etang Salé, La Réunion; [4]Staatliches Museum für Naturkunde Stuttgart, Rosenstein 1, 70191 Stuttgart, Germany.

Corresponding author: MP Email: math.pinault@gmail.com

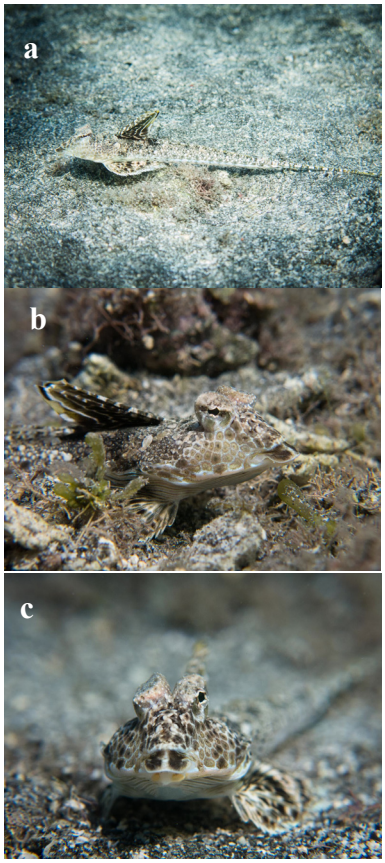


Figure 1. *Callionymus aagilis* in its natural environment at Reunion Island: a) the fish in its natural habitat, b) close-up of the head and c) face.

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.

Acknowledgements–Thanks to anonymous reviewers for their comments.

References

Fricke R, Mulochau T, Durville P, Chabanet P, Tessier E, Letourneur Y (2009) Annotated checklist of the fish species (Pisces) of La Réunion, including a Red List of threatened and declining species. Stuttgarter Beiträge zur Naturkunde A 2: 1-168

Tessier E, Bigot L, Cadet C, Cauvin B, Chabanet P, Conand C, Nicet JB, Quod JP (2008) Coral reefs of Réunion Island in 2007: Status report and monitoring network. Revue d'Ecologie la Terre et la Vie 63: 85–102