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, Western Indian Ocean Marine Science Association, 2014, 12 (1), pp.87. <hal-01306714>

HAL Id: hal-01306714
http://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.
First Observation of the Slow Dragonet *Callionymus aagilis* Fricke, 1999 in Its Natural Environment

M. Pinault¹,², A. Daydé³, R. Fricke⁴

¹USR 3278 CNRS-EPHE, CRIOBRE & CBETM, University of Perpignan. 66860 Perpignan, France; ²Laboratory of Marine Ecology (ECOMAR), University of Reunion Island, FREL356 INEE-CNRS, 15 Avenue René Cassin, BP 7151, 97715 Saint-Denis, Reunion; ³Vie Océane Association, 16 avenue d’Aquitaine, 97427 Etang Salé, La Réunion; ⁴Staatliches Museum für Naturkunde Stuttgart, Rosenstein 1, 70191 Stuttgart, Germany.

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

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**
