Ichthyological note – *Note ichtyologique*

First record of *Parapristipoma octolineatum* (Haemulidae) on the French Atlantic coast

by

Marie-Noëlle de CASAMAJOR (1)

Received: 27 Nov. 2015
Accepted: 12 Apr. 2016
Editors: R. Causse, P. Béarez

Résumé. – Premier signalement de *Parapristipoma octolineatum* (Haemulidae) sur la côte atlantique française.

Un spécimen de grondeur rayé *Parapristipoma octolineatum* a été observé sur la partie française du golfe de Gascogne. Il s'agit du premier et du plus septentrional signalement de cette espèce dans l'Atlantique. Plus largement, aucun individu de cette famille n'a été répertorié dans cette zone géographique. Des observations répétées d'un même individu, au cours des quatre derniers étés (2013-2016), suggèrent une adaptation aux conditions environnementales locales.

Keywords. – Haemulidae - *Parapristipoma octolineatum* - Bay of Biscay - New record.

One specimen of *Parapristipoma octolineatum* (Valenciennes, 1833) was observed *in situ,* for the first time on the French coast (South of Bay of Biscay) at 43°28.82 and 1°36.65 W, at two nautical miles from the coast (Fig. 1). The scuba diving observation was made in an underwater cave on rocky shore, at 19 m C.D. (Chart Datum) depth, corresponding to bathymetric distribution given by Ben-Tuvia and McKay (1986), *i.e*. from the coast to 50-60 m depth. The individual of *P. octolineatum* had been observed in this place, at each dive, for seasons (since 2013), assuming it was always the same individual (same size…). However, the lack of annual monitoring does not allow us to confirm the sedentary behaviour of this individual. The cave where *P. octolineatum* has been systematically observed could bring him food resources, but also shelter and protection, limiting his capture probability.

Fishes of the family Haemulidae are demersal species living in tropical and subtropical area. The African striped grunt usually lives on the African Atlantic coast from Angola northward to Spain, including Cape Verde, Madeira and Canary islands, and the western Mediterranean (Ben-Tuvia and McKay, 1986; Wirtz *et al*., 2008). The present observation is the northern most report of the species and the family in the Atlantic Ocean.

The specimen was not caught and biometric description is not available. However, it presents general features that characterize the species (Fig. 2). The total length is evaluated around 25 cm, which corresponds to the common size given in the literature, *i.e*. standard length between 20 and 30 cm (Ben-Tuvia and McKay, 1986). The body is uniformly brown to greyish, more or less marked by four longitudinal stripes, clear to pale blue, depending on emotional condition of the individual; fins are often yellowish (Fig. 2).

Ecological requirements, like hydrodynamic conditions and temperature, are poorly documented for this species. In a same way, the biology of *P. octolineatum* is poorly known: *e.g*. longevity, age at first sexual maturity. The species is oviparous and males and females pair for the breeding season. Adults feed on zoobenthos, like benthic crustaceans and molluscs. The behaviour of this species is mainly gregarious, over rocky or sometimes sandy bottoms. However, isolated specimens can be observed. The youngest are reported to be more coastal than adults (Louisy, 2015).

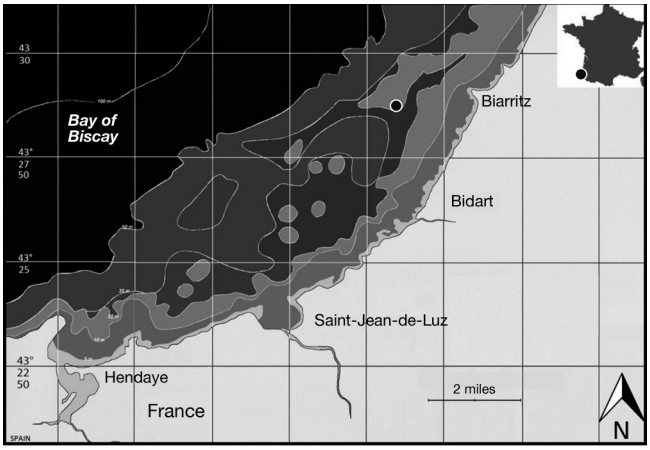

Figure 1. – Location (●) of *Parapristipoma octolineatum* observation on the French coast of the Bay of Biscay.

According to EUNIS classification (Bajjouk *et al*., 2015) the main physical characteristics of this habitat correspond to A3.71 "Robust faunal cushions and crusts in surge gullies and cave" with exposed conditions to waves and hydrodynamics, in this part of the Bay of Biscay, especially in winter (Abadie *et al*., 2005). However, taking into account benthic colonization, the habitat correspondence is suitable with A4.71 "Communities of circalittoral caves and overhangs" with presence of crustose sponges, corals as *Leptopsammia pruvoti* Lacaze-Duthiers, 1897 and anthozoa as *Parazoanthus axinellae* (Schmidt, 1862) as described in Casamajor (de) (2004). This habitat is accessible for divers, mainly between May and October. Meteorological and oceanic conditions are unfavourable during winter.

In a context of global change and warming of sea surface waters (Le Treut, 2013) a particular attention should be paid to potential shifts in fish populations of the Bay of Biscay. Many meridional species have been listed in the south of the Bay of Biscay (Quéro *et al*., 1998). In that context, it should be interesting to see, during next decade, if the observation of this species is repeated and if the number of individuals observed increases.

Acknowledgements. – The author is grateful to Christelle Mazières for reviewing English text and acknowledge Muriel Barrere, diver, who gave the photography 2B. Thanks to Patrick Louisy and Jean-Claude Quéro for confirmation of identification.

(1) Ifremer, 1 allée du Parc Montaury, UFR Côte Basque, 64600 Anglet, France. [mndecasa@ifremer.fr]

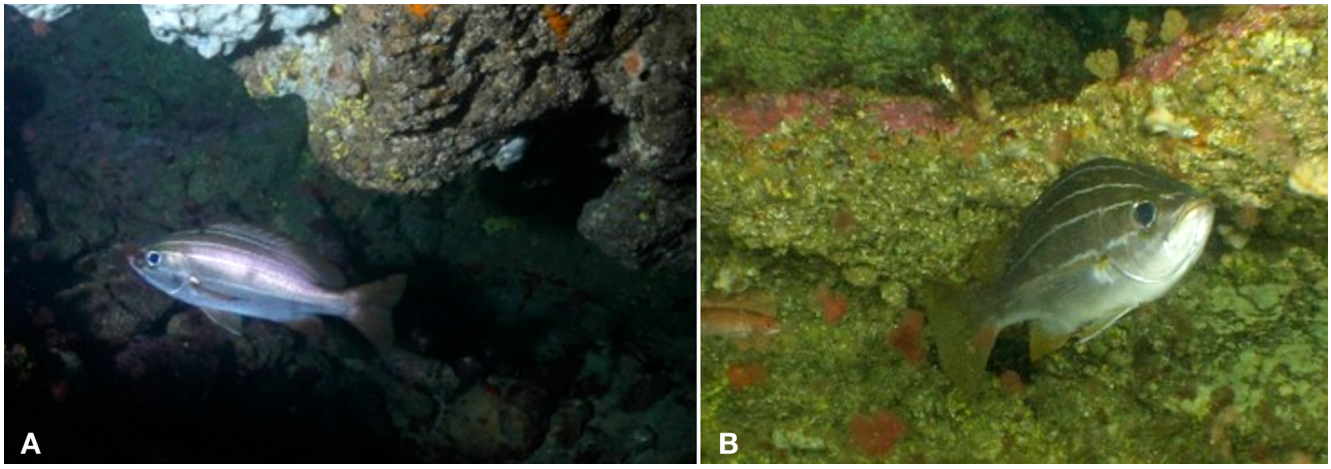

Figure 2. – Specimen of *P. octolineatum* on the rocky coast of the Bay of Biscay. **A**: Body greyish, violet-brown (photo M.N. de Casamajor); **B**: Longitudinal stripes on back and sides, fins yellowish (photo M. Barrere)

REFERENCES

ABADIE S., BUTEL R., DUPUIS H. & BRIÈRE C., 2005. - Paramètres statistiques de la houle au large de la côte sud-aquitaine. *C. R. Geoscience*, 337: 769-776.

BAJJOUK T., GUILLAUMONT B., MICHEZ N. *et al*. [11 authors], 2015. - Classification EUNIS, Système d'Information européen sur la Nature : Traduction française des Habitats benthiques des Régions Atlantique et Méditerranée, Vol. 2. Habitats subtidaux et Complexes d'Habitats. 237 p. Réf. Ifremer/DYNECO/AG/15-02/TB2.

BEN-TUVIA A. & McKAY R., 1986. - Haemulidae. *In:* Fishes of the North-Eastern Atlantic and the Mediterranean (Whitehead P.J.P., Bauchot M.L., Hureau J.C., Nielsen J. & Tortonese E., eds), pp. 858-864. Paris: Unesco.

CASAMAJOR (de) M.N., 2004. - Baie de Biscaye : Richesse & Diversité méconnue. 264 p. Ascain: Alexandre Dewez.

LOUISY P., 2015. - Guide d'Identification des Poissons marins Europe et Méditerranée. 512 p. Paris: Ulmer.

QUÉRO J.C., DU BUIT M.H. & VAYNE J.J., 1998. - Les observations de poissons tropicaux et le réchauffement des eaux dans l'Atlantique européen. *Oceanol. Acta*, 21(2): 345-351.

TREUT (Le) H., 2013. - Les Impacts du Changement climatique en Aquitaine. 360 p. Bordeaux: Presses Universitaires de Bordeaux (PUB).

WIRTZ P., FRICKE R. & BISCOITO M.J., 2008. - The coastal fishes of Madeira Island – New records and an annotated checklist. *Zootaxa*, 1715: 1-26.