

SHORT COMMUNICATION

ON SOME INTERESTING OPISTHOBRANCHS (MOLLUSCA, GASTROPODA) FROM THE AZORES

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The nudibranch *Eubranchus farrani* Alder and Hancock, 1844 is recorded from the Azores for the first time. The presence of the sacoglossan *Placida cremoniana* (Trinchese, 1892) in the Azores is confirmed. *Pleurobranchus* sp. from the Azores, Madeira and the Canary Islands is compared with *P. garciagomesi* Cervera et al. 1996; it probably is an undescribed species.

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INTRODUCTION

WIRTZ (1998) summarized the state of knowledge on the opisthobranch gastropods of the Azores. He did, however, overlook a paper on deep-sea opisthobranchs by BOUCHET (1977). Since then, ORTEA et al. (1999) and ÁVILA (2000) have recorded additional species for this Atlantic archipelago.

During diving surveys around Faial Island, we recently encountered three interesting opisthobranch species, on which we here report.

MATERIAL AND METHODS

The material was collected during the fieldwork carried out during the project MARÉ - a programme which includes the description of the shallow subtidal communities of three Sites of Community Interest (Habitats Directive) in the channel between Faial and Pico Islands as one of its objectives - and during an ongoing inventory of the shallow-water invertebrate fauna of the Azores by the third author. Specimens are collected whenever *in situ* identification is uncertain or not possible. Voucher material is deposited in the reference collection of the Department of Oceanography and Fisheries of the

University of the Azores. Photos of live animals are deposited in the department's image archives (*ImagDOP*).

The species were identified with the help of SCHMEKEL & PORTMANN (1982), WEINBERG (1993), PICTON & MORROW (1994) and ORTEA et al. (1999).

RESULTS

***Eubranchus farrani* Alder and Hancock, 1844**
(Nudibranchia, Arminiacea)

During summer 1999, the first author encountered an individual of *Eubranchus farrani* Alder and Hancock, 1844 (Fig. 1) at Monte da Guia (western coast of Faial Island). Two additional animals were found at Baixa do Sul, an underwater seamount located between Faial and Pico Islands. All three animals were found in between 35 to 40 metres depth, feeding on hydroids of the genus *Obelia*. They ranged in size from 1.5 to 2 cm total length.

The species is variable in colour with four different morphs (PICTON & MORROW 1994). The animals observed in the Azores belonged to the common morph usually found in the British Isles: translucent body with scattered yellow/orange

patches on the dorsum and on the tips of the cerata, rhinophores and oral tentacles (cf. Fig. 1). In the British Isles, *Eubranchus farrani* is usually found in the shallow subtidal. *Obelia* hydroids do not occur in the shallow subtidal in the Azores and this might be the reason why *E. farrani* has not been collected previously.

The species is known from all around the British Isles and from Norway to western Mediterranean (PICTON & MORROW 1994).

***Placida cremoniana* (Trinchese, 1892)**
(Sacoglossa)

In the middle of August 1999, while collecting data on the algal communities of Porto Pim bay (south-eastern coast of Faial island, Azores), the second author collected two *Placida cremoniana*. The two individuals were just a few centimetres apart on an algal turf dominated by *Cladophora* sp. and geniculated Corallinacea in a depth of ca. 4 m, over the jagged rocks located just off São Sebastião fortress. In late June 2000, the same author once again observed the species on a small reef near Feteira Islets (south coast of Faial). The single animal was on filamentous Chlorophyta growing on an *Antipathes wollastoni* colony at 20 m depth.

A colour photo of the species can be found in WEINBERG (1993) and the Azorean specimens correspond perfectly to this. According to ORTEA et al. (1999) the known distribution of *P. cremoniana* comprises the Mediterranean Sea and the archipelagos of the Canaries, Madeira and the Azores. ORTEA et al. (1999) were the first to record the species from the Azores. They found *P. cremoniana* at São Miguel island, one of the islands of the eastern group of the Azores, whereas Faial is one of the islands of the central groups, about 300 km west of São Miguel.

***Pleurobranchus* sp.**
(Pleurobranchomorpha)

While snorkelling at night in a large tidal pool at Varadouro, western coast of Faial Island, in September 1999, a large snail of the genus *Pleurobranchus* Cuvier, 1804 was encountered.

The animal, shown in figure 2, had a body length of approximately 7 cm. It obviously belongs to the same species as the animal from the Canary Islands (photo by Rogelio Herrera) figured in WIRTZ 1995, page 163 top, and the animal from Madeira island (photo by Joe Klenk) figured in WIRTZ 1999, plate 2, photo number 5.

CERVERA et al. (1996) summarised the knowledge about the Mediterranean and eastern Atlantic *Pleurobranchus* species and described *Pleurobranchus garciagomezi* from the Cape Verde Islands. L. Cervera (personal communication to PW) suggested that the species from the Canary Islands and Madeira could be a colour morph of *P. garciagomezi*. This view was shared by MALAQUIAS (2000) who apparently found the same species at the Selvagens Islands (a small group of islands between the Canary Islands and Madeira). Fig. 3 shows a colour photo of *P. garciagomezi* taken at Tarrafal, north-western coast of São Tiago Island, Cape Verde Islands. The authors believe that the opisthobranch shown in Fig. 2 is an undescribed species of the genus *Pleurobranchus*. It differs from *P. garciagomezi* not only in its colour pattern but also in body shape and behaviour. A comparison of Figs. 2 and 3 shows the differences in colour: while *Pleurobranchus garciagomezi* from Cape Verde has conspicuous white lines on a cream-coloured to dark brown smooth body, *Pleurobranchus* sp. has a much denser network of much thinner pale lines on an orange-coloured slightly rugose body. The body shape of *Pleurobranchus* sp. is more ovoid and higher-backed than that of *P. garciagomezi*. The *Pleurobranchus* sp. captured at the Azores is larger than any *P. garciagomezi* recorded so far (the maximum size of *P. garciagomezi* given by CERVERA et al. (1996) is 5 cm). Finally, *P. garciagomezi* is a day-active species that can commonly be seen on open substrates throughout the day at the Cape Verde Islands (personal observations by the third author during ca. 60 dives between 1988 and 2000), whereas the two *Pleurobranchus* sp. from Madeira and the Azores were active at night and never encountered in about 1000 dives during the day (between 1983 and 2000) in these two archipelagos.



Fig. 1. *Eubranchus farrani* Alder and Hancock, 1844, Faial Island, Azores Islands (photo J. Fontes)



Fig. 2. *Pleurobranchus* sp., Faial Island, Azores (photo P. Wirtz).



Fig. 3. *Pleurobranchus garciagomezi* Cervera, 1996, São Tiago Island, Cape Verde Islands (photo P. Wirtz).

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