

OCCURRENCE OF *PERICLIMENES SCRIPTUS* (RISSO, 1822)  
(DECAPODA, CARIDEA, PONTONIINAE) IN PORTUGUESE WATERS

BY

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There are several records of *Periclimenes scriptus* in the eastern Atlantic, such as Norman (1907), Nobre (1931), Holthuis (1951, 1952), and Domenech et al. (1981), with the record by Nobre (1931) concerning specimens from Portuguese waters. However Grippa & d'Udekem d'Acoz (1996) concluded that all East Atlantic records of *P. scriptus* referred either to *Periclimenes sagittifer* (Norman, 1861) or were dubious, and that the only reliable records of *P. scriptus* were from the Mediterranean Sea. So far, *Periclimenes sagittifer* was the only *Periclimenes* species known with certainty from the waters off continental Portugal (Neves, 1975). However, in a review of the studies on larvae of European *Periclimenes*, Dos Santos et al. (2004) pointed out that there were markedly different kinds of larvae in the waters of continental Portugal, and hence concluded that there would be more than one species in the area.

This is confirmed by the present study. During a field trip in southern Portugal in March and April 2004, the present author looked for crustaceans on small fishing boats (about 5 meters long) working with resting nets at short distances from the coast. Tens of *Periclimenes* were found on the boats of Armação de Pêra, 37°06'N 008°21'W (small boats stranded on the beach) and Ferragudo, 37°08'N 008°32'W (one small boat stranded on an inclined plane of the harbour). All of them were quite different from *P. sagittifer* and had a morphology agreeing perfectly with *P. scriptus*, as described by Zariquiey Alvarez (1946, 1968) and Grippa & d'Udekem d'Acoz (1996). Especially, they had a slender outline, a very slender rostrum, and both second pereopods equal to each other and with a long and narrow carpus (fig. 1). Furthermore, their colour pattern agreed with photographs published in literature (Debelius, 1983, 1999; Göthel, 1992; Moostleiner & Patzner, 1995; Grippa & d'Udekem d'Acoz, 1996; Wirtz &

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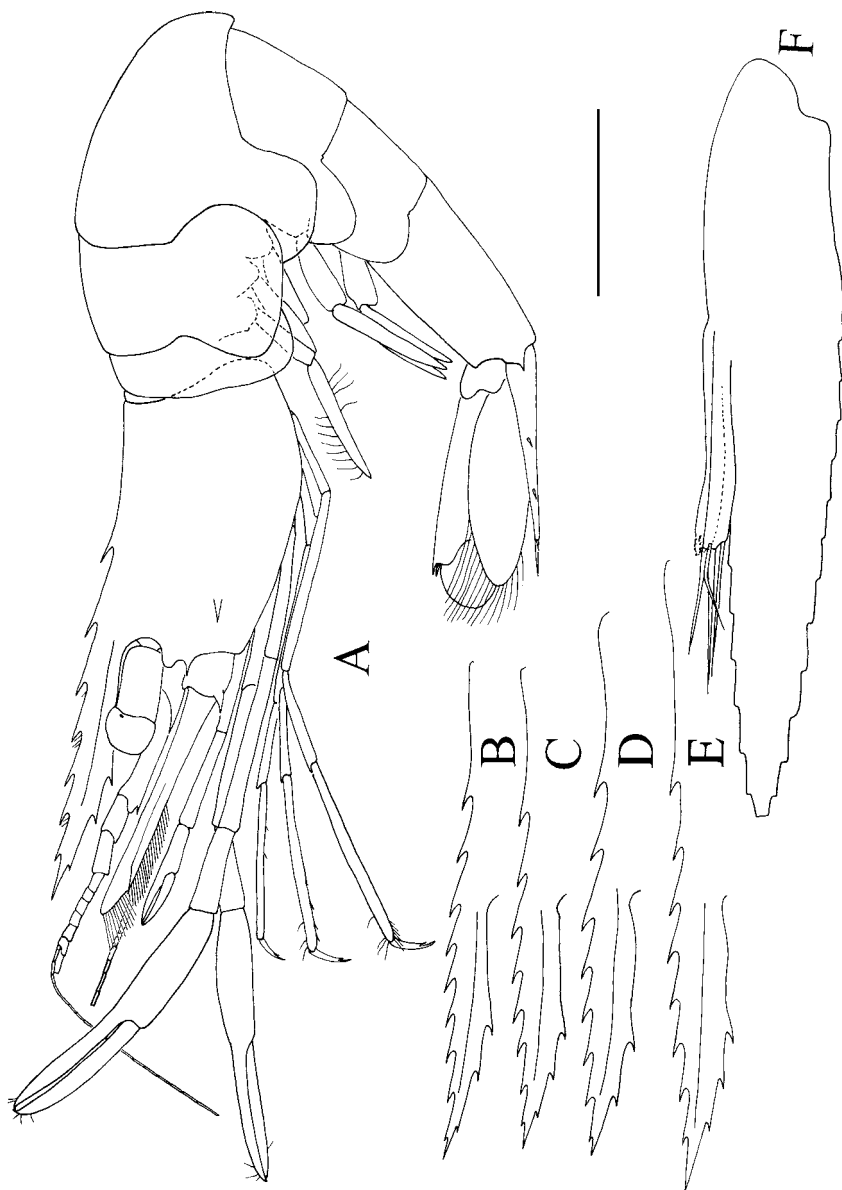


Fig. 1. *Periclimenes scriptus* (Risso, 1822), southern Portugal, collected by fishermen of Armação de Pêra, 27.iii.2004, Tromsø Museum, reg. nr. TMU 13 655. A, C, D, E, females, B, F, male. A, habitus (left and right P2 illustrated); B, C, D, E, rostrum and dorsal part of carapace, F, endopod of left second pleopod. Scale bar: A-E, 2.5 mm; F, 0.42 mm.

Debelius, 2003). The shrimps were transparent and the third pleonite had a dorsal, posteriorly directed V-shaped drawing. The branches of this “V” were narrow and white. The inner margins of the white “V” were underlined with red dots and there was also an outer red dot on the tip of the “V”.

Interestingly, no specimens had eggs and females had no lateral pigmented spots on the pleonites, suggesting that in southern Portugal the species is still in reproductive rest in March and early April. The exact depth of collection is not known. However, other decapods found on the small boats such as *Diogenes pugilator* (P. Roux, 1829) and *Pilumnus hirtellus* (Linnaeus, 1761) suggest that they were collected in shallow water, probably in less than 30 m depth. The net refuse included large stones and organisms of hard bottoms such as *Xantho pilipes* A. Milne-Edwards, 1867, *Pilumnus hirtellus*, *Pilumnus spinifer* H. Milne Edwards, 1834, and of soft bottoms such as *Diogenes pugilator*, *Ebalia tumefacta* (Montagu, 1808), *Medorippe lanata* (Linnaeus, 1767), as well as many opportunist species. This suggests that the *P. scriptus* came from mixed bottoms. It is also worthwhile to indicate that at both localities gorgonians were present in the net refuse. Grippa (1993) indicates that *P. scriptus* may be observed on gorgonians in the Mediterranean and it is possible that the Portuguese *P. scriptus* were associated with gorgonians, too. However the species has also been recorded in association with the sea anemone, *Condylactis aurantiaca* (Delle Chiaje, 1825) (cf. d’Udekem d’Acoz, 1999). Whilst the occurrence of *P. scriptus* in the eastern Atlantic is now demonstrated, there is so far no evidence that the species occurs elsewhere in this ocean than along the southern region of the Iberian Peninsula. The statements of Grippa & d’Udekem d’Acoz (1996) concerning previous Atlantic records remain valid. Yet, the present observations confirm the feeling expressed by d’Udekem d’Acoz (1999), that some allegedly endemic Mediterranean decapods could actually occur in the eastern Atlantic, at least in areas close to the Mediterranean Sea.

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