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On the occurrence of *Ascorhynchus castelli* (Dohrn, 1881) (Arthropoda: Pycnogonida) in the Aegean Sea

Cengiz KOÇAK*

Department of Hydrobiology, Faculty of Fisheries, Ege University, 35100 Bornova, İzmir – TURKEY

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Abstract: Sampling studies in the Turkish Aegean Sea revealed the occurrence of a sea spider species, *Ascorhynchus castelli* (Dohrn, 1881). The presence of this species is reported for the first time from the Aegean Sea and the second time from the eastern Mediterranean Sea. This record further extends the known distribution of the species from the Turkish Mediterranean Sea to the Aegean Sea in the eastern Mediterranean. This is also the first record of the species from shallow waters in the eastern Mediterranean Sea (10 m).

Key words: *Ascorhynchus castelli*, Pycnogonida, Aegean Sea, eastern Mediterranean

Ascorhynchus castelli (Dohrn, 1881) has occasionally been found in the Mediterranean Sea, mainly in its western and central regions (Arnaud, 1987; Chimenz and Lattanzi, 2003). In the eastern Mediterranean Sea, it was reported only off Anamur on the Turkish Mediterranean coast at depths ranging from 200 to 250 m (Özcan et al., 2009). An examination of sea spiders collected in İzmir Bay revealed the presence of a species belonging to the genus *Ascorhynchus* Sars, 1878, which is identified in this paper as *Ascorhynchus castelli*. This species is new for the Aegean Sea. It is also reported here for the second time in the eastern Mediterranean Sea.

By scuba diving, 2 specimens of the species were collected from Mordoğan, İzmir Bay (Figure 1). The specimens were fixed in formalin (4%) and stored in the ESFM (Museum of the Faculty of Fisheries, Ege University, İzmir). The species was identified following Dohrn (1881) and Stock (1968).

Family ASCORHYNCHIDAE Hoek, 1881

Ascorhynchus castelli (Dohrn, 1881)

Material: 1 ♂, 1 ♀ (EFSM-PYC/2010-1); Mordoğan, İzmir Bay; 38°31'N, 26°37'E; *Posidonia oceanica* (L.) + sand bottom, 10 m; 04.viii.2010.

Measurements (mm): ♂. Length of trunk (frontal margin of cephalic segment to tip of 4th lateral process), 3.8; trunk width (across 2nd lateral processes), 1.5; abdomen length, 1.1; length of proboscis (ventral), 1.9.

Description: ♂. Proboscis almost half the trunk length; abdomen long, cylindrical, reaching midpoint of 2nd coxae of 4th legs, slightly swollen distally (Figure 2). Second coxae with slight middorsal hump, femur, and tibia, 1 with a strong dorsodistal tubercle; 2nd tibiae longest segments with several long dorsal setae, several short lateral and ventral setae (Figure 3A). Propodus moderately long, slightly curved, with

* E-mail: kocakcengiz@gmail.com



Figure 1. Earlier established occurrence of *Ascorhynchus castelli* (Dohrn, 1881) in the eastern Mediterranean Sea (filled rectangle) and the sampling area (filled triangle) reported in the present study.



Figure 2. *Ascorhynchus castelli* (Dohrn, 1881) ♂, from İzmir Bay, dorsal view.

4 long and 6 short dorsal setae. Tarsus short, about 4.5 times shorter than propodus, with 1 dorsal seta, several ventral and lateral setae (Figure 3B). Palp with 10 segments, the 3rd segment longest, the 5th segment with a long lateral seta (longer than segment diameter) (Figure 3C). Ovipiger with 10 segments, the

4th segment longest, the 6th segment with several short lateral setae (Figure 3D), strigilis strong, each segment with several setae and 2 rows of denticulate spines with 5 marginal lobes per side; larger row of spines arranged according to the formula 7:3:3:5 (Figures 3D and 3E).

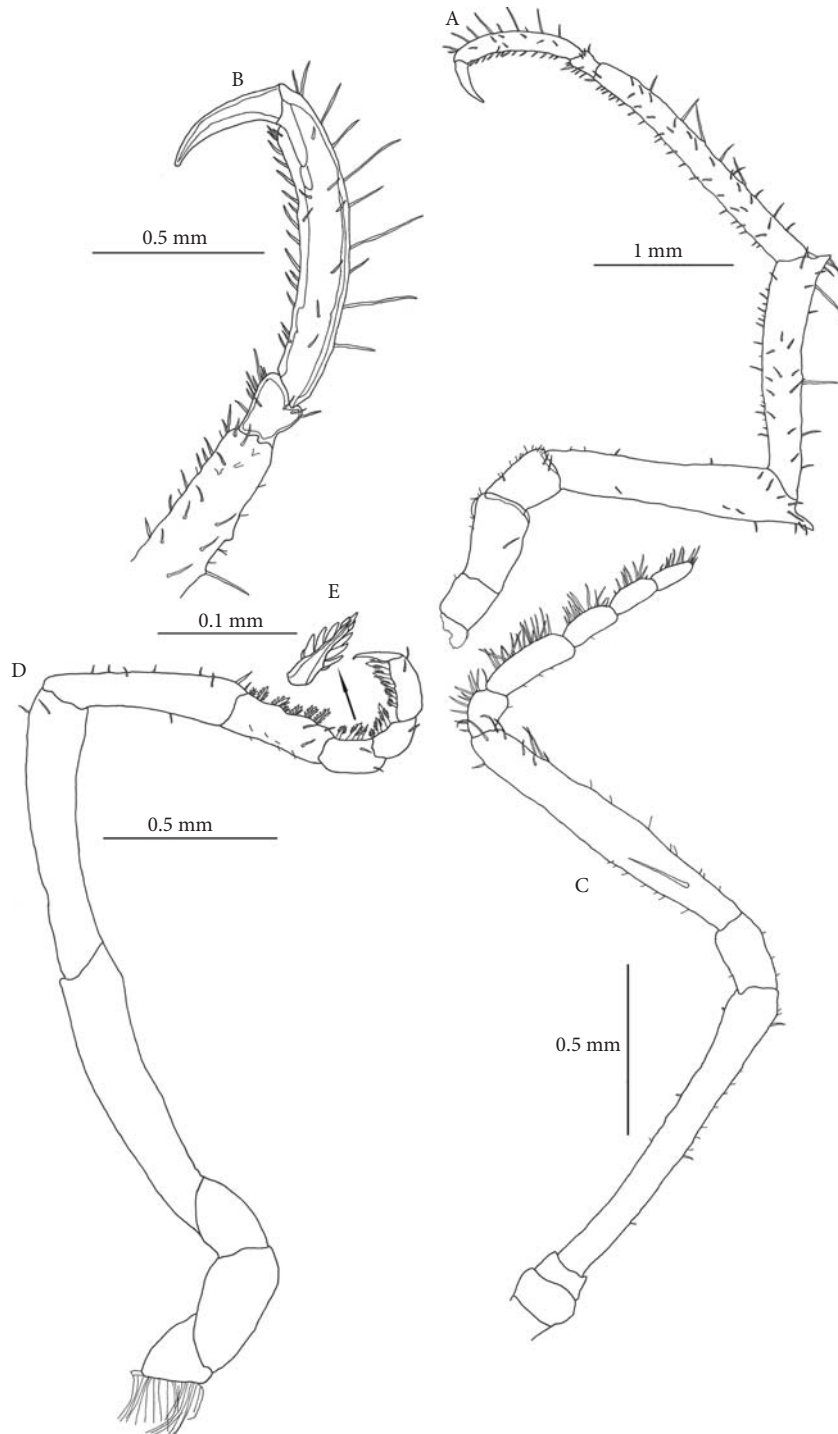


Figure 3. *Ascorhynchus castelli* (Dohrn, 1881) ♂, from İzmir Bay: A) left leg 3; B) tarsus and propodus of the same leg; C) right palp; D) left oviger; E) further enlargement of typical denticulate spine.

Remarks: The present specimen shows features identical with those given by Dohrn (1881), with some minor differences. The 5th segment of the palp has a long lateral seta that is longer than the segment diameter in the present specimen. The presence of the seta was not shown by Dohrn (1881). The number of denticulate spines in the 1st segment of strigilis is 7 in the present specimen, while the number is 6 in the Dohrn (1881) specimen.

Most previous records of *A. castelli* from the Mediterranean Sea were from the western and central regions (Soyer, 1966; Stock, 1968; Arnaud, 1987; Chimenz and Lattanzi, 2003): Italy: the Gulf of Naples, Liguria, the island of Corsica, the island of Sardinia, Latium (North Sardinian Sea), Campania (Central Tyrrhenian Sea), northern Sicily (South

Tyrrhenian Sea), Civitavecchia (central Italy), and the Gulf of Genoa; Spain: Cap Creus, Gerona, and the Medas Islands (Catalonia); France: Marseille, the island of Riou, the Gulf of Fos-sur-Mer, Toulon, Port-Cross Island, and Nice; and Tunisia: Tabarka. In the eastern Mediterranean Sea this species is reported only off the Mediterranean coast of Turkey at depths ranging from 200 to 250 m (Özcan et al., 2009). In the present study, the species is reported in the Aegean Sea at a depth of 10 m. Therefore, this is a new record of the species for the Aegean Sea, and also the first record of the species from the shallow waters of the eastern Mediterranean Sea. The record herein further extends the known distribution of the species from the Turkish Mediterranean Sea to the Aegean Sea in the eastern Mediterranean.

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