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Orthometopon romanicus n. sp. (Crustacea, Isopoda, Crinocheta: Agnaridae) in Romanian fauna

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SUMMARY. We have identified a new isopod species, from the genus *Orthometopon*, among specimens collected from Sacalin Island, Portita and Grindul Lupilor, during research performed in the Danube Delta (Dobrogea region). We named this species *Orthometopon romanicus* **n. sp.** The present paper describes the species' characters.

Keywords: isopods, *Orthometopon*, specific characters.

Introduction

Eight species are known from the genus *Orthometopon* (Schmalfuss, 2003). Of these, five species occur only in Greece (Schmalfuss, 1993, 2003). The species with the largest distribution is *Orthometopon planum* (Budde-Lund 1885), known from France, Slovakia, Croatia, Czech Republic, Hungary (Frankarberger, 1959, Korsós *et al.*, 2002, Schmalfuss, 1993, 2003, Sechet *et al.*, 2012, Tuf and Tufová, 2005, Vandel, 1962, Wächtler, 1937). The characters of this species were described by several authors (Frankenberger, 1959, Vandel, 1962, Wächtler, 1937). Schmalfuss (1993) described specific characters for other 7 species belonging to the genus *Orthometopon*, from Greece, of which 3 were new for science. No species, belonging to the genus *Orthometopon*, was previously described from Romanian fauna (Radu, 1985, Tăbăcaru and Boghean, 1989, Giurgincă and Curćic, 2003). In our research performed in the period: 1991-1994, in the Danube Delta, we identified a new species, belonging to the genus *Orthometopon*, among specimens collected from Sacalin Island, Portita and Grindul Lupilor, which we named *Orthometopon romanicus* **n. sp.** The present paper describes the species' characters.

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Materials and methods

The investigated biological material was collected in august 1994, from three locations in the Danube Delta: Sacalin Island, Portita and Grindul Lupilor. All specimens were collected from areas with sandy soil and herbaceous vegetation, reed and sedges (hygrophilous plants). On the Sacalin Island specimens were collected only from areas covered with sedge, with moist soil and moderate temperature. The specimens density was approximately 200 specimens/m^2. In Portita locality specimens were collected from areas covered with reed and rich in detritus, the soil was sandy and moist and temperature moderate. Here too, the density of *Orthometopon* was high, approximately 1000 specimens/m^2. In the Grindul Lupilor area, specimens were collected from similar habitat to the one on Sacalin Island. Totally 19 males, 106 females and 16 juveniles were collected. Six males were dissected in the laboratory and prepared on microscope slides in Canada balsam and Euparal. Whole males and 4 females were studied and photographed dorsally. Microscope slides were analysed under the stereomicroscope and microscope and photographed. The photographs were used to describe the species. The slides ad specimens conserved in ethanol 70^0 will be donated to the Zoological Museum of the "Babeş-Bolyai" University, Cluj-Napoca.

Results and discussion

Species description

Size: males 5 x 2 mm – 7.4 x 3 mm, females 6 x 2.8 mm – 8.2 x 3.5 mm.

Colour: The cephalon is dark brown with small yellow-orange dots (Fig. 1, c). On the pereional tergites there are large dark brown spots, which form one longitudinal line on each side at the basis of the coxal plates and two lines in the median region. Between these lines there are dark brown and yellow-orange spots, which vary in form and size (Fig. 1, a, b). Within populations of *Orthometopon* we found variability in the colour of the pereional tergites. The pleon is mostly dark brown with a row of small yellow-orange spots in the median region and on the sides (Fig. 1, a, b, e).

Somatic characters

Cephalon. The lateral cephalic lobes are reduced and triangle-shaped. The median lobe is short and has the form of an obtuse triangle (Fig. 1, c).

Pereion. The posterior end of the coxal plates of the tergites 1, 2 and 3 is straight. In the case of the tergites 4-7, the posterior end of the coxal plates is curved, more marked on the tergites 6 and 7. The noduli laterales are placed at the same distance from the lateral edges of the coxal plates (Fig. 1, d).

Pleon. The pleotelson is short, triangle-shaped (Fig. 1, e).

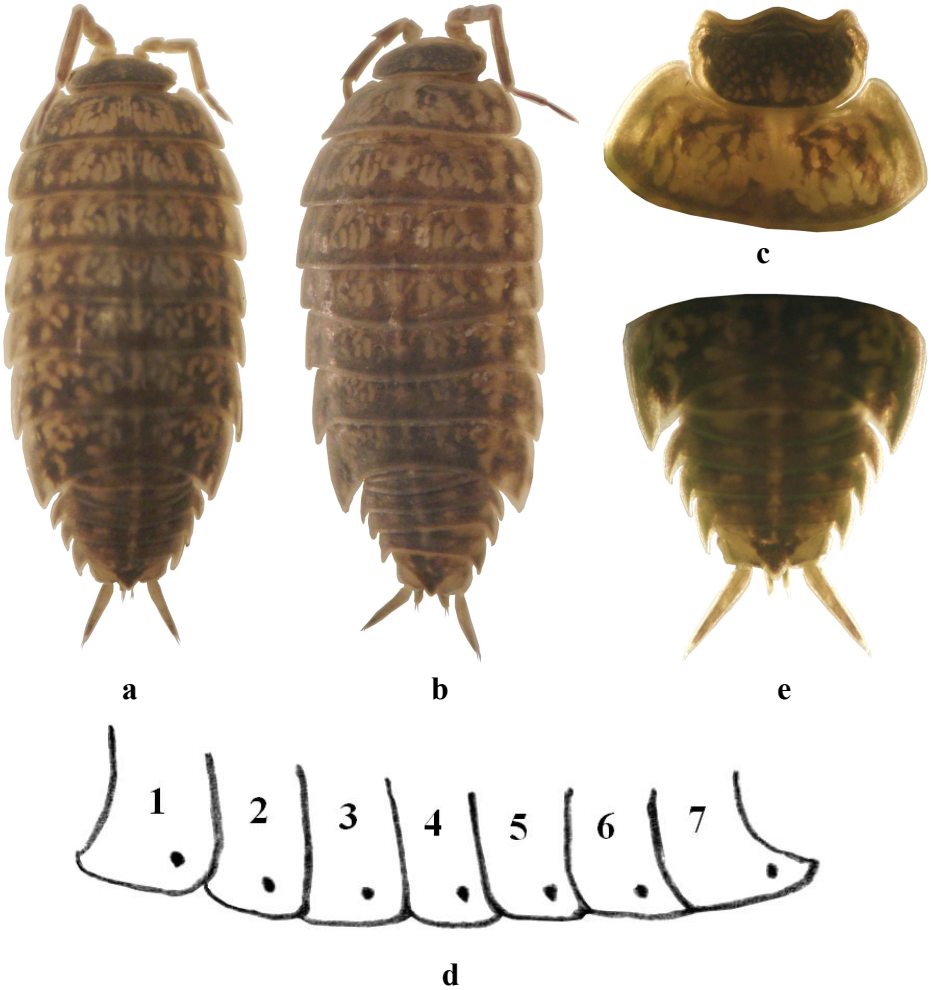

Figure 1. *Orthometopon romanicus* nov. spec., Holotyp, male and female dorsal view: **a.** ♂ 6.5 x 3 mm, **b.** ♀ 8.2 x 3.5 mm, **c.** cephalic lobes, **d.** coxal plates of the pereion and noduli laterales, **e.** pleon.

Appendages

Antennae. The last two antennal segments have approximately the same length (Fig. 2, a). In two males we found abnormal antennae, one of them with shorter and less pigmented segments.

Pereiopods. Pereiopods 1-3 have numerous thorns on the merus and carpus (Fig. 2, b, c, d). In males, the 7thpereiopod's ischium is slightly concave on the ventral side, on the carpus there is a short triangular crest of the carpus proximal region (Fig. 2, e).

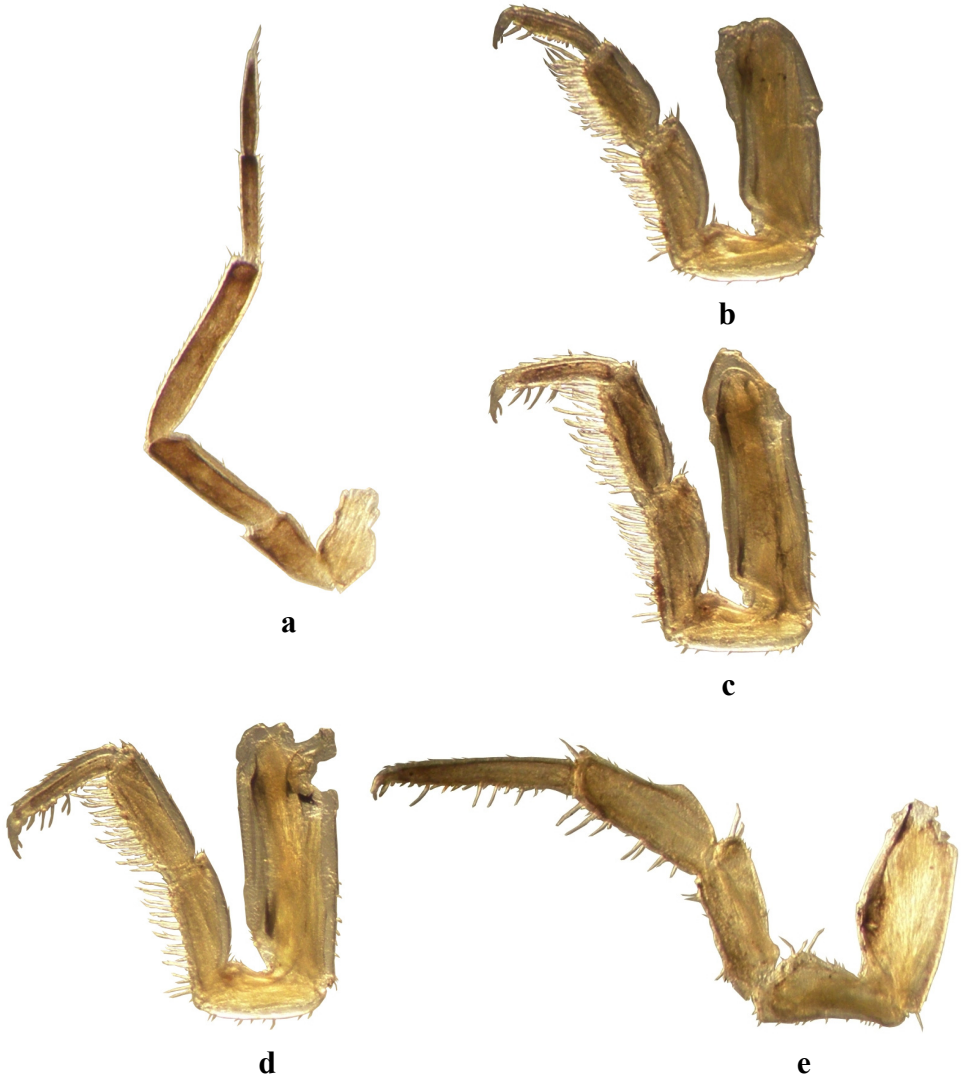

Figure 2. *Orthometopon romanicus* nov. spec., Holotyp, ♂ 6.5 x 3 mm **a.** antenna, **b.** pereiopods 1, **c.** pereiopods 2, **d.** pereiopods 3, **e.** pereiopods 7.

Pleopods. Exopods of the 1st pleopods of males have their inner side oblique, their external side slightly curved in the distal region. The posterior extremity is slightly concave (Fig. 3, a). The exopods of the pleopods 2-5 have rare short thorns on their external side (Fig. 3, b, c, d, e).

Endopods in males have a wide basal half, with the external side slightly curved (Fig. 3, f). The extremities of the endopods have each a tuft of short thorns (Fig. 3, g).

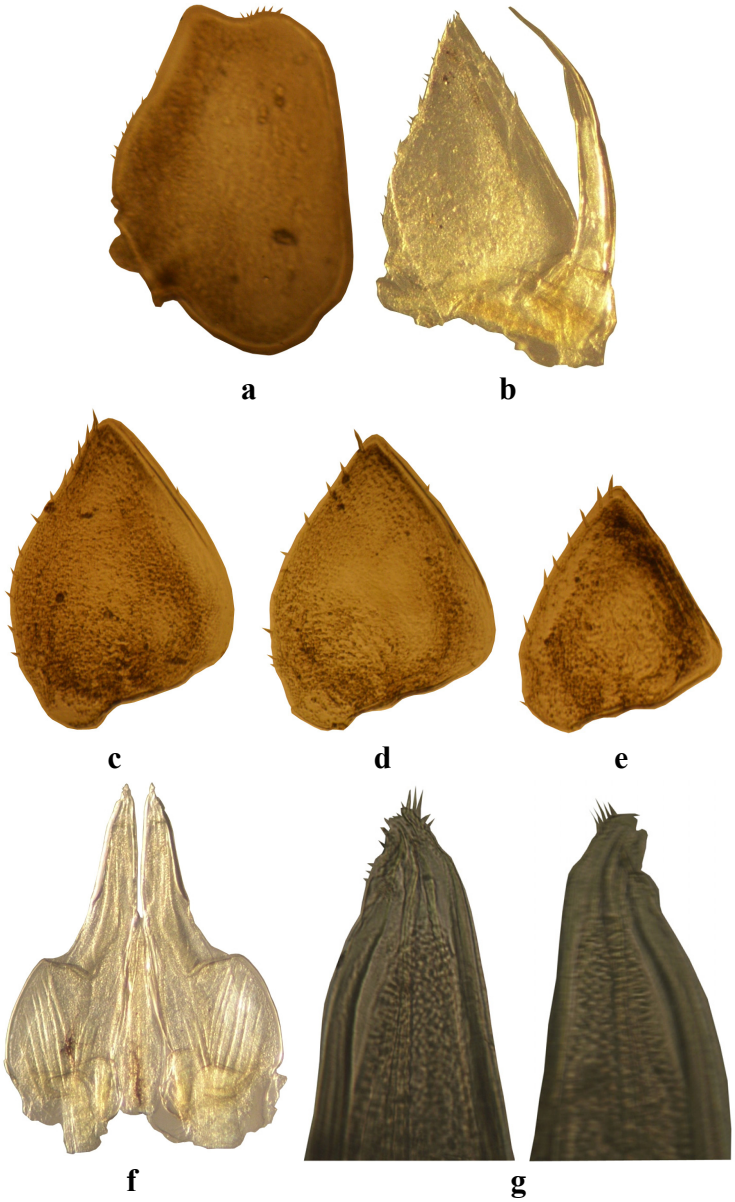

Figure 3. *Orthometopon romanicus* nov. spec. Holotyp, ♂ 6.5 x 3 mm, **a.** exopod pleopods 1, **b.** exopod and endopod pleopods 2, **c.** exopod pleopods 3, **d.** exopod pleopods 4, **e.** exopod pleopods 5, **f.** endopod pleopods 1, **g.** apex of the endopod pleopods 1.

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