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ГЛАСНИК ОДЈЕЉЕЊА ПРИРОДНИХ НАУКА, 14, 2002.

ЧЕРНОГОРСКАЯ АКАДЕМИЯ НАУК И ИСКУССТВ
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**FIRST DESCRIPTION OF THE MALE OF
ATRACTIDES GRAECUS K. VIETS, 1950
(ACARI, ACTINEDIDA, HYGROBATIDAE)
FROM MONTENEGRO (YUGOSLAVIA)**

A b s t r a c t

The male of *Atractides graecus* K. Viets, 1950 (Acari, Actinedida, Hygrobatidae) is described for the first time. The specimens were collected from a spring near Podgorica (Montenegro, Yugoslavia).

Key words: water mites, male, *Atractides graecus*, Montenegro, Yugoslavia

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PRVI OPIS MUŽJAKA *ATRACTIDES GRAECUS*
K. VIETS, 1950 (ACARI, ACTINEDIDA,
HYGROBATIDAE) IZ CRNE GORE (JUGOSLAVIA)

I z v o d

Mužjak vrste *Atractides graecus* K. Viets, 1950 (Acari, Actinedida, Hygrobatidae) opisan je po prvi put. Jedinke su sakupljene u jednom izvoru u blizini Podgorice (Crna Gora, Jugoslavija).

Ključne riječi: vodene grinje, mužjak, *Atractides graecus*, Crna Gora, Jugoslavija

INTRODUCTION

Atractides graecus described by K. V i e t s (1950) from a spring in Theben, Greece. The species has no more been discovered since the first description, and the male is described here for the first time.

MATERIAL AND METHODS

Water mites were collected by hand netting, sorted on the spot from the living material, and conserved in Koenike's fluid. A description of the preparation method is given by G e r e c k e (1991). All material has been deposited in the Department of Biology of the University of Montenegro. The following abbreviations are used: Ac-1 = first acetabulum, Vgl = ventroglandularia, I-L-6 = Leg 1, sixth segment, P-1 = palp, first segment, Cx-1 = first coxae, S-1 = proximal seta at I-L-5, S-2 = distal seta at I-L-5.

ATRACTIDES GRAECUS K. VIETS, 1950

Fig. I, 1-5

M a t e r i a l e x a m i n e d: Crna Gora (Montenegro), Fundina, village Rašovići, rheocrenic spring at 600 m asl., 22. 02. 2000, 2 males, 1 female.

Male: Length of idiosoma 483 μm , width 369 μm . Dorsally the integument is striated. View of coxal and genital field: see Fig. I,1. Length between anterior end of first coxae and posterior end of fourth coxae 286 μm ; Cx-3 width 328 μm . Anterior coxal groups 214 μm in

length; Cx-1+2 width 272 μm ; Cx-1 medial suture 102 μm in length; posterior coxal groups 217 μm in length; distance from lateralmost tips of Cx-2 to the medioposterior edge of Cx-2+3 203 μm . Measurements of mouthparts: chelicerae total length 156 μm , claw 48 μm in length; palp total length 288 μm , dorsal length (in μm) and relative length [% total length] (in parentheses) of single segments: P-1 27.0 (9.4), P-2 62 (21.5), P-3 73.0 (25.4), P-4 98.0 (34.0), P-5 28.0 (9.7); length ratio P-2/P-4 is 0.63. P-2/3 ventral margins straight; P-4 with a fine denticle near each ventral hair insertion, sword seta inserted halfway between ventral hairs (Fig. I,2).

Genital field 90 μm in length, 106 μm in width, gonopore 47 μm in length, Ac-1-3 length 30.3-27.5-30.3 μm ; anus smooth; Vgl-1 separate from Vgl-2. Measurements of the distal segments (Fig. I,3) of the first leg: I-L-5 dorsal length 131.5 μm , I-L-5 ventral length 105 μm , ratio dorsal length I-L-5/ventral length 1.25, I-L-5 central height 25 μm , ratio dorsal length I-L-5/central height 5.26, S-1 length 37 μm , ratio length S-1/width 7.4, S-2 length 36 μm , ratio length S-2/width 6.5, distance of sword setae at I-L-5 3.5 μm ; length ratio S-1/2 1.03; I-L-6 length 111 μm , I-L-6 central height 28 μm , ratio length I-L-6/central height 4.0; length ratio I-L-5/6 1.18.

Female: Length of idiosoma 728 μm , width 578 μm . Dorsally the integument is striated. Length between anterior end of first coxae and posterior end of fourth coxae 350 μm ; Cx-3 width 450 μm . Anterior coxal groups 246 μm in length; Cx-1+2 width 333 μm ; Cx-1 medial suture 107 μm in length; posterior coxal groups 260 μm in length; distance from lateralmost tips of Cx-2 to the medioposterior edge of Cx-2+3 236 μm . Measurements of mouthparts: chelicerae 219 μm in length, claw 56 μm in length; palp total length 351 μm , dorsal length (in μm) and relative length [% total length] (in parentheses) of single segments: P-1 32.0 (9.0), P-2 74.0 (21), P-3 98.0 (28.0), P-4 114.0 (32.5), P-5 33.0 (9.5); length ratio P-2/P-4 is 0.65. P-3 ventral margin straight; P-4 with a fine denticle near each ventral hair insertion, sword seta inserted halfway between ventral hairs (Fig. I,4).

View of genital field: see Fig. I,5; genital field 175 μm in length, 169 μm in width; the individual acetabular plates 113 μm in length; praegen 81 μm in width; Ac-1-3 length 36-39-40 μm ; anus smooth; Vgl-1 separate from Vgl-2. Measurements of the distal segments of the

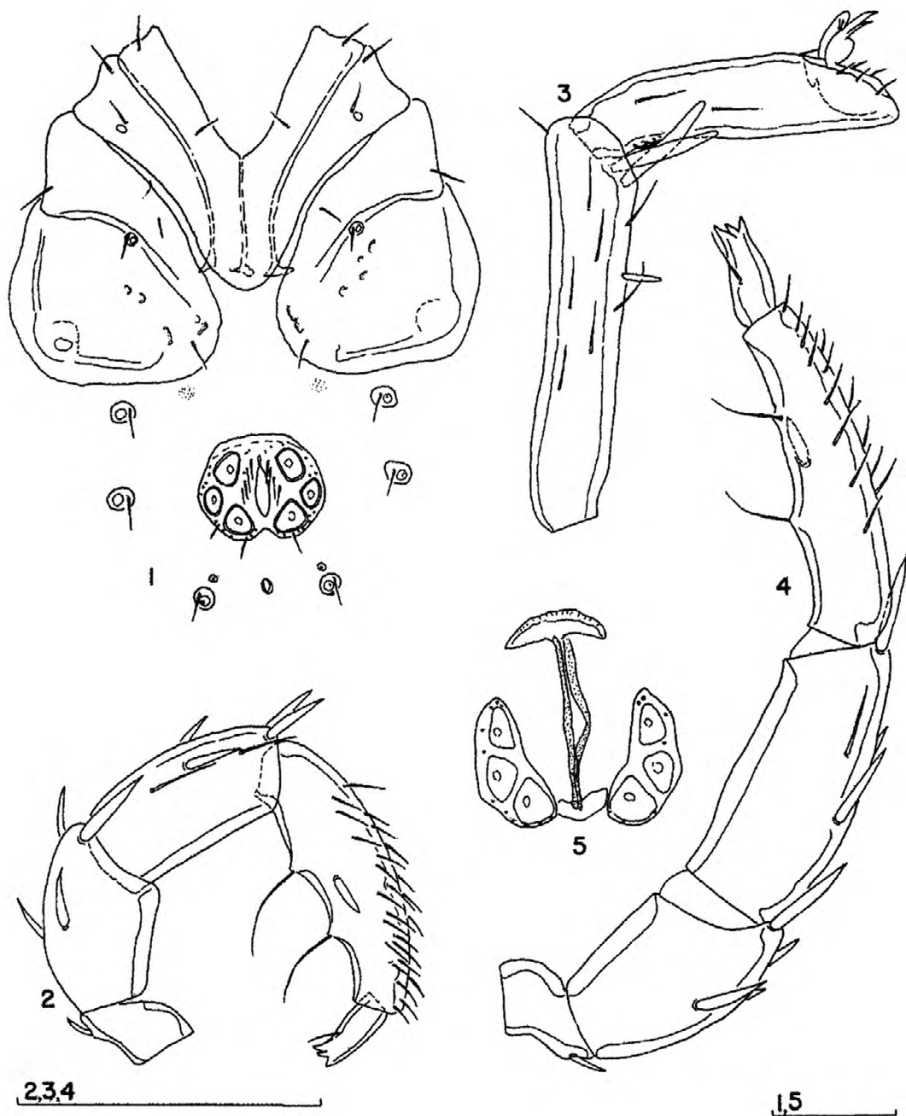


Fig. I: *Atractides graecus* K. Viets, 1950 (1, 2, 3 = male; 4, 5 = female): 1 = coxal and genital field; 2 = palp; 3 = I-L-5/6; 4 = palp; 5 = genital field. Bars = 0.1 mm.

first leg: I-L-5 dorsal length 168 μm , I-L-5 ventral length 134 μm , ratio dorsal length I-L-5/ventral length 1.25, I-L-5 central height 30 μm , ratio dorsal length I-L-5/central height 5.6, S-1 length 47 μm , ratio length S-1/width 8.4, S-2 length 46 μm , ratio length S-2/width 8.2, distance of sword setae at I-L-5 4.5 μm ; length ratio S-1/2 1.02; I-L-6 length 129 μm , I-L-6 central height 30 μm , ratio length I-L-6/central height 4.3; length ratio I-L-5/6 1.3.

R e m a r k s: The holotype of *A. graecus* differs from the female from Montenegro in generally smaller dimensions (e.g., coxal field length 260, Cx-3 width 325, palp total length 305, genital field 126 μm). However, the rather good agreement in proportions suggests that these differences are due to geographical variability. The only further difference, the more slender I-L-5/6, are possibly due to squeezing in the holotype preparation (All the indications on the holotype are R. G e r e c k e personal communication).

In the combination of a few modified I-L-5/6 with relatively short, homoimorphic setae S-1/2, *A. graecus* is most similar to *A. pumilus* (Szalay, 1946), *A. pygmaeus* (Motas & Tanasachi, 1948), *A. clavipes* Lundblad, 1954, *A. dentipalpis* (Walter, 1935) and *A. tenerifensis* Lundblad, 1962. From males of the three species, males of *A. graecus* differs in the absence of sclerotized muscle attachments (for *A. clavipes* pers.comm. R. G e r e c k e); males of *A. dentipalpis* still wait to be described, but are expected to display a very stout I-L-6 and a denticulated ventrodiscal extension of P-2, as in females; *A. tenerifensis* differs from *A. graecus* in a longer medial suture of Cx-1+2, the setae S-1/2 placed side by side, and a more stout palp.

D i s t r i b u t i o n: Greece, Yugoslavia.

B i o l o g y: As indicated by the two so far known records, *A. graecus* is probably a krenobiontic species.

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REZIME

Vrsta *A. graecus* K. Viets, 1950 je da sada bila poznata sa jednog lokaliteta iz Grčke, i to samo jedan primjerak ženke. Posle opisa, vrsta do sada nije nalažena, tako da je mužjak sada opisan po prvi put. Mužjak je sakupljen u jednom rekrenom izvoru u blizini Podgorice (Fundina, selo Rašovići). Vrste slične *A. graecus*, po malo modifikovanom petom i šestom segmentu prvih nogu sa relativno kratkim, sličnim trnovima S-1/2, su: *A. pumilus* (Szalay, 1946), *A. pygmaeus* (Motas & Tanasachi, 1948), *A. clavipes* Lundblad, 1954, *A. dentipalpis* (Walter, 1935) i *A. tenerifensis* Lundblad, 1962. Od mužjaka tri prve vrste, mužjak *A. graecus* se jasno odvaja po nesklerotizovanom integumentu (od *A. clavipes* pers. com. R. Gerecke); mužjak *A. dentipalpis* još nije opisan, ali se očekuje da se odlikuje jako zdepastim I-L-6 i nazubljenom ventrodistalnom projekcijom na P-2, kao kod ženke; *A. tenerifensis* se razlikuje od *A. graecus* po dužoj medijalnoj suturi Cx-1+2 kao i po više zdepastijim palpima.

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