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First records of two new species ***Ochthebius*** Leach (Coleoptera: Hydraenidae) genus from Turkey*

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Summary

Ochthebius (s. str.) ***costatellus*** Reitter, 1897 and ***Ochthebius*** (*Asiobates*) ***pliginskiyi*** Jach, 1990 are recorded for the first time from Turkey and their male genitalia were illustrated.

Key words: Coleoptera, Hydraenidae, ***Ochthebius***, new records, Turkey
Anahtar sözcükler: Coleoptera, Hydraenidae, ***Ochthebius***, yeni kayıtlar, Türkiye

Introduction

The genus ***Ochthebius*** has ten subgenera (Chiesa, 1959). Sixty seven species and four subspecies are known from Palearctic region (Jäch, 1990, 1998; Jäch, et al, 2003). Thirteen species have been collected from Turkey so far (Kasapoğlu & Erman, 2002; Jäch, et al., 2003).

The ***marinus*** group of ***Ochthebius*** (s. str.) has also been revised by Jäch (1992). Twenty four species are recorded in Palaearctic region. Seven of them known from Turkey. This study adds one ***Asiobates minimus*** group and one ***Ochthebius marinus*** group species to the Turkish Hydreanidae Fauna. They live in stagnant water (Jäch 1990, 1992).

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Material and Methods

The specimens were collected from both running and stagnant fresh water using by a net and fingertip. The specimens were put in ethyl alcohol and carried to laboratory. The aedeagophore, very important for identification, was dissected under the microscope and kept in a drop of lactic acid for twenty four hours to allow it to become transparent. Then it was illustrated using a Nikon Type 104 microscope. In addition, specimens were compared with the specimens in Natural History Museum in Vienna, Austria. The materials housed in Atatürk University, Science and Arts Faculty, Biology Department, Zoological Museum, Erzurum.

Results

Ochthebius Leach, 1815

Body contour interrupted between pronotum and elytra; head with a transverse furrow separating clypeus and frons, the latter on each side with an interocular pit-like depression and a short longitudinal depression or furrow posteromedially; anterior margin of labrum truncate, sometimes with a small median emargination; pronotum covered by a narrow hyaline membrane, middle pronotal portion raised, and with longitudinal or transversal furrow; elytra with distinct striae or series of punctures, a large genus with a worldwide distribution, comprising about 300 known species (Chiesa, 1959; Hansen, 1987; Jäch, 1992).

Ochthebius (s. str.) Leach, 1815

Lateral margins of pronotum only narrowly excised posteriorly and narrowly bordered by the marginal membrane, pronotum without distinct longitudinal furrow, but with two transverse, rather shallow depressions, one before and one behind middle, the lateral longitudinal depression delimiting the raised middle portion of pronotum, shallow or very shallow, sometimes fused with the small, very shallow depression inside posterior angles; marginal elytral ridge disappearing posteriorly. Second antennal segment not enlarged distally (Hansen, 1987; Jäch, 1992).

Ochthebius (s. str.) differs from other subgenera by the following characteristics: 1) Lateral margin of pronotum only narrowly excised posteriorly, 2) Pronotum without distinct longitudinal furrow, but two transverse, 3) The lateral longitudinal depressions delimiting the raised middle portion of pronotum, 4) Marginal elytral ridge disappearing posteriorly, 5) Second antennal segment not enlarged distally (Hansen, 1987).

The ***marinus*** group very variable colouration; yellow, brown, dark brown or black, some species with metallic reflections. Labrum truncate, slightly emarginated or slightly excised, but never deeply excised. Pronotal foveae confluent; elytral striae regular; metasternum usually pubescent, occasionally glabrous; aedeagus: main piece usually long and slender, dorsal side evenly curved, phallobasis more or less symmetrical, subapical bristles present, apex enlarged (Jäch, 1992).

Ochthebius (*s. str.*) ***costatellus*** Reitter, 1897

Body lenght 2.2-2.3 mm, darkbrown to black, surface of labrum shagreened, clypeus distinctly microreticulate, frons with small and dense punctures, two depressions behind the eyes with tooth-like projections; pronotum wide, with two transverse grooves near together inside of grooves with black microreticulation; no longitudinal groove developed, pronotal disc darkbrown, metallic reflections, with small and dense punctures; elytra wide, widest in middle, dark brown, striae regular, interstrial area convex; legs brown, tibia with spine-like setae, longer and more dense apically; abdomen with hydrofugic pubescence, last sternite glabrous and wider in male, last tergite with thicker and longer setae in female; aedeagophore 330 μm long, main piece strongly sinuous, apical third of main piece with 7-8 micropores, subapical setae present (Fig.1A, B). Distal lobe long, cylindrical, apical end of distal lobe curved, parameres as long as main piece, with a few apical seta (Fig.1A, B).

Material examined: Erzurum, Tortum, Uzunkavak village, stream, 22. VII. 1999, 84 ♂♂, 92 ♀♀.

Distribution: Northeastern Palearctic (Mongolia, East Siberia) and northern Nearctic (Canada) (Hansen, 1998; Jäch, 1992).

Asiobates Thomson, 1859

It differs from other subgenera, ***Ochthebius***, by pronotal and aedeagal characteristics: 1) Sides of pronotum pronouncedly excised in posterior half, anterior (convex) portion always longer than excised (concave) portion, 2) Parameres distinctly divergent from main piece at their bases. Two species group are distinguished; ***minimus*** group and ***bicolon*** group. The species of the ***minimus*** group are mainly united by the absence of anterior and posterior foveae on the pronotum (Jäch, 1990).

Ochthebius (*Asiobates*) ***pliginskiyi*** Jäch, 1990

Body length 2.0-2.3 mm, black, mandibles with stiff setae in male, surface of labrum shagreened, frons with two shallow depressions; pronotum with densely punctures, punctures wide in pronotal disc, median groove narrow; elytral punctures regular, widest in middle, elytral margins invisible on the apex; last abdominal sternit wide and shining in male; legs short, brown and with setae, protibia widened apically; aedeagus 370 μm long, main piece curved in the middle, distal lobe cylindrical, ejaculatory duct long and cylinder, parameres with short setae (Fig. 2).

Material examined: Artvin, Şavşat, Karagöl, 16. IX. 2000, 1♂, 6 ♀♀.

Distribution: Ukraine (Crimea) to Azerbaydzhan (Hansen, 1998; Jäch, 1990).

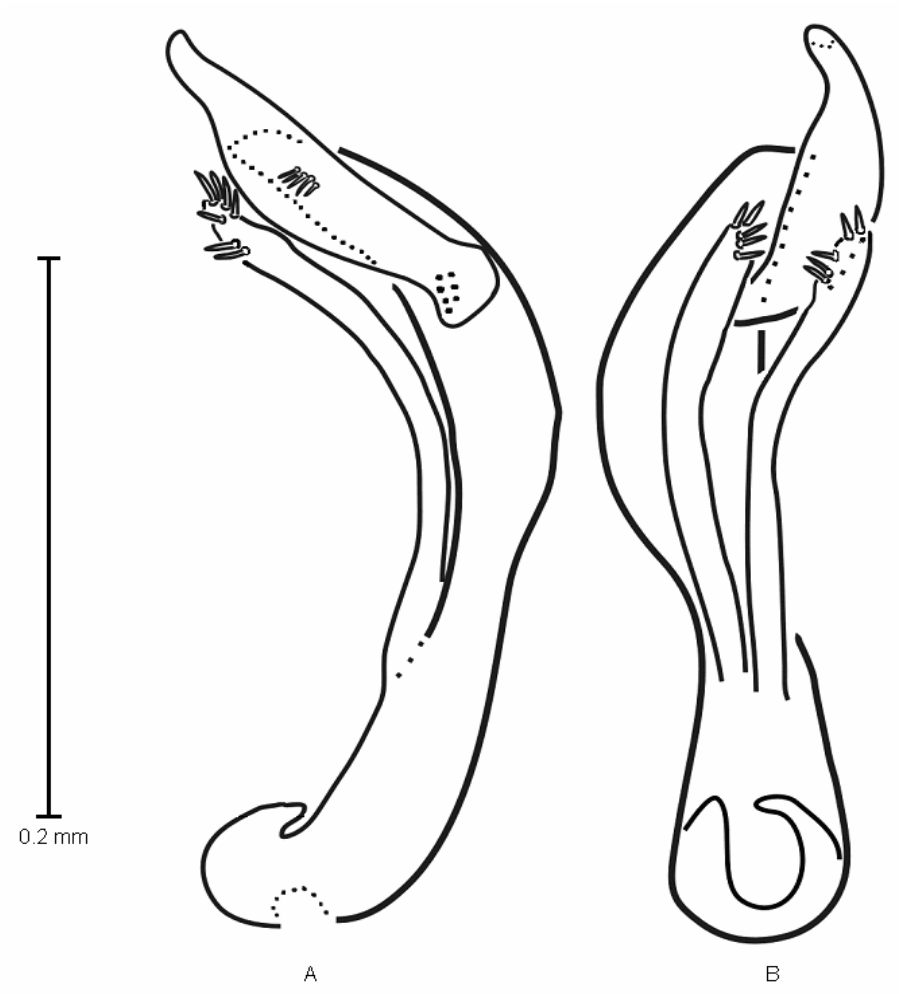

Figure 1. ***Ochthebius*** (s. str.) ***costatellus*** Reitter, 1897, aedeagophore. (A) lateral view; (B) ventral view.

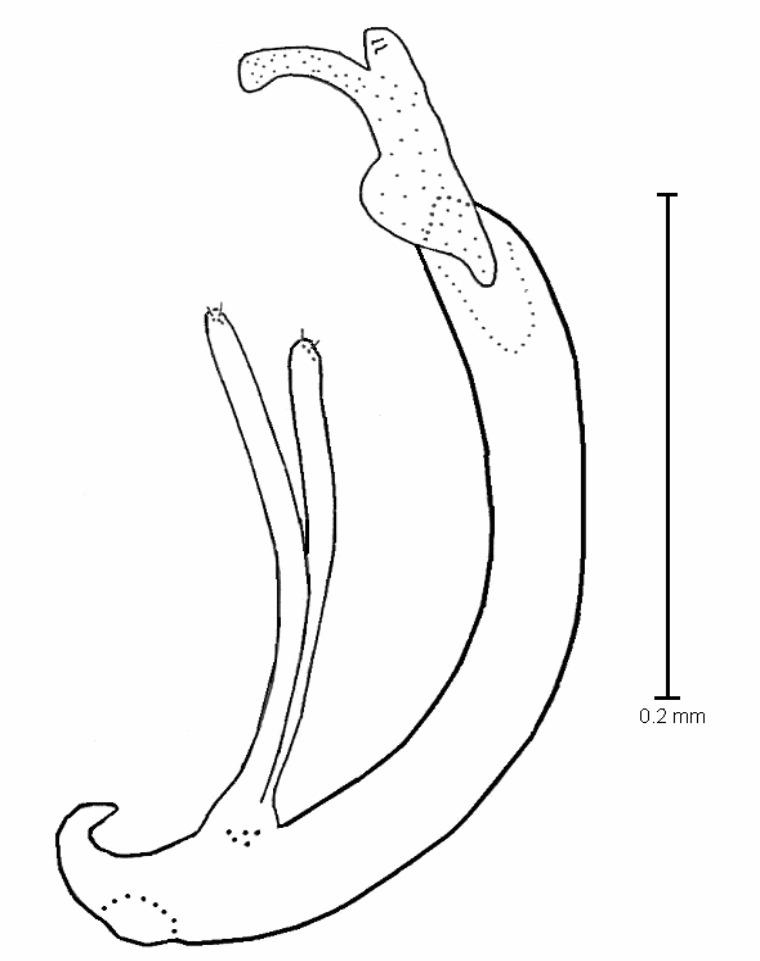

Figure 2. ***Ochthebius*** (*Asiobates*) ***pliginskiyi*** Jäch, 1990 aedeagophore, lateral view.

Discussion

Ochthebius (s. str.) ***marinus*** group was revised by Jäch (1992). It has been described that ***O. costatellus*** is a dark and slightly metallic species with deeply impressed elytral striae, aedeagus quite devious, main piece strongly sinuous, distal lobe long, sinuous, inserted far from the apex (Jäch, 1992). Our specimens are in agreement with both the morphological and aedeagal features of ***O. costatellus*** given above except coloration and regular elytral striae. ***O. costatellus*** is known from cold region such as Canada, E. Siberia and Mongolia. Our specimens were also collected about 2500 m high level. ***Ochthebius*** (*Asiobates*) ***pliginskiyi*** 1.8-2.0 mm long, aedeagus quite costant, no variability observed, without any setae, apical rode of distal lobe long and evenly curved (Jäch, 1990).

Our specimens are in agreement with both the morphological and aedeagal features of ***O. pliginskiyi*** except longer body size.

Özet

Türkiye'den *Ochthebius* **Leach (Coleoptera: Hydraenidae) cinsine ait iki yeni kayıt**

Ochthebius (s. str) ***costatellus*** Reitter, 1897 ve ***Ochthebius*** **(***Asiobates***) *pliginskiyi*** Jäch, 1990 Türkiye faunası için yeni kayıt olarak verilmiş, erkek genitalyaların şekli çizilmiştir.

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