

Contribution to the knowledge of Hydrophilidae and Haliplidae (Coleoptera) fauna of Algeria

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Summary

In this study, Hydrophilidae and Haliplidae (Coleoptera) species were given from Northeastern of Algeria. Among them, *Enochrus affinis* (Thunberg, 1974) and *Hydrobius arcticus* Kuwert, 1890 were new records for Algerian fauna. Separately, record of *Peltodytes rotundatus* (Aubé, 1836) from Algeria was confirmed with the additional material examination.

Key words: Coleoptera, Hydrophilidae, Haliplidae, new records, distribution, Algeria

Anahtar sözcükler: Coleoptera, Hydrophilidae, Haliplidae, yeni kayıtlar, yayılış, Cezayir

Introduction

The aquatic beetle fauna of Algeria is partly known. Although many species as *Enochrus (Methydus) affinis* (Thunberg, 1974) (Coleoptera: Hydrophilidae) are being very common in Palearctic region, and frequently collected and found in larger beetle collections, there is no published records from Algeria to date.

All samples, treated here, were collected from lowland and moderately highland habitats of Northeastern Algeria (maximum 530 m a.s.l.). Distributional data mainly based on the Löbl & Smetana (2003, 2004).

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Material and Methods

Specimens of aquatic Coleopteran were collected in various parts of Northeastern Algeria in different surveys in 2005. The beetles were killed using ethyl acetate or in 70 % alcohol solution. Aedeagophores of the beetles, cleaned with brushes were dissected under a stereomicroscope and left in 10 % KOH solution for 1-2 h. Identifications were made using a SMZ-1500 Nikon type 104 microscope.

Results

Hydrophilidae

Enochrus (Methydrus) affinis (Thunberg, 1974)

Distribution in the world: Armenia, Austria, Belgium, Bosnia Herzegovina, Bulgaria, Byelorussia, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Italy, Kazakhstan, Latvia, Lithuania, The Netherlands, Norway, Poland, Russia (Central European Territory, East Siberia, Far East, North European Territory, South European Territory, West Siberia), Slovakia, Sweden, Switzerland and Ukraine (Hansen, 1999; Löbl & Smetana, 2004).

Material examined: Mare Gauthier III, 26.V.2005, 2 ♂♂, 2 ♀♀; Feid IV, 20.II.2005, 1 ♂, 2 ♀♀; Feid II, 20.II.2005, 1 ♂, 1 ♀; Feid I, 20.II.2005, 1 ♂.

New records for Algeria fauna.

Brief description

Body length 3.0 mm. Head black, with a pair of brown preocular spots. Pronotum dark brown, darker medially. Pronotal spots distinct. Maxillary palp yellowish brown. Aedeagus 0.7 mm in length. Apex of paramers sharply pointed and distinctly bending outwards.

Hydrobius arcticus Kuwert, 1890

Distribution in the world: Finland, Norway, Russia (North European Territory), Sweden and Turkey (Hansen, 1999; Löbl & Smetana, 2004; Mart et al., 2006).

Material examined: Mare Gauthier III, 26.V.2005, 1 ♂, 2 ♀♀.

New records for Algeria fauna.

Brief description

Body length 5.0 mm. Head black with greenish reflections. Maxillary palp reddish brown, last segment of maxillary palpus darkened at apical third. Pronotum and elytra reddish brown (both are paler than Turkish specimens). Aedeagus length 1.1 mm. Apex of paramers bluntly pointed, but distinctly bending inwards.

Haliplidae

Peltodytes rotundatus (Aubé, 1836)

Distribution in the world: Albania, Bosnia Herzegovina, Croatia, France, Greece, Hungary, Italy, Luxembourg, Morocco, Portugal, Slovenia, Spain, Tunisia and Turkey (Löbl & Smetana, 2003).

Material examined: Exutoire Salines. 31.V.2005, 1 ♂; Lekhaila II, 14.VII.2005, 1 ♂, 1 ♀; Mare Gauthier II, 26.V.2005, 2 ♂♂; Chaabat Djebenet Ghorba, 20.V.2005, 1 ♂.

Remark: According to Mason (1939), the species ***Peltodytes rotundatus*** is an Algerian Hot Spring fauna member, but this record has not placed in world catalogues (Löbl & Smetana, 2003; 2004). This state discussed in detail under the discussion title.

Haliplus (Neohaliplus) lineatocollis (Marsham, 1802)

Distribution in the world: Algeria, Armenia Austria, Azerbaijan, Belgium, Bosnia Herzegovina, Bulgaria, Byelorussia, Canary, Croatia, Czech Republic Denmark, Egypt, France, Great Britain, Germany, Greece, Hungary, Iran, Ireland, Islands, Israel, Italy, Lebanon, Malta, Macedonia, Morocco, The Netherlands, Poland, Portugal, Romania, Russia (Central European Territory, South European Territory), Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, Yugoslavia, Tunisia, Saudi Arabia, Syria, Turkey and Yemen (Löbl & Smetana, 2003).

Material examined: Exutoire Salines, 31.V.2005, 1 ♀; Chaabat Feid El-Bagrat (After spring), 18.V.2005, 1 ♂, 1 ♀; El Medjen, 09.VII.2005, 1 ♂, 2 ♀♀; Chaabat Djebenet Ghorba, 20.V.2005, 1 ♀; Ain Chef, 23 VII.2005, 1 ♂, 1 ♀.

Haliplus (Liaphlus) mucronatus Stephens, 1828

Distribution in the world: Albania, Algeria, Austria, Belgium, Bulgaria, Croatia, Czech Republic, France, Great Britain, Germany, Greece, Iraq, Italy, Kyrgyzstan, Macedonia, Morocco, The Netherlands, Portugal, Slovenia, Spain, Ukraine, Yugoslavia, Tunisia and Turkey (Löbl & Smetana, 2003).

Material examined: Chaabat Djebenet Ghorba, 20.V.2005, 1 ♀; Ain Chef, 23 VII.2005, 1 ♂, 1 ♀.

Discussion

The genus ***Hydrobius (Hydrobius fuscipes)*** (Linnaeus, 1758) was recorded from Algeria for the first time by Bouzid & İncekara (2006). After this paper, second member of the genus ***Hydrobius, Hydrobius convexus*** Brullé, 1835, was reported from the Algeria by İncekara & Bouzid (2007). The number of the genus was increased to three with the record of ***H. arcticus***.

H. arcticus is a rare species, and worldwide distribution of the species is very limited. It is only known from Europe Asia Minor (Asiatic part of Turkey), Finland, Norway, Russia (North European Territory) and Sweden (Hansen, 1999; Löbl & Smetana, 2004; Mart et al., 2006).

According to Mason (1939), the species **P. rotundatus** is an Algerian Hot Spring fauna member. This paper had not devoted on the aquatic beetle's fauna and record deal with the species **P. rotundatus** has placed in neither revisional studies nor world catalogues (Löbl & Smetana, 2003; 2004). Record of this species from Algeria has been confirmed with this study.

Besides the two newly recorded Hydrophilid beetles from research area and confirmation of the record of Haliplid species **P. rotundatus** for the Algerian fauna, additional distributional knowledges were given deal with two Haliplid species (**H. lineatocollis** and **H. mucronatus**). In respect of morphological characters, our findings are in accordance with the results obtained from previous studies.

Considering the fact that the limited studies on the Algerian aquatic coleopteran fauna, the number of hydrophilid and haliplid species must be much higher than recorded so far in the research area. So new studies should be conducted intensively on this group of insects.

Özet

Cezayir'in Hydrophilidae ve Haliplidae (Coleoptera) faunasına katkılar

Bu çalışmada, Cezayir'in Kuzeydoğusundan Hydrophilidae ve Haliplidae (Coleoptera) familyalarına ait bazı türler verilmiştir. Bunlardan **Enochrus affinis** (Thunberg, 1974) ve **Hydrobius arcticus** Kuwert, 1890 türleri Cezayir faunası için yeni kayıttır. Ayrıca, **Peltodytes rotundatus** türünün şüpheli olan Cezayir'deki yayılışı, incelenen yeni materyal ile doğrulanmıştır.

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References

- Bouzid, S. & Ü. İncekara, 2006. Distributional notes on Northeastern Algerian Hydrophilidae (Coleoptera), with three new records. **Turkish Journal of Zoology**, **30** (3): 305-308.
- Hansen, M., 1999. World Catalogue of Insects. Hydrophiloidea (Coleoptera). **Apollo Books**, Vol. 2, 416 pp.

- İncekara, Ü. & S. Bouzid, 2007. Distributional, systematic and ecological notes on newly recorded lowland hydrophilid beetles from Algeria. **African Entomology**, **15** (2): 391-393.
- Löbl, I. & A. Smetana, 2003. Catalogue of Palearctic Coleoptera, **Apollo Books**, Vol. 1, Copenhagen. 819 pp.
- Löbl, I. & A. Smetana, 2004. Catalogue of Palearctic Coleoptera. Hydrophiloidea-Staphylinoidea. **Apollo Books**, Vol. 2, Copenhagen, 942 pp.
- Mart, A., Ü. İncekara, & R. Hayat, 2006. Two new records of hydrophilid (Coleoptera: Hydrophilidae) species of the Turkish fauna. **Turkish Journal of Zoology**, **30** (3): 267-269.
- Mason, I. L., 1939. Studies on the fauna of an Algerian hot spring. **Journal of Experimental Biology**, **16**: 487-498.