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A study on rove beetles (Coleoptera: Staphylinidae) from Tehran, Iran

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A b s t r a c t : This short paper deals with the fauna of Staphylinidae (Coleoptera) from Tehran province. In total 21 species from the subfamilies Omaliinae (3 species), Proteininae (1 species), Pselaphinae (3 species), Steninae (2 species), Paederinae (5 species), and Staphylininae (7 species) were collected and identified.

K e y w o r d s : Coleoptera, Staphylinidae, Rove beetle, Fauna, Iran.

Introduction

The Staphylinidae is most diverse family of the order Coleoptera, comprising about 57,000 species belonging to 33 subfamilies in all zoogeographical regions of the world (HERMAN 2001; ANLAS & DEVECI 2011). These beetles have worldwide distribution but their diversity is more various in tropical and temperate than in arctic regions, and also more diverse in moist forested areas than in drier areas or deserts (NEWTON & THAYER 1992; THAYER 2005). It is an ancient group, with fossil rove beetles known from the Triassic, 200 million years ago. Rove beetles are known from every type of habitat where beetles occur in, and their diets include just about everything except the living tissues of higher plants (NAOMI 1985; NEWTON et al. 2001). Most rove beetles are predators of insects and other kinds of invertebrates, living in forest leaf litter and similar kinds of decaying plant matter. They are also commonly found under stones, and around freshwater margins. Several types are known to live on ocean shores that are submerged at high tide, several species have adapted to live as inquilines in ant and termite colonies, and some are "parasites" of mammals that actually benefit their hosts by eating fleas and other parasites. Few species, notably those of the genus *Aleochara*, are parasitoids of other insects, particularly of certain fly pupae (FRANK 1982; HANSEN 1997; LÖBL 1997). The fauna of Iranian Staphylinidae was studied rather well and totally 716 species have been recorded so far (SAMIN et al. 2011). The goal of this paper is faunistic study on Staphylinidae from some regions of Tehran.

Materials and Methods

The material of this research was collected by Berlese funnel trap and aspirator from some regions of Tehran province through 2011-2012. Classification and nomenclature

suggested by NEWTON & THAYER (1992), HERMAN (2001) and LÖBL & SMETANA (2004) have been followed.

Species list

Totally 21 staphylinid species from 17 genera (*Anthobium*, *Lesteva*, *Omalium*, *Proteinus*, *Batrisodes*, *Biblopectus*, *Sognorus*, *Stenus*, *Astenus*, *Leptobium*, *Micrillus*, *Sunius*, *Procirrus*, *Othius*, *Neobisnus*, *Philonthus* and *Quedius*) were collected in this research. The number of collected specimens is given in brackets.

Subfamily *Omalinae* MACLEAY 1825

Tribe *Anthophagini* THOMSON 1859

Genus *Anthobium* LEACH 1819

Anthobium fusculum (ERICHSON 1839)

Material examined: Shahreyar, (2), 26 April 2011. Robat-Karim, (1), 22 October 2011.

Genus *Lesteva* LATREILLE 1797

Lesteva longoelytrata (GOEZE 1777)

Material examined: Shemiranat, (1), 10 October 2011.

Tribe *Omalini* MACLEAY 1825

Genus *Omalium* GRAVENHORST 1802

Omalium caesum GRAVENHORST 1806

Material examined: Jajrood, (1), 15 June 2011. Lavasanat, (3), 7 April 2012.

Subfamily *Proteininae* ERICHSON 1839

Tribe *Proteinini* ERICHSON 1839

Genus *Proteinus* LATREILLE 1797

Proteinus brachypterus (FABRICIUS 1792)

Material examined: Shahreyar, (2), 26 April 2011.

Subfamily *Pselaphinae* LATREILLE 1802

Tribe *Batrisini* REITTER 1882

Genus *Batrisodes* REITTER 1882

Batrisodes oculatus (AUBÉ 1833)

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Material examined: Jajrood, (1), 15 June 2011. Kan, (1), 14 May 2012.

Tribe Trichonychini REITTER 1882

Genus *Biblopectus* REITTER 1882

***Biblopectus pusillus* (DENNY 1825)**

Material examined: Shemiranat, (2), 10 October 2011.

Tribe Ctenistini C.É. BLANCHARD 1845

Genus *Sognorus* REITTER 1882

***Sognorus calcaratus* (BAUDI DI SELVE 1870)**

Material examined: Lavasanat, (3), 7 April 2012.

Subfamily Steninae MACLEAY 1825

Genus *Stenus* LATREILLE 1797

***Stenus aceris* STEPHENS 1833**

Material examined: Kan, (1), 14 May 2012.

***Stenus solutus* ERICHSON 1840**

Material examined: Shemiranat, (2), 10 October 2011. Robot-Karim, (1), 22 October 2011.

Subfamily Paederinae FLEMING 1821

Tribe Paederini FLEMING 1821

Genus *Astenus* STEPHENS 1833

***Astenus procerus* (GRAVENHORST 1806)**

Material examined: Shahreyar, (4), 26 April 2011. Kan, (2), 14 May 2012.

Genus *Leptobium* CASEY 1905

***Leptobium illyricum* (ERICHSON 1840)**

Material examined: Jajrood, (2), 15 June 2011. Kan, (2), 14 May 2012.

Genus *Micrillus* RAFFRAY 1873

***Micrillus testaceus* (ERICHSON 1840)**

Material examined: Shemiranat, (1), 10 October 2011. Robot-Karim, (2), 22 October 2011.

Genus *Sunius* STEPHENS 1829

***Sunius melanocephalus* (FABRICIUS 1793)**

Material examined: Lavasanat, (3), 7 April 2012.

Tribe *Pinophilini* NORDMANN 1837

Genus *Procirrus* LATREILLE 1829

***Procirrus saulcyi* FAUVEL 1873**

Material examined: Jajrood, (3), 15 June 2011.

Subfamily *Staphylininae* LATREILLE 1802

Tribe *Othiini* THOMSON 1859

Genus *Othius* STEPHENS 1829

***Othius punctulatus* (GOEZE 1777)**

Material examined: Shahreyar, (2), 26 April 2011.

Tribe *Staphylinini* LATREILLE 1802

Genus *Neobisnus* GANGLBAUER 1895

***Neobisnus prolixus* (ERICHSON 1840)**

Material examined: Lavasanat, (1), 7 April 2012.

Genus *Philonthus* STEPHENS 1829

***Philonthus cruentatus* (GMELIN 1790)**

Material examined: Shahreyar, (3), 26 April 2011. Jajrood, (2), 15 June 2011.

***Philonthus ventralis* (GRAVENHORST 1802)**

Material examined: Kan, (2), 14 May 2012.

Genus *Quedius* STEPHENS 1829

***Quedius coxalis* KRAATZ 1858**

Material examined: Robat-Karim, (4), 22 October 2011.

***Quedius josue* SAULCY 1864**

Material examined: Jajrood, (3), 15 June 2011.

***Quedius umbrinus* ERICHSON 1839**

Material examined: Shahreyar, (2), 26 April 2011. Lavasanat, (1), 7 April 2012.

Discussion

In this research, totally 21 species from 17 genera and 6 subfamilies were collected from some regions of Tehran province. Among the subfamilies of this work, Staphylininae with 7 and Paederinae with 5 species are more diverse than the others. Although neither of the collected species of this paper are new records for Iran, but however this work and the same faunistic works are valuable for determining the fauna of Iran. Among the different regions of Iran, the staphylinids' fauna of southern and eastern Iran was poorly studied and therefore surveys in these regions will result to new data. Additionally biology and behavior of dominant staphylinid species is another unknown topic which can be necessary and interesting.

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Zusammenfassung

Vorliegende Arbeit widmet sich dem Vorkommen von Staphylinidae (Coleoptera) in der Provinz Teheran (Iran), welches in den Jahren 2011 und 2012 aufgesammelt wurde. Insgesamt konnten 21 Arten aus nachfolgenden Unterfamilien nachgewiesen werden: Omaliinae (3 Arten), Proteininae (1 Art), Pselaphinae (3 Arten), Steninae (2 Arten), Paederinae (5 Arten), and Staphylininae (7 Arten).

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