

Two New Records of Eirrhinid Weevils from Turkey; *Notaris scirpi* (F.) and *Tournotaris bimaculata* (F.) (Coleoptera: Curculionoidea: Eirrhinidae)

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ABSTRACT

Recent surveys on weevil diversity in eastern Anatolia brought several new faunistic findings. Of these, erirrhinid weevils *Notaris scirpi* (Fabricius, 1792) and *Tournotaris bimaculata* (Fabricius, 1787) (Coleoptera: Curculionoidea: Eirrhinidae) are determined from Turkey for the first time. Genus *Notaris* Germar, 1817 and both species above are new records for Turkish fauna.

Key words: Curculionoidea, Eirrhinidae, *Notaris*, *Tournotaris*, new records, Turkey.

INTRODUCTION

Weevils (Curculionidea) are the most diverse animal superfamily with about 62,000 species (Oberprieler *et al.*, 2007). Twenty-one weevil families are recognized according to world catalogue and family Eirrhinidae Schoenherr, 1825 is distributed worldwide with two subfamilies and approximately 90 genera (Alonso-Zarazaga and Lyal 1999). Fauna of Eirrhinidae in Palaearctic region has been representing a subfamily Eirrhiniinae Schoenherr, 1825, with 39 genera and 125 species (Caldara, 2011). Knowledge of erirrhinid fauna of Turkey is little known. Totally ten species and three subspecies are known from eight genera (Caldara, 2011).

Distinctive characters between genera of *Notaris* Germar, 1817 and *Tournotaris* Alonso-Zarazaga and Lyal, 1999 are presence or absence of tibial spur and their formula. According to a recent review of these two genera by Thompson (2005), tibia of *Tournotaris* is not having spur; in contrast, tibial spur formula is 1-2-2 for *Notaris*.

MATERIAL AND METHODS

The materials were collected in eastern Turkey by sweeping net and by visual examination. The species *Notaris scirpi* (F.) was collected in soil by hand. Specimens was glued on paper card or pinned. Totally eight specimens were evaluated and they have been preserving at Entomology Museum of Atatürk University in Erzurum. Photographs were taken with Leica DFC 420 digital camera joining microscope using

LeicaLAS software for montage. The digital images were then imported into Adobe Photoshop 8.0 and CorelDRAWX4 for labelling and plate composition.

RESULTS

Notaris scirpi (Fabricius, 1792) (Fig. 1)

Material examined: TURKEY: Erzurum prov., Köprüköy, 39°57'970" N; 41°51'985" E 1578 m, 5.v.2007, 3 ♀♀, leg. L. Gültekin.

Distribution: Albania, Austria, Belgium, Bosnia Herzegovina, Bulgaria, Belarus, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Great Britain, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Latvia, The Netherland, Norway, Poland, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Ukraine (Caldara, 2011), Lithuania (Tamutis *et al.* 2011), Turkey (new record).

Host plants: According to Hoffmann (1958) larva lives in the collar of *Carex paludosa*. Gooden and Dedyukhin (2012) reviewed additional host plant associations data of *N. scirpi*: *Glyceria plicata* Fries (Fries), *Typha angustifolia* L., *Phragmites australis* (Cav.) Trin. ex Steud., *Alopecurus pratensis* L., *Carex acutiformis* Ehrh. Specimens were collected in soil in the river bank.

Tournotaris bimaculata (Fabricius, 1787) (Fig. 2)

Material examined: TURKEY: Erzurum prov., 2.vi.1971, 3 ♀♀, leg. H. Özbek; 14.vi.1971, 1♂, leg. M. Doğanlar; Köşk Köyü, NE of Erzurum, ca. 1850 m, 26.v.2002, 1♂, leg. Ö. Çalmaşur.



Figs. 1-2. 1) *Notaris scirpi* (Fabricius, 1792); 2) *Tournotaris bimaculata* (Fabricius, 1787).

Two Eirrhinid Weevils, Notaris scirpi (F.) and Tournotaris bimaculata (F.)

Distribution: Albania, Austria, Belgium, Bulgaria, Belarus, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Great Britain, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Moldavia, Montenegro, The Netherlands, Norway, Poland, Romania, Russia, Serbia, Slovakia, Sweden, Switzerland, Tajikistan, Turkmenistan, Ukraine, Uzbekistan (Caldara, 2011), Lithuania (Tamutis *et al.* 2011), Turkey (new record), North America (Anderson, 2002).

Host plants: According to Hoffmann (1958) larva lives in stems of *Thypha latifolia* L. and *Phalaris arundinacea* L. Dedyukhin (2012) informed additional data regarding host plant association of *T. bimaculata*: *Dactylis glomerata* Ehrh., *Bromopsis inermis* (Leyss.) Holub., *Carex* spp., *Sparganium* sp. and *Glyceria* sp.

DISCUSSION

Fauna of Eirrhinidae in Turkey is little known. With this current finding, genera of erirrhinid from Turkey are reached nine, species of twelfth and subspecies three. According to new catalogue by Caldara (2011): Genus *Arthrostenus* Schoenherr, 1826 is representing with two species *A. adanensis* Pic 1914 and *A. rottroui* Pic, 1940. Both are endemic species and distributed only in Turkey. Species *Bagoopsis globicollis* (Fairmaire, 1863) is known from European part of Turkey and also distributed southern Europe. *Hypoplyptus heydeni* Faust, 1889 is known from Armenia, Macedonia and Turkey. *Icaris sparganii cinereus* (Miller, 1861) is distributed Syria and Turkey. Genus *Notaris* have 17 species from Palaearctic and not known any of them from Turkey until now. With present finding, genus and species *N. scirpi* (F.) are newly recorded from Turkey. *Notodermus* Desbrochers des Loges, 1857 is distributed only Middle East with five species; two of them *N. steineri* (Voss, 1936) and *N. subtellatus* (Voss, 1936) are endemic for Turkey. Genus *Picia* Tournier, 1895 are representing with three species from Palaearctic region as well as from Turkey: *P. mesopotamica* (Tournier, 1889), *P. sinuatocollis* (Faust, 1885), *P. syriaca* (Reitter, 1888). Genus *Procas* Stephens, 1831 have two subspecies from Turkey: *P. picipes levantinus* Thompson, 2006, *P. picipes steveni* (Krynicky, 1832). Only one species of *Tournotaris granulipennis* (Tournier, 1874) is known from Turkey in the catalogue and *T. bimaculata* (F.) is second species with this new finding.

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REFERENCES

- Anderson, R. S., 2002, *Curculionidae*. In: American Beetles, R. H. Arnett, Jr., M. C. Thomas, P. E. Skelley and J. H. Frank (eds.). CRC Press, Boca Raton, FL. 722-815.
- Alonso-Zarazaga, M. A., Lyal, C. H. C., 1999, *A World Catalogue of Families and Genera of Curculionidae (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae)*. Entomopraxis, S.C.P. Edition, Barcelona, 315 pp.

- Caldara, R., 2011, *Eirrhinidae* In: Catalogue of Palaearctic Coleoptera. (I. Löbl and A. Smetana, editors). Stenstrup, Apollo Books, 7: 192-197.
- Dedyukhin, S. V., 2012, [The weevils (Coleoptera, Curculionoidea) of the Vyatka-Kama interfluvium: fauna, distribution, ecology]. Izhevsk, Udmurt University: 340 p. (in Russian)
- Hoffmann, A., 1958, *Faune de France. Coléoptères Curculionides (Troisième partie)*. Lechevalier, Paris, ill. 62: 1208-1839
- Oberprieler, R. G., Marvaldi, A. E., Anderson, R. S., 2007, Weevils, weevils, weevils everywhere. *Zootaxa*, 1668: 491-520.
- Tamutis, V., Tamutė, B., Ferenca, R., 2011, A catalogue of Lithuanian beetles (Insecta, Coleoptera). *ZooKeys* 121: 1-494.
- Thompson, R. T., 2005, On the nomenclature and taxonomy of *Tournotaris* Alonso-Zarazaga & Lyal, 1999 and related genera (Coleoptera, Curculionoidea, Eirrhinidae). *Deutsche Entomologische Zeitschrift*, 52(1): 125-130.

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