

## NEW AND LITTLE KNOWN SOME ICHNEUMONIDAE SPECIES (HYMENOPTERA) FROM TURKEY

**Saliha Çoruh\* and Hikmet Özbek**

\* Atatürk University, Faculty of Agriculture, Department of Plant Protection, Erzurum, TURKEY. E-mail: spekel@atauni.edu.tr

**[Çoruh, S. & Özbek, H. 2013. New and little known some Ichneumonidae species (Hymenoptera) from Turkey. Munis Entomology & Zoology, 8 (1): 135-138]**

ABSTRACT: The present contribution is based upon the ichneumonids collected from two different localities (Bayburt and Erzurum) of Turkey (Anatolia), in 1999 and 2003. A total of six species have been recorded in the subfamilies, Banchinae and Ichneumoninae. One genus (*Aoplus*) and five species were new records for the Turkish fauna.

KEY WORDS: Ichneumonidae, Banchinae, Ichneumoninae, new records, Turkey.

The Ichneumonidae (Hymenoptera), is a widespread and extremely large family, with an estimated 60 000 extant species in 35 genera worldwide (Townes, 1969). The Ichneumoninae has a worldwide distribution and is the second largest subfamily of Ichneumonidae with 373 genera and about 1700 species in Palaearctic Region. The species in this subfamily are koinobiont or idiobiont endoparasitoids of Lepidoptera (Rasnitsyn & Siitan, 1981). The Banchinae is another subfamily of the family Ichneumonidae with about 1,500 species worldwide. The tribes Banchini, Glyptini and Lissonotini are distributed worldwide (Townes & Townes, 1978). All Banchinae species are koinobiont endoparasites of Lepidoptera.

The first paper on Turkish Ichneumoninae was published by Fahringer (1922). Kolarov (1995) listed 66 Ichneumoninae species in his catalogue of Turkish Ichneumonidae. Recently, several contributions have been conducted on the Ichneumoninae fauna of Turkey (Özbek et al., 2003; Çoruh et al., 2005; Riedel, 2008a,b; Riedel et al., 2010; Çoruh & Özbek, 2011; Çoruh et al., 2011; Riedel et al., 2011) and the number of Ichneumoninae species occurring in Turkey reached to 178.

The Banchinae fauna of Turkey has not been enough studied. The first data on Turkish Banchinae were published by Kohl (1905). In the catalogue of Kolarov (1995) only 29 species were listed. With recent studies (Özdemir, 1996; Kolarov et al., 1997a,b; Pekel, 1999; Pekel et al., 2000; Kolarov & Gürbüz, 2006; Çoruh, 2008; Çoruh & Çoruh, 2008; Gürbüz et al., 2009) the number of Turkish Banchinae species reached to 78. Despite these contributions on the both subfamilies there are still many localities in the country, where no material has yet been collected.

### MATERIAL AND METHODS

Materials were collected by sweeping on flowering plants in the north-eastern Turkish provinces (Bayburt and Erzurum) during 1999 and 2003. All examined material was determined by M. Riedel (Germany) and deposited in the Entomology Museum Erzurum, Turkey (EMET). New records of species are marked by an asterisk (\*). General distributions of the species were taken from Yu et al. (2005).

## RESULTS

### Subfamily Banchinae

#### *\*Exetastes crassus* Gravenhorst, 1829

**Material examined:** Erzurum-Oltu, Aksuyayla, 14.07.1999, 1 female, leg. E. Yıldırım.

**Distribution:** New record for the Turkish fauna. It is a widely distributed species (Eastern Palaearctic and Western Palaearctic).

**Remarks:** Although *Aoplus castaneus*, *Obtusodonta equitatoria*, *Limerodops subsericans* and *Exetastes crassus* have very large distribution area (Eastern Palaearctic and Western Palaearctic) were recorded from Turkey for the first time. With this contribution, the species of Ichneumoninae occurring in Turkey have increased to 182 in 53 genera and those of Banchinae to 79 species.

### Subfamily Ichneumoninae

#### *\*Aoplus castaneus* (Gravenhorst, 1820)

**Material examined:** Erzurum:İllica, Rizekent, 2200 m, 10.07.1999, 1 male , leg. Ö. Çalmaşur.

**Distribution:** New record for the Turkish fauna (as both species and genus). It has wide distribution (Eastern Palaearctic and Western Palaearctic).

#### *\*Coelichneumon erythromerus* (Rudow, 1888)

**Material examined:** Erzurum: Atatürk University Fields, 1850 m, 06.06.2001, 1 male, leg. S. Çoruh.

**Distribution:** New record for the Turkish fauna. It is distributed in Russia and Ukraine. Erzurum Province is the souththernmost distribution record for this species.

#### *Eutanyacra ruficornis* (Berthoumieu, 1894)

**Material examined:** Erzurum: Atatürk University Field, 1850 m, 14.07.2003, 1 female, leg. S. Çoruh.

**Distribution:** New record for the Turkish fauna as well Asia Continent. It has been known only from Algeria. After type locality and since 1894 Turkey (Erzurum Province) is the second record of this rare species.

#### *Limerodops subsericans* (Gravenhorst, 1820)

**Material examined:** Erzurum: Oltu, Tutmaç and Başaklı border, 1900 m, 01.07.2000, 1 female, leg. H. Özbek.

**Distribution:** New record for the Turkish fauna. It has large distribution area (Eastern Palaearctic and Western Palaearctic).

#### *Obtusodonta equitatoria* (Panzer, 1786)

**Material examined:** Bayburt: Maden, 1650 m, 16.06.2000, 1 male, leg. S. Çoruh.

**Distribution:** It is known from Turkey (Istanbul, Ankara, Edirne, and Erzurum provinces) (Kolarov, 1989; Özdemir, 1996; Yurtcan et al., 1999; Riedel et al., 2010). It has wide distribution (Eastern Palaearctic). In the present study Bayburt Province was added to the distribution area.

**ACKNOWLEDGEMENTS**

We are grateful to Dr. M. Riedel (Germany) for identifying the material and the two colleagues (E. Yıldırım and Ö. Çalmasıur) helped in the collection of the material examined.

**LITERATURE CITED**

- Çoruh, S.** 2008. Two new records of Ichneumonidae (Hymenoptera) from Turkey. *Entomological News*, 119 (3): 311-315.
- Çoruh, İ. & Çoruh, S.** 2008. Ichneumonidae (Hymenoptera) species associated with some Umbelliferae plants occurring in Palandöken Mountains of Erzurum, Turkey. *Turkish Journal of Zoology*, 32: 121-124.
- Çoruh, S. & Özbek, H.** 2011. New and little known some Ichneumonidae (Hymenoptera) species from Turkey with some ecological notes. *Turkish Journal of Entomology*, 35 (1): 119-131.
- Çoruh, S., Özbek, H. & Kolarov, J.** 2005. A contribution to the knowledge of Ichneumoninae (Hymenoptera) from Turkey. *Journal of the Entomological Research Society*, 7 (3): 53-57.
- Çoruh, S., Riedel, M. & Özbek, H.** 2011. An additional contribution to the Ichneumoninae (Hymenoptera: Ichneumonidae) fauna of Turkey. *Turkish Journal of Entomology*, 35 (4): 603-613.
- Fahringer, J.** 1922. Hymenopterologische Ergebnisse einer wissenschaftlichen Studienreise nach der Türkei und Kleinasien (mit Ausschluß des Amanusgebirges). *Arc. für Naturgesch A*, 88: 149-222.
- Gürbüz M. F., Aksoylar, M. Y. & Boncukcu, A.** 2009. A faunistic study on Ichneumonidae (Hymenoptera) in Isparta, Turkey. *Linzer Biologische Beiträge*, 41 (2): 1969-1984.
- Kohl, F. F.** 1995. In Penther, A. & E. Zederbauer: Ergebnisse einer naturwissenschaftlichen Reise zum Erdschias Dag (Kleinasien). *Ann. Naturh. Hofmus.* 20: 220-246.
- Kolarov, J.** 1995. A catalogue of the Turkish Ichneumonidae (Hymenoptera). *Entomofauna*, 16: 137-188.
- Kolarov, J.** 1989. Ichneumonidae (Hym.) From Balkan Peninsula and Some Adjacent Regions. III. Ophioninae, Anomaloninae, Metopiinae, Mesochorinae, Acaenitinae, Oxytorinae, Orthopelmatinae, Collyriinae, Orthocentrinae, Diplazontinae and Ichneumoninae. *Turkish Journal of Entomology*, 13 (3): 131-140.
- Kolarov, J. & Gürbüz, M. F.** 2006. A study of the Turkish Ichneumonidae (Hymenoptera). III. Anomaloninae, Banchinae, Ophioninae and Xoridinae. *Acta Entomologica Serbica*, 11 (1/2): 91-94.
- Kolarov, J., Yurtcan, M. & Beyarslan, A.** 1997a. New and Rare Ichneumonidae (Hymenoptera) From Turkey. I. Pimplinae, Tryphoninae, Phygadeuontinae, Banchinae and Ctenopelmatinae. *Acta Entomologica Bulgarica*, 3 (4): 9-12.
- Kolarov, J., Beyarslan, A. & Yurtcan, M.** 1997b. Ichneumonidae (Hymenoptera) from the Gokceada and Bozcaada Islands Turkey. *Acta Entomologica Bulgarica*, 3 (4): 13-16.
- Özbek, H., Çoruh, S. & Kolarov, J.** 2003. A contribution to the Ichneumonidae fauna of Turkey. Subfamily Ichneumoninae (Hymenoptera). *Entomofauna*, 24: 157-163.
- Özdemir, Y.** 1996. Species of ichneumonid wasps of the subfamilies Banchinae and Ichneumoninae (Hym.: Ichneumonidae) from Central Anatolia. *Bitki Koruma Bülteni*, 36: 91-103.
- Pekel, S.** 1999. New and little known Turkish Banchinae (Hymenoptera, Ichneumonidae). *Acta Entomologica Bulgarica*, 1: 37-41.
- Pekel, S., Kolarov J. & Özbek, H.** 2000. New records of the subfamily Banchinae (Hymenoptera, Ichneumonidae) from Turkey. *Journal of the Entomological Research Society*, 2 (3): 1-4.

- Rasnitsyn, A. P. & Siitan, U. V.** 1981. Ichneumoninae. In: A guide to the identification of insects of the European part of the USSR. (ed. D.R. Kasparyan, Vol. 3. Hymenoptera Moscow, Nauka Press, pp. 668.
- Riedel, M.** 2008a. Die *Coelichneumon*-Arten (Hymenoptera, Ichneumonidae, Ichneumoninae) des Biologiezentrums Linz, Austria. Linzer Biologische Beiträge, 40 (2): 1839-1859.
- Riedel, M.** 2008b. Revision der westpaläarktischen Platylabini 1. Die Gattung *Platylabus* (Wesmael, 1845). Spixiana, 31: 105-172.
- Riedel, M., Çoruh, S. & Özbek, H.** 2010. Contribution to the Ichneumoninae (Hymenoptera, Ichneumonidae) fauna of Turkey, with description of three new species. Turkish Journal of Entomology, 34 (2): 1-26.
- Riedel, M., Çoruh, S. & Özbek, H.** 2011. New records and little-known Ichneumoninae (Hymenoptera: Ichneumonidae) from Turkey, with description of the male of *Melanichneumon glaucatorlops* Heinrich. Journal of the Entomological Research Society, 13 (3): 105-112.
- Townes, H.** 1969. The genera of Ichneumonidae, Part 1. Mem. American Entomological Institute, 11: 1-300.
- Townes, H. T. & Townes, M.** 1978. Ichneumon-flies of America North of Mexico: 7. Subfamily Banchinae, tribes Lissonotini and Banchini. Mem. American Entomological Institute, 26: 1-614.
- Yu, D., Van Achterberg, K. & Horstmann, K.** 2005. World Ichneumonoidea 2004. CD-ROM, Taxapad, Vancouver.
- Yurtcan, M., Beyarslan, A. & Kolarov, J.** 1999. Investigations on the Ichneumonidae (Hymenoptera) fauna of Turkey. V. Diplazontinae and Ichneumoninae. Acta Entomologica Bulgarica, 5 (1): 34-36.