

Short communication

***Syzeuctus irrisorius* (Hymenoptera: Ichneumonidae: Banchinae): New genus and species record for the fauna of Iran**

Negar Bahremand¹, Mohammad Khayrandish^{1&*},
Abbas Mohammadi-Khoramabadi² & Reijo Jussila³

1- Department of Plant Protection, College of Agriculture, Shahid Bahonar University of Kerman, Kerman, Iran, 2- Department of Plant Production, College of Agriculture and Natural Resources of Darab, Shiraz University, Darab, Iran & 3- Zoological Museum, Biodiversity Unit, University of Turku, Finland.

* Corresponding author, E-mail: m.khayrandish@uk.ac.ir

***Syzeuctus irrisorius* (Hymenoptera: Ichneumonidae: Banchinae). گزارش یک جنس و**

گونه جدید برای فون ایران

نگار بهره‌مند^۱، محمد خیراندیش^{۱*}، عباس محمدی خرم‌آبادی^۲ و ریجو جوسیلا^۳

۱- گروه گیاه‌پزشکی، دانشکده کشاورزی، دانشگاه شهید باهنر کرمان، کرمان، ۲- گروه تولیدات گیاهی، دانشکده کشاورزی و منابع طبیعی، دانشکده کشاورزی داراب، دانشگاه شیراز، داراب و ۳- موزه جانورشناسی، بخش تنوع‌زیستی، دانشگاه تورکو، فنلاند.

* مسئول مکاتبات، پست الکترونیکی: m.khayrandish@uk.ac.ir

چکیده

مطالعه فونستیک زنبورهای زیرخانواده (Hymenoptera: Ichneumonidae) Banchinae در جنوب استان کرمان، در سال‌های ۱۳۹۳ و ۱۳۹۴ با استفاده از ۸ تله مالیز در شهرستان‌های جیرفت و فاریاب انجام شد. سه گونه از این زیرخانواده به نام‌های *Exetastes adpersorius* (Thunberg, 1824) و *Lissonota pleuralis* Brischke, 1880 و *Syzeuctus irrisorius* (Rossi, 1794) جمع‌آوری و شناسائی گردیدند. گونه *L. pleuralis* برای استان کرمان و جنس و گونه *S. irrisorius*، برای فون ایران گزارش جدید می‌باشند.

واژگان کلیدی: Ichneumonidae, Banchinae, *Syzeuctus irrisorius*. ایران، کرمان.

دریافت: ۱۳۹۶/۴/۱۲، پذیرش: ۱۳۹۶/۵/۱۵.

The Banchinae Wesmael, 1845 (Hymenoptera: Ichneumonidae) is a large and species rich ichneumonid subfamily with about 1758 species (Yu *et al.*, 2012). All members of this subfamily are koinobiont endoparasitoids of Lepidoptera (Quicke, 2014). The fauna of Banchinae of Iran has been poorly studied with only 21 banchine species (Masnadi-Yazdinejad *et al.*, 2010; Barahoei *et al.*, 2012; Barahoei *et al.*, 2014; Sarafi *et al.*, 2015; Amiri *et al.*, 2016; Mohammadi-Khoramabadi *et al.*, 2016b; Mohebban *et al.*, 2016).

This study was intended to collect and identify species of the subfamily Banchinae in Jiroft and Faryab counties, Kerman province, southeast of Iran between 2014 and 2015. We set up eight Malaise traps in different habitats and preserved the specimens in 70% ethanol. Later, the collected specimens were removed from alcohol and pinned. Identifications were made by the fourth author (R J). Specimens are deposited in the insect collection of Shahid

Bahonar University of Kerman, Iran, and private ichneumonid collection of R. Jussila, Finland. New records for Kerman province and Iran were marked with one and two asterisks, respectively.

***Exetastes adpersorius* (Thunberg, 1824)**

Material examined: IRAN, Kerman province, Faryab county, Faryab (N 28° 05', E 57° 13', 640m a.s.l.), 12.V.2013, 1♀, Leg.: N. Bahremand.

Distribution within Iran: Fars (Sarafi *et al.*, 2015) and Kerman (Mohebban *et al.*, 2016) provinces.

Distribution: Algeria, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, China, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Jordan, Kazakhstan, Latvia, Lithuania, Moldova, Mongolia, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain (including Canary Islands), Sweden, Switzerland, Tunisia, Turkey, Ukraine, United Kingdom (Yu *et al.*, 2012).

Lissonota pleuralis* Brischke, 1880

Material examined: IRAN, Kerman province, Faryab county, Faryab (N 28° 05', E 57° 13', 640m a.s.l.), 20.IV.2014, 1♀, Leg.: N. Bahremand.

Distribution within Iran: Khorasan-e-Razavi (Barahoei *et al.*, 2014) and Kerman (current study) provinces.

Distribution: Bulgaria, China, Czech Republic, France, Germany, Hungary, Latvia, Lithuania, Moldova, Netherlands, Poland, Romania, Russia, Slovakia, Sweden, Switzerland, Turkey and United Kingdom (Yu *et al.*, 2012).

Syzeuctus irrisorius* (Rossi, 1794)*

Material examined: IRAN, Kerman province, Faryab county, Faryab (N 28° 05', E 57° 13', 640m a.s.l.), 20.IV.2014, 1♀, Leg.: N. Bahremand.

Distribution: Austria, Bulgaria, Croatia, Czech Republic, former Yugoslavia, France, Romania, Slovakia, Spain, Turkey, United Kingdom (Yu *et al.*, 2012) and Iran (New Record).

Diagnosis: body length 9 mm; head with gena about as long as basal width of mandible, clypeus as high as wide, antenna with apical flagellomeres transverse; fore wing and hind wing apically dark; propodeum without carinae; metasoma with tergites 2 and 3 as long as wide; tergites 1-5 black with a posterior yellow margin.

The members of the subfamily Banchinae in Iran and Kerman province increases to 22 and 3 species, respectively (Masnadi-Yazdinejad *et al.*, 2010; Barahoei *et al.*, 2012; Barahoei *et al.*, 2014; Sarafi *et al.*, 2015; Amiri *et al.*, 2016; Mohammadi-Khoramabadi *et al.*, 2016b; Mohebban *et al.*, 2016). Kerman province with an area of 180,726 km² comprises nearly 11% of Iran's land. The ichneumonid fauna of this region is relatively

better known thanks to the previous studies by Bakhtiarinasab *et al.*, 2014; Mahyabadi *et al.*, 2016a & b; Mohammadi-Khoramabadi *et al.*, 2014; Mohammadi-Khoramabadi *et al.*, 2016a and Mohebban *et al.*, 2016.

References

- Amiri, A., Talebi, A., Rey Del Castillo, C., Rakhshani, E. & Hajiqanbar, H.** (2016) Study of the genus *Lissonota* (Hymenoptera: Ichneumonidae: Banchinae) in southern Iran. *Journal of Entomological Society of Iran* 36, 89–99.
- Bakhtiarinasab, F., Khayrandish, M. & Mohammadi-Khoramabadi, A.** (2014) First record of *Homotropus elegans* (Hymenoptera: Ichneumonidae: Diplazontinae) from Iran. *Journal of Entomological Society of Iran* 34, 77.
- Barahoei, H., Rakhshani, E., Fathabadi, K. & Moradpour, H.** (2014) A survey on the fauna of Ichneumonidae (Hymenoptera) associating with alfalfa fields of Khorasan Razavi province. *Iranian Journal of Animal Biosystematics* 10, 145–160.
- Barahoei, H., Rakhshani, E. & Riedel, M.** (2012) A checklist of Ichneumonidae (Hymenoptera: Ichneumonidae) from Iran. *Iranian Journal of Animal Biosystematics* 8, 83–132.
- Mahyabadi, M., Khayrandish, M., Takaloozadeh, H.M. & Barahoei, H.** (2016a) Faunistic study of the subfamily Cryptinae (Hymenoptera: Ichneumonidae) in Jiroft, Kerman province. *Abstracts of 22nd Iranian Plant Protection Congress, Tehran University, Iran*, p. 458.
- Mahyabadi, M., Khayrandish, M., Takaloozadeh, H.M. & Barahoei, H.** (2016b) A checklist of Iranian Cryptinae (Hymenoptera: Ichneumonidae). *Journal of Insect Biodiversity and Systematics* 2, 449–466.
- Masnadi-Yazdinejad, A., Jussila, R. & Riedel, M.** (2010) The Iranian fauna of the subfamilies Acaenitinae, Banchinae, Campopleginae, Ophioninae and Tryphoninae (Hymenoptera: Ichneumonidae) with some new records. *Entomologica Fennica* 21, 70–83.
- Mohammadi-Khoramabadi, A., Hesami, S. & Shafiei, S.** (2016a) A contribution to the knowledge of the fauna of Ichneumonidae in Rafsanjan county of Kerman province, Iran. *Entomofauna* 37, 453–468.
- Mohammadi-Khoramabadi, A., Kamangar, S.A. & Lotfalizadeh, H.** (2016b) Ichneumonid parasitoids of *Tortrix viridana* (Lepidoptera: Tortricidae) in the west of Iran. *Linzer Biologische Beiträge* 48, 681–691.
- Mohammadi-Khoramabadi, A., Ziaaddini, M. & Asadi, A.** (2014) A faunal study on the parasitoid wasps of Pimpliformes (Hymenoptera: Ichneumonidae) in Kerman province, Iran. *3rd Integrated Pest Management Conference (IPMC), Kerman, Iran*, pp. 352–359.

-
- Mohebban, Sh., Barahoei, H., Takalloozadeh, H.M., Madjdzadeh, S.M. & Riedel, M.** (2016) A survey of the Ichneumonidae (Hymenoptera: Ichneumonoidea) of Kerman province, south-east Iran. *Journal of Insect Biodiversity and Systematics* 2, 419–437.
- Quicke, D.L.J.** (2014) *The Braconid and Ichneumonid Parasitoid Wasps: Biology, Systematics, Evolution and Ecology*. 1-733 pp. Wiley Online Library.
- Sarafi, T., Barahoei, H., Madjdzadeh, S.M. & Askari, M.** (2015) A contribution to the knowledge of the Ichneumonidae (Hymenoptera: Ichneumonoidea) from Neyriz county of Fars province, Iran. *Journal of Crop Protection* 4, 643–654.
- Yu, D.S., Van Achterberg, K. & Horstmann, K.** (2012) *World Ichneumonidae 2011. Taxonomy, Biology, Morphology and Distribution*. Ottawa, Ontario, Canada, Available from: <http://www.taxapad.com/> (Accessed 25 February 2017).
-