



An investigation on genus *Chersotis* Boisduval, 1840 in Iran

Ehsan Kazemi^{1*}, Peyman Rajaei²

¹*Young Researchers and Elite Club, Kerman Branch, Islamic Azad University, Kerman, Iran*

²*Kerman Branch, Islamic Azad University, Kerman, Iran*

Article published on July 27, 2014

Key words: Fauna, *Chersotis* Boisduval, Iran.

Abstract

In this paper, the distribution of the *Chersotis* species from Iran are listed. Original data and published data by the author have been used as well.

*Corresponding Author: Ehsan Kazemi ✉ ekazemi.kazemi86@gmail.com

Introduction

This genus belonging to subfamily Noctuinae of family Noctuidae of Lepidoptera. Boisduval (1840) described this genus based on the typical species *C. rectangulara* (Denis & Schiffermüller, 1775). The first time, Iranian *Chersotis* (*Ch. capnistis* (Lederer) was described by Lederer (1872) from north of Iran. lately, other experts illustrated and described more taxa of this genus in Iran e.g (Schwingenschuss, 1937, Brandt, 1938, Brandt, 1941, Sheljuzhko, 1955, Dufay and Varga, 1995, Gyulai and Varga, 2006, Hacker 1990; Hacker and Meineke 2001; Ebert and Hacker 2002). The species of this genus live mostly in xerothermophilic habitats. They hibernate mostly as larvae. *Chersotis* species feed various species from the

genera *Vicia*, *Trifolium*, *Plantago*, *Galium*, *Asperula*, *Cirsium* etc. This paper contains 25 species of the genus *Chersotis* Boisduval, 1840 in Iran as well as the distribution in Iran 's provinces.

Material and method

Materials of *Chersotis* were collected by portable light trap systems (powered by batteries 12 volt 8 watt Black light UVB tubes) in Iran (specially south and southeast). Genitalia of both sexes were erected and stain in eosin yellowish and mounted in canadabalsam. Genitalia of the collected specimens were prepared for the study according to the method cited in Fibiger (1997) with little changes.



Fig 1. The map shows provinces of Iran.

Genus: *Chersotis* Boisduval, 1840

Chersotis Boisduval, 1840, *Genera Index Meth Eur. Lepid.*: **103**. Type species: *Noctua rectangulara* [Denis & Schiffermüller], 1775. L. t.: Austria, Vienna district.

Chersotis anachoreta forsteri Sheljuzhko, 1955

Chersotis anachoreta forsteri, Sheljuzhko, 1955, *Mitt. Munch. Ent. Ges.* **45**: 277. L. t.: Elburz Mountains.

Distribution: Elburz Mountains (Holik & Sheljuzhko, 1955).

Chersotis firdussi Schwingenschuss, 1937

Chersotis firdussi Schwingenschuss, 1937, *Z. Oster. Ent. Ver.* **22**: 58. L. t. Elburz Mountains.

Distribution: Tehran (Schwingenschuss, 1937), Lorestan, Khorasan, Fars (Ebert & Hacker, 2002)

***Chersotis alpestris ponticola* (Draudt, 1936)**

Rhyacia alpestris ponticola Draudt, 1936, *Ent. Rdsch.* **53**: 469. L. t.: Turkey, Aksehir, Sultan Dag.

Distribution: Mazandaran, Tehran, Lorestan, Khorasan (Ebert & Hacker, 2002).

***Chersotis multangula subdissoluta* (F. Wagner, 1931)**

Agrotis multangula subdissoluta F. Wagner, 1931, *Int. Ent. Z. Guben* **24**: 474. L. t.: Turkey, Aksehir.

Distribution: Tehran, Lorestan (Ebert & Hacker, 2002).

***Chersotis semna* (Pungeler, 1906)**

Agrotis semna Pungeler, 1906, *Dt. Ent. Z. Iris.* **19**: 85. L. t.: Aschabad.

Distribution: Gilan, Fars, Lorestan (Ebert & Hacker, 2002), Sistan va Balouchestan.

***Chersotis juvenis* (Staudinger, 1901)**

Agrotis juvenis Staudinger, 1901, *Cat. Lep. Palaearkt. Faunengeb.* **1**: 141. L. t.: Turkey, Taurus, Zeytun. (Synonym: *caelebs* Staudinger, 1900; *clarivenosa* Draudt, 1936)

Distribution: Tehran, Kordestan, Lorestan (Ebert & Hacker, 2002).

***Chersotis binaloudi* Brandt, 1941**

Chersotis binaloudi Brandt, 1941, *Mitt. Munch. Ent. Ges* **31**: 845. L. t.: Iran, Khorasan.

Distribution: Khorasan (Brandt, 1941), Fars.

***Chersotis hahni* (Christoph, 1885)**

Agrotis hahni Christoph, 1885, *In Romanoff Mem. Lep.* **2**: 33. L. t.: Nordpersien, Schahkuh, Russ. Armenien, Ordubad.

Distribution: Tehran (Ebert & Hacker, 2002), Fars, Sistan va Balouchestan.

***Chersotis nitens* Brandt, 1941**

Chersotis nitens Brandt, 1941, *Mitt. Munch. Ent. Ges.* **31**: 845. L. t.: Iran, Khorasan.

Distribution: Khorasan (Brandt, 1941).

***Chersotis capnistis* (Lederer, 1872)**

Agrotis capnistis Lederer, 1872, *Horae Soc. Ent. Ross.* **8**: 14. L. t.: Iran, Astrabad. (Synonym: *Agrotis neara* Pungeler, 1906)

Distribution: Golestan (Lederer, 1872), Tehran (Ebert & Hacker, 2002), Fars.

***Chersotis margaritacea* (Villers, 1789)**

Noctua margaritacea Villers, 1789, *Linn. Ent.* **2**: 272. L. t.: France, Lyon.

(Synonyms: *i-intactum* Hubner [1803]; f. *dequadrata* Dannehl, 1929; f. *pura* Dannehl, 1929; f. *signata* F. Wagner, 1932; f. *abruzzensis* Corti & Draudt, 1933; *espunensis* Calle, 1982)

Distribution: Gilan (Ebert & Hacker, 2002).

***Chersotis sterilis* (Brandt, 1938)**

Agrotis sterilis Brandt, 1938, *Ent. Rdsch.* **55**: 503. L. t.: Iran, Fars.

Distribution: Fars (Brandt, 1938), Kerman.

***Chersotis cryptographa* Varga & Gyulai, 2002**

Chersotis cryptographa Varga & Gyulai, 2002, *Esperiana* **8**: 215. L. t.: Iran, Kohkiluyeh va Boyer-Ahmad.

Distribution: Kohkiluyeh va Boyer-Ahmad (Varga & Gyulai, 2002).

***Chersotis ebertorum* Kokak, 1980**

Chersotis ebertorum Kokak, 1980, *Nota. Lepid.* **2**: 144. L. t.: Turkey, Maras.

(Synonym: *maraschi* Corti et Draudt, 1933)

Distribution: Sistan va Balouchestan.

***Chersotis elegans* (Eversmann, 1837)**

Agrotis elegans Eversmann, 1837, *Bull. Soc. Imp. Nat. Moscow* **1837**: 33. L. t.: Russia, Sarepta.

(Synonyms: *grammiptera* Rambur, 1839; *cancellata* Freyer, 1839; *ragonensis* Schwingenschuss, 1962)

Distribution: North of Iran (Hacker, 1990).

***Chersotis eberti* Dufay & Varga, 1995**

Chersotis eberti Dufay & Varga, 1995, *Acta Zoologica Hungarica* **41(1)**: 35. L. t.: Iran, Fars.

Distribution: Tehran, Lorestan, Fars (Ebert & Hacker, 2002).

***Chersotis anatolica* (Draudt, 1936)**

Rhyacia elegans ssp. *anatolica* Draudt, 1936, *Ent. Rdsch.* **53**: 469. L. t.: Turkey, Aksehir, Sultan Dagh.

(Synonyms: *elegantula* Boursin, 1945; *elegans* sensu Dufay, 1981; *iranica* Schwingenschuss, 1955; *majellensis* Dannehl (nomen nudum))

Distribution: Tehran, Lorestan (Ebert & Hacker, 2002).

***Chersotis larixia erebina* (Boursin, 1940)**

Rhyacia larixia erebina Boursin, 1940, *Mitt. Munch. Ent. Ges* **30**: 495. L. t.: Daghestan.

Distribution: Tehran, Mazandaran, Khorasan (Ebert & Hacker, 2002).

***Chersotis gratissima gratissima* (Corti, 1932)**

Agrotis gratissima Corti, 1932, *Int. Ent. Z.* **26**: 152. L. t.: Turkey, Aksehir.

Distribution: Markazi (Ebert & Hacker, 2002).

***Chersotis gratissima zaghros* Gyulai & Varga, 2006**

Chersotis gratissima zaghros Gyulai & Varga, 2006, *Esperiana* **12**: 271. L. t.: Iran, Kohkiluyeh va Boyer-Ahmad, Esfahan.

Distribution: Kohkiluyeh va Boyer-Ahmad, Esfahan (Gyulai & Varga, 2006).

***Chersotis fimbriola raddei* (Christoph, 1877)**

Agrotis raddei Christophe, 1877, *Horae. Soc. Ent. Ross.* **12**: 246. L. t.: Iran, Shahkouh.

Distribution: Golestan (Christoph, 1877), Tehran, Zanjan, Azarbayjan-e-Gharbi, Lorestan, Kordestan (Ebert & Hacker, 2002), Fars.

***Chersotis laeta euxinia* Hacker & Varga, 1990**

Chersotis laeta euxinia Hacker & Varga, 1990, *Spixiana*, 13:

Distribution: Tehran, Fars.

***Chersotis illauta* (Draudt, 1936)**

Agrotis illauta Draudt, 1936, *Ent. Rdsch.* **53**: 465. L. t.: Turkey, Sultan Dagh, Maras.

Distribution: Tehran (Ebert & Hacker, 2002), Fars

***Chersotis glebosa* (Staudinger, 1900)**

Agrotis glebosa Staudinger, 1900, *Dt. Ent. Z. Iris.* **12**: 359. L. t.: Turkey, Zeitun.

Distribution: Tehran (Ebert & Hacker, 2002).

***Chersotis sarhada* Brandt, 1941**

Chersotis sarhada Brandt, 1941, *Mitt. Munch. Ent. Ges.* **31**: 845. L. t.: Iran, Khorasan, Balouchestan.

Distribution: Khorasan, Sistan va Balouchestan (Brandt, 1941), Azarbayjan-e-Gharbi.

***Chersotis curvispina* Boursin, 1961**

Chersotis curvispina Boursin, 1961, Beitr. Naturk. Forsch. SW-Deutschl. 19: 373. L. t.: Kopet-Dagh (S Turkmenistan).

Distribution: Khorasan-e-Razavi (Rabieh, *et al.*, 2013)

Acknowledgments:

I would like to thank of Mrs. S. Mohamadzade and Mr. S. Farzan for her assistance in collecting the materials used for this paper.

References

Boursin C. 1961. Ergebnisse der Deutschen Afghanistan- Expedition 1956 der Landessammlungen für Naturkunde Karlsruhe. Beiträge zur naturkundlichen Forschung in Südwestdeutschland **19**, 373–398.

Brandt W. 1938. Beitrag zur Lepidopteren-fauna von Iran. Entomologische Rundschau. **55**, 503–504.

Brandt W. 1941. "Beitrag zur Lepidopteren-Fauna von Iran (3). Neue Agrotiden nebst Faunenverzeichnissen Mitteilungen der Münchner Entomologische Gesellschaft **31**, 835–863.

Ebert G, Hacker HH. 2002. "Beitrag zur Fauna der Noctuidae des Iran: Verzeichnis der bestände im staatlichen Museum für Naturkunde Karlsruhe, taxonomische Bemerkungen und beschreibung neuer Taxa." Esperiana **9**, 237–409.

Fibiger M. 1997. Noctuinae III. – Noctuidae Europaeae. Denmark: Entomological Press.

Gyulai P, Varga Z. 2006. New Taxa of Noctuidae, Noctuinae from Iran and Central Asia (Lepidoptera). Esperiana **12**, 271–281.

Hacker HH. 1990. Die Noctuidae Vorderasiens (Lepidoptera), Systematische Liste mit einer Übersicht über die Verbreitung unter besonderer Berücksichtigung der Fauna der Türkei (einschließlich der Nachbargebiete Balkan, Südrussland, Westtukestan, Arabische albinsel, Ägypten). Neue Entomologische Nachrichten **27**, 1–707.

Hacker H, Meineke JU. 2001. Beitrag zur Fauna der Noctuidae des Iran: Ergebnisse von Forschungen der Jahre 1998 bis 2000 (Lepidoptera). Esperiana **8**, 791–810

Lederer J. 1872. Nachtrag zum verzeichnis der von Herrn Jos. Haberhauer bei Astrabad in Persian gesammelten schmetterlinge. *Horae Societatis Entomologicae Rossicae* **8**, 3–27.

Schwingenschuss L. 1937. Weitere Neuheiten aus Nord-Persien. Zeitschrift der Österreichische Entomologische Vereins **22**, 57–60.

Varga Z, Gyulai P, Miatleuski J. 2002. New Species of Noctuidae, Noctuinae from Iran and Central Asia. Esperiana **9**, 207–225.

Holik o, Sheljuzhko L. 1955. Über die Zygaenen-Fauna Osteuropas, Kleinasiens, Irans, Zentralasiens und Sibiriens. Mitteilungen der Münchner Entomologische Gesellschaft **44/45**, 26-158.

Rabieh MM, Esfandiari M, Seraj AA, Rajaei H. 2013. New record of *Chersotis curvispina* Boursin, 1961 (Lepidoptera: Noctuidae) in Iran. Zoology and Ecology **23(2)**, 111-114.