

Geometridae of Turkey 5. Data on 38 new Turkish Geometridae species (Lepidoptera)

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Abstract. In the provisional list of Geometridae of Turkey several species are marked as new for the Turkish fauna. In this paper full data of these species are given.

Samenvatting. Geometridae uit Turkije 5. Gegevens over 38 nieuwe Geometridae soorten voor Turkije (Lepidoptera)
Op de voorlopige lijst van de Turkse Geometridae zijn een aantal soorten aangeduid als nieuw voor de Turkse fauna. Van deze soorten worden in dit artikel de volledige gegevens vermeld.

Résumé. Geometridae de Turquie 5. Données sur 38 espèces de Geometridae nouvelles pour la Turquie (Lepidoptera)
Dans la liste provisoire des Géomètres de Turquie plusieurs espèces sont mentionnées comme nouvelles pour la faune turque. Dans la présente note les informations sur ces espèces sont données.

Key words: Geometridae - Turkey - faunistics.

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I. Introduction

The following Geometridae species were mentioned by me (Riemis 1994) from Turkey for the first time. Full information on localities and dates of capture is given. It is remarkable that almost all new species were found in the North-East of Turkey. Consulting the works of Viidalepp (1976, 1979) and Vardikjan (1985) learns that many of the new species occur in Armenia (Vardekjian), the Caucasus and Transcaucasia (Viidalepp). So the populations in the North-East of Turkey make part of their natural range of distribution. The major reason that these species are now mentioned for the first time seems that so far hardly anybody has paid attention to the Geometrid fauna in this part of Turkey. Unless stated otherwise, the indication "mentioned by Vardikjan" means that the species is known from Armenia and "mentioned by Viidalepp" means that the species is known from the Caucasus **and** from Transcaucasia.

Specimens of all mentioned species are present in my collection. On my request for help and collaboration I got several reactions for which I am very grateful. But I was completely astonished by the reaction of Prof. Dr. A.O. Koçak from Ankara. Within three weeks (!) he managed to publish comments on my paper (Koçak 1994), a prestation which may frustrate many editors of entomological periodicals. This "answer by return" is even more astonishing regarding the fact that several letters sent to him before and after publication always remained unanswered. Publishing a paper seems the only way to get to him. Anyway, thanks to Prof. Dr. A.O. Koçak's remarks, I know now that the following nine species had already been mentioned from Turkey before. So, the asterisk indicating them as new for the Turkish fauna in my paper (Riemis 1994) has to be deleted. These nine species are:

Geometra papilionaria Linnaeus
Rhodostrophia sieversi Christoph
Epirrhoe alternata Müller
Euphyia biangulata Haworth
Trichodezia haberhaueri Lederer
Gnopharmia rubraria Staudinger
Gnophos obfuscata Denis & Schiffermüller
Selenia lunularia Hübner
Aspitates gilvaria Denis & Schiffermüller

Species found in the literature with indications as "Asia Minor", "Western Asia", "Mesopotamia" without exact locality within the present borders of Turkey are not withold in my list. Species from the "Turkish part" of Cyprus have also been omitted.

II. List of species

Chlorissa pretiosaria Staudinger. Artvin: Yusufeli, Çoruh Valley, 900 m, 4/15-VII-1991, 1 ex.; Env. Kiliçkaya, 14-20 km SW of Yusufeli 1000 m. 19-VII-1993, 1 ex.; 2.5 km W of Yusufeli, 900 m, 22-VII-1993, 2 ex.; Kaçkar dağları, 30 km SW Sarıgöl, 2000 m. 5-VIII-1993, 1 ex.

Mentioned by Vardikjan and Viidalepp.

Chlorissa asphaleia Wiltshire. Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 3 ex.; Van: 10 km SW Çatak, 1500 m. 6-VII-1992, 1 ex.

Not mentioned by Vardikjan. Viidalepp notes Transcaucasia and North-Iran, from where this species has been described by Wiltshire in 1966.

Idaea biselata Hufnagel. Rize: 10 km S of Of, 200 m, 17-VII-1989, 1 ex.

Mentioned by Vardikjan and Viidalepp.

Idaea fathmaria Oberthür. Hakkari: 10-25 km SW Hakkari, Zab River Valley, 1000-1300 m, 16/26-VI-1990, 1 ex.

Not mentioned by Vardikjan and Viidalepp.

Scopula tessellaria Boisduval. Bayburt: Kopdağı Geçidi, 2100-2300 m. 20/22-VII-1989, 2 ex.; ibid., 2200-2400 m. 14-VII-1991, 2 ex. Erzurum: Palandöken, 5 km S of Erzurum, 2200-2500 m, 30-VI-1991, 1 ex.

Mentioned by Vardikjan. Viidalepp mentions Transcaucasia.

Scopula orientalis Alpheraky. Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 1 ex.; Erzurum: Road Erzurum-İspir, 10 km SW of Ovaçık, 2300 m, 2/12-VII-1991, 2 ex.; Artvin: 8-10 km S of Yusufeli, Çoruh Valley, 900-1000 m, 4/9-VII-1991, 2 ex.

Mentioned by Vardikjan and Viidalepp.

Xanthorrhoe munitata Hübner. Kars: Ilgardağı Geçidi, 18 km S of Posof, 2500-2800 m, 18/20-VII-1989, 1 ex.; Gümüşhane: Kopdağı Geçidi, West-side, 2400-2600 m, 22-VII-1993, 1 ex.; 2-5 km Road to Şırnak, 1100 m, 24-VII-1993, 1 ex.

Mentioned by Vardikjan and Viidalepp.

Scotopteryx moeniata Scopoli. Artvin: Kaçkar dağları, 30 km SW Sarıgöl, 2000m, 5-VIII-1993, ca 100 ex.; 5 km S Veliköy, 1200 m. 8-VII-1993, 12 ex.; Kaçkar dağları, 5-15 km NW Meydancik, 1800-2000 m, 1-VIII-1993, 20 ex.

Not mentioned from Armenia by Vardikjan, but Viidalepp mentions Caucasus and Transcaucasia.

Scotopterys alpheraki Erschoff. Erzurum: Rd. Erzurum-İspir, 10 km SW of Ovaçık, 2300 m, 2/12-VII-1991, 2 ex.; Artvin: Kaçkar dağları, 30 km SW of Sarıgöl, 2000 m, 15/18-VII-1991, 30 ex.; Gümüşhane: Kopdağı Geçidi, West-side, 2400-2600 m, 22-VII-1993, 4 ex.

Mentioned by Vardikjan and Viidalepp.

Entephria ignorata Staudinger. Bitlis: Nemrut Dağı, 2100-2400 m, 30/31-VII/1-VIII-1988, 5 ex.; Gümüşhane: Kopdağı Geçidi, West-side, 2400-2600 m, 22-VII-1993, 1 ex.; Niğde: Aladağ, 18 km SE of Çamardı, 1800-2100 m, 27-VII-1983, 10 ex.

Not mentioned by Vardikjan. Viidalepp mentions Caucasus and North-Iran.

Epirrhoe molluginata Hübner. Erzurum: Rd. Erzurum-İspir, 10 km SW of Ovaçık, 2300 m, 2/12-VII-1991, 12 ex.

Mentioned by Viidalepp.

Philereme vetulata Denis & Schiffermüller. Artvin: 8-10 km S of Yusufeli, Çoruh Valley, 900-1000 m, 4/9-VII-1991, 1 ex.; 12 km ESE Ardanuç, 1200 m, 8-VII-1991, 1 ex.; Gümüşhane: 2-5 km Road to Şırnak, 1100 m, 24-VII-1993, 1 ex.

- Mentioned by Vardikjan and Viidalepp.
Hydriomene furcata Thunberg. Kars: 3-5 km S of Posof, 1700-1800 m, 31-VII-1993, 1 ex.
 Mentioned by Vardikjan and Viidalepp.
Hydriomena coeruleata Fabricius. Artvin: Kaçkar dağları, 5-15 km NW Meydançik, 1800-2000 m, 1-VIII-1993, 1 ex.
 Not mentioned by Vardikjan. Viidalepp mentions the species from Iran.
Perizoma parahydrata Alberti. Artvin: Kaçkar dağları, 24-30 km SW Sarıgöl, 2000 m, 15/20-VII-1993, 3 ex.; Kars: 7-10 km SE Sarıkamış, 2000 m, 8-VIII-1993, 1 ex.; Çamlıçatak, 11 km E of Ardahan, 2100 m, 8-VIII-1993, 1 ex.
 Mentioned by Vardikjan and Viidalepp.
Perizoma albulata Denis & Schiffermüller. Trabzon: 30 km E of Trabzon, 0-100 m, 10-VI-1987, 1 ex.; Kars: 7-10 km SE Sarıkamış, 2000 m, 20/24-VII-1990, 1 ex.; ibid., 10/14-VII-1989, 1 ex.
 Mentioned by Vardikjan and Viidalepp.
Stammnodes depeculata Lederer. Bayburt: Kopdağı Geçidi, 2100-2300 m, 20/22-VII-1989, 2 ex.; ibid., 2200-2400 m, 14-VII-1991, 1 ex.; ibid., 2400-2600 m, 22-VII-1993, 1 ex.
 Not mentioned by Vardikjan. Viidalepp mentions this species from the Caucasus and Transcaucasia. The specimens from the Kop Dağ belong to the nominate subspecies, as do the specimens from Transcaucasia. According to Viidalepp the Caucasus specimens belong to ssp. *narzhanica* Alpheraki. *S. depeculata* is widespread in Asia, and many subspecies have been described.
Chloroclysta truncata Tengström. Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 2 ex.
 Not mentioned by Vardikjan, nor by Viidalepp. Skou (1986) mentions Asia Minor in the distribution range of the species.
Thera obeliscata Hübner. Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 3 ex.; ibid., 10/14-VII-1989, 3 ex.
 Not mentioned by Vardikjan. According to Viidalepp the presence of this species is doubtful in the Caucasus, but he mentions Transcaucasia.
Thera albonigrata Höfer. Bursa: Ulu Dağ, 2000 m, 23-IX-1990, 4 ex.
 This species is probably more widespread in Turkey, and some earlier records of "variata" may actually refer to this species.
Thera cognata Thunberg. Artvin: Kaçkar dağları, 30 km SW of Sarıgöl, 2000 m, 15/18-VII-1991, 1 ex.; ibid., 5-VIII-1993, 3 ex.
 Not mentioned by Vardikjan. According to Viidalepp its presence is doubtful in the Caucasus, but he mentions Transcaucasia.
Eupithecia mesogrammata Dietze. Bitlis: Nemrut Dağı, 2200 m, 21/22-VI-1990, 1 ex.
 Mentioned by Vardikjan. Viidalepp mentions Transcaucasia and North-Iran.
Eupithecia subfuscata Haworth. Artvin: 12 km ESE of Ardanuç, 1200 m, 8-VII-1991, 1 ex.; Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 1 ex.
 Not mentioned by Vardikjan, but mentioned by Viidalepp.
Eupithecia icterata de Villers. Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 3 ex.
 Mentioned by Vardikjan. Viidalepp mentions this species from the Crimea, Transcaucasia and Iraq.
Eupithecia ochrovittata Christoph. Kars: Sarıkamış, 2000 m, 4-VIII-1989, 1 ex.
 Mentioned by Vardikjan. Viidalepp mentions Transcaucasia.
Schistostegè nubilaria Hübner. Kars: 7-10 km S of Sarıkamış, 2000 m, 28-VII-1993, 1 ex.
 Mentioned by Vardikjan. Viidalepp mentions the Caucasus and North-Iran.

- Aplocera dervenaria* von Mentzer. Adana: Nurdağı Geçidi, 1100 m, 27/28-IX-1991, 7 ex.
This species was described by von Mentzer from Macedonia, Derven pass, 30-VIII-1975 (above Prilep) and Kastalanovo, 16/17-IX-1974, also in Macedonia. So far this species is only known from those localities. The species occurs also in Bulgaria, as I found some specimens of it in a parcel which I received from J. Ganey, Sofia. The discovery of this species in South-Turkey proves that *dervenaria* is much more widespread than known hitherto.
- Calospilis pantaria* Linnaeus. Bitlis: Sarikonak, 1100 m, 29-VII-1988, 4 ex.; Hakkari: 20 km WNW of Yüksekova, 1800 m, 10-VII-1990, 2 ex.
Mentioned by Vardikjan. Viidalepp mentions Transcaucasia.
- Semiothisa rippertaria* Duponchel. Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 2 ex.
Not mentioned by Vardikjan. Viidalepp doesn't mention the presence of this species in the neighbourhood of Turkey. *S. rippertaria* is a very local species. The most nearby known locations are Transcaucasia and the South-East of Russia (Seitz).
- Itame wauaria* Linnaeus. Artvin: Kaçkar dağları, 30 km SW Sarıgöl, 2000 m, 5-VIII-1993, 1 ex.
Not mentioned by Viidalepp. Vardikjan mentions the species from Armenia.
- Rhoptria poggearia* Lederer. As shown by Haussman (1993) this species does not occur in Turkey. The specimens from Turkey, thus far regarded as *R. poggearia*, are in fact *Steeegania wolffi* (Haussman, 1993).
- Gnophos pseudosnelleni* Rjabov. Bitlis: Nemrut Dağı, 2100-2400 m, 30/31-VII-1988, 8 ex.; 12 km E of Resadiye, 1800 m, 29-VII-1992, 1 ex.; Tunceli: 5 km S of Tanyeri, 1200 m, 21-VII-1991, 1 ex.
Mentioned by Vardikjan. Viidalepp mentions Transcaucasia.
- Gnophos ciscaucasica* Rjabov. Artvin: Kaçkar dağları, 30 km SW of Sarıgöl, 2000 m, 15/18-VII-1991, 1 ex.; ibid., 5-VIII-1993, 4 ex.; Kaçkar dağları, 5-15 km NW of Meydançık, 1800 m, 1-VIII-1993, 2 ex.; Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VII-1990, 6 ex.; 3-5 km S of Posof, 1700-1800 m, 31-VII-1993, 2 ex.; Rize: Ovitdağı Geçidi, West-side, 2500-2700 m, 22-VII-1993, 8 ex.
Not mentioned by Vardikjan, but mentioned by Viidalepp.
- Gnophos anthina* Wehrli. Erzurum: Ovitdağı Geçidi, South-side, 1700-1900 m, 17/18-VII-1989, 1 ex.
Mentioned by Vardikjan and Viidalepp both from Armenia.
- Boarmia roboraria* Denis & Schiffermüller. Artvin: Kaçkar dağları, 24 km W of Sarıgöl, 1900 m, 20-VII-1993, 1 ex.
Mentioned by Vardikjan and Viidalepp.
- Ennomos erosaria* Denis & Schiffermüller. Bingöl: 21 km W of Solhan, 1350 m, 26-VII-1988, 1 ex.
Not mentioned by Vardikjan, but mentioned by Viidalepp.
- Selenia dentaria* Fabricius. Artvin: Kaçkar dağları, 30 km SW of Sarıgöl, 2000 m, 15/18-VII-1991, 1 ex.
Mentioned by Vardikjan and Viidalepp.
- Ourapteryx persica* Ménétriés. Artvin: Kaçkar dağları, 30 km SW of Sarıgöl, 2000 m, 15/18-VII-1991, 2 ex.; 12 km ESE Çaglayan, 1500 m, 27-VII-1989, 1 ex.; Erzincan: Env. Çaglayan, 1500 m, 27-VII-1989, 1 ex.; Kars: 3-5 km S of Posof, 1700-1800 m, 7-VII-1991, 1 ex.
Mentioned by Vardikjan. Viidalepp mentions Transcaucasia.
- Epione parallelaria* Denis & Schiffermüller. Gümüşhane: Köşedağı Geçidi, 1700-1900m, 21/25-VII-1989, 1 ex.; Kars: 7-10 km SE of Sarıkamış, 2000 m, 20/24-VI-1990,

2 ex.; *ibid.*, 10/14-VII-1989, 2 ex.

Not mentioned by Vardikjan, but mentioned by Viidalepp.

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