



Checklist of the Geometridae of European Turkey, with new records (Lepidoptera)

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Abstract

A checklist with synonyms, distributions, larval foodplants, and parasitoid data for the European Turkish geometrid moths is presented. The checklist includes both published and previously unpublished faunistic information. In total, 200 species are reported for the region. Seventeen new species are tabulated for the fauna of European Turkey: *Charissa ambiguata* (Duponchel, 1830); *Eumannia oppositaria* Mann, 1864; *Neognopharmia stevenaria* Boisduval, 1849; *Alsophila aceraria* (Denis & Schiffermüller, 1775); *A. aescularia* (Denis & Schiffermüller, 1775); *Thetidia smaragdaria* (Fabricius, 1787); *Cleta filacearia* (Herrich-Schäffer, 1847); *Idaea circuitaria* (Hübner, 1819); *Costaconvexa polygrammata* (Borkhausen, 1794); *Eupithecia extremata* (Fabricius, 1787); *E. insigniata* (Hübner, 1790); *E. silenicolata* Mabille, 1867; *E. subfuscata* (Haworth, 1809); *E. venosata* (Fabricius, 1787); *Orthonama vittata* (Borkhausen, 1794); *Rheumaptera cervinalis* Scopoli, 1763; and *Scotopteryx luridata* (Hufnagel, 1767). Three species are new for the geometrid fauna of Turkey: *Idaea muricata* (Hufnagel, 1767); *Scopula floslactata* (Haworth, 1809) and *Pasiphila chloerata* (Mabille, 1870). Erroneous data for *Rhodostrophia calabra* (Petagna, 1786); *Timandra griseata* (W. Petersen, 1902), *Pasiphila debiliata* (Hübner, 1817), and *Nychiodes dalmatina* Wagner, 1909, given by Okyar & Aktaş (1999) are corrected respectively under the entries for *R. discopunctata* (Amsel, 1935), *T. comae* (Schmidt, 1931), *P. chloerata* (Mabille, 1870), *N. waltheri* Wagner, 1919.

Key words: Lepidoptera, Geometridae, European Turkey, new records, synonyms, foodplants, parasitoids

Introduction

The speciose moth family Geometridae contains circa 21,000 described species worldwide. In Europe, 957 species of Geometridae have been recorded (Hausmann *et al.* 2007), and the number of species recorded on mainland Greece and Bulgaria (which are close to Turkey) are 368 and 441, respectively. Although there is a large volume of literature dealing with the Lepidoptera fauna of European Turkey, studies on the Geometridae of Turkey are few and generally not detailed. The older geometrid literature for the region (e.g., Buresch 1915; Buresch & Iltschew 1915, 1921; Buresch & Tuleschkow 1936; Graves 1925, 1926a, 1926b; Lattin 1944, 1951) extends back to as early as 1881 (Mathew 1881). Among the more recent taxonomic surveys are Güneyi & Sengün (1972), Koçak & Seven (1991), Okyar & Aktaş (1999), Karatepe (2003), and Hausmann (2004).

The surveys noted above tabulate some 183 geometrid species from European Turkey. This paper presents a comprehensive annotated checklist that updates these prior surveys, and increases the total number of species to 200. This corresponds to approximately 21% of the overall Geometridae fauna of Europe.