

New faunistic records of moths from Czechoslovakia (Lepidoptera: Geometridae, Nolidae, Noctuidae)

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In last years we identified some remarkable moths and four of them we recognized as new for Czechoslovakia. These species belong to the families Geometridae, Nolidae and Noctuidae and their observation in the country add to the present knowledge of their occurrence in central Europe. These night-flying moths were caught by traditional methods at light or at sugar in different parts of Czechoslovakia and being of different origin and distribution they document considerable diversity of this territory, where the limit of distribution of some west, east, south and north European species occurs. We discuss our data with general distribution of these species, especially with their occurrence in the neighbouring countries.

We are indebted to V. Elsner, M. Hluchý, Dr. I. Novák, CSc. and Z. Novák for loaning material from their private collections and for some other data.

GEOMETRIDAE

Cyclophora suppunctaria Zeller, 1847

(Plate I, Fig. 1)

Two males representing the second generation of this bivoltine species were caught in southern Slovakia, in the Jihoslovenský kras-karst, in a locality where a number of thermophilous species have been observed before, e. g. *Synaphe moldavica* (Esper), *Eublemma arcuinna* (Hübner), *Metachrostis dar-douini* (Boisduval) and others (cf. Krامل, Marek & Novák, 1980). The identification of *C. suppunctaria* was confirmed by examination of genitalia (Fig. 1). The species is distributed in Europe from France, Italy, Yugoslavia to Rumania and Hungary (Spuler, 1910; Prout in Seitz, 1915; Herbulot, 1961—63; Popescu-Gorj, 1964; Forster & Wohlfahrt, 1981). As the species is known from several localities in the northern part of Hungary near the Czechoslovak border — e. g. Bükk-hegység mts., near the towns of Szécsény and Gödöllő (Kovács, 1953, 1956; Balogh, 1967) we could expect its occurrence also in our country.

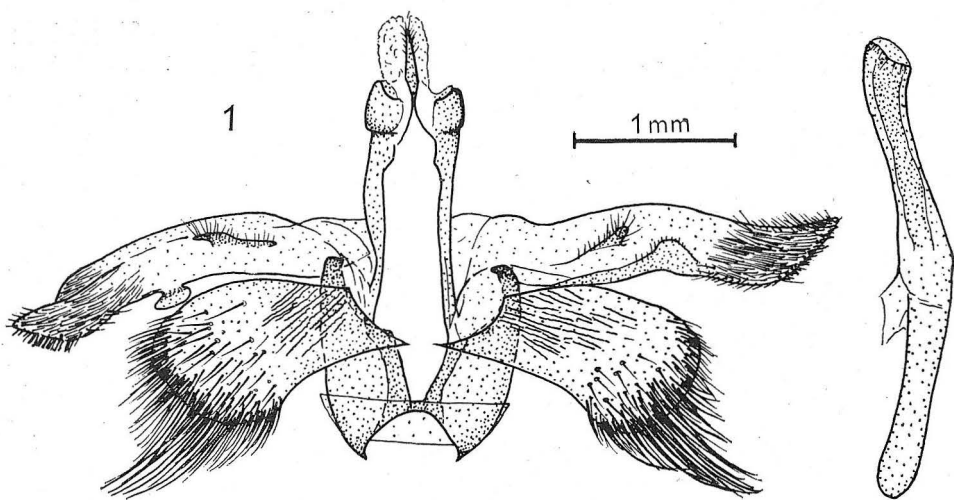


Fig. 1. Male genitalia of *Cyclophora suppunctaria* Zeller.

As it also occurs in two externally different generations in a year and, moreover, as it strongly resembles *C. ruficiliaria* (Herrich-Schäffer), it would be wise for our lepidopterists to pay more attention to its likely occurrence in other localities in the southern parts of Slovakia. Zádiel is the northernmost place within the comparatively continuous range of this species. An isolated occurrence was reported by Klimaszewski (1960) and Bleszyński (1960) from southern Poland near Nowy Sacz. New species for Czechoslovakia.

Material. Slovakia: Jihoslovenský kras-karst, Zádiel, 20. vii. 1971 1 ♂, 27. vii. 1973 1 ♂, lgt. & coll. J. Marek.

NOLIDAE

Nola chlamytulalis (Hübner, 1813) (Plate II, Fig. 2)

This species was collected in two generations in several localities in the warmest part of Slovakia along the river Danube, where its occurrence directly continues from neighbouring Hungary (Kovács, 1953, 1958) and Austria (Kasy, 1965; Sterzl, 1967). It is widely distributed in southern Europe from Spain and France eastwards up to Balkans and Asia Minor (Spuler, 1910; Seitz, 1913; Draudt in Seitz, 1933). Our records seem to represent the northern limit of its distribution in central Europe.

N. chlamytulalis somewhat resembles *N. cristatula* (Hübner) (Plate II, Fig. 3), which is more extended in the southern parts of Czechoslovakia (Skala, 1911, 1931—32; Hrubý, 1964), and also *N. subchlamydula* Staudinger (Plate II, Fig. 1), not yet observed in the country and known nearest from southern

Germany (Baden, Pfalz) (Forster & Wohlfahrt, 1960). The most conspicuous external character distinguishing *N. chlamyptulalis* from both the species mentioned is its white-coloured hindwing with only grey outer band and outlined median line and cell spot, whereas both sexes of the two other species are characterizing by nearly unicolorous grey hindwing, somewhat darker in *N. cristatula* than in *N. subchlamyptula*. Forewing of *N. chlamyptulalis* usually with prominent black markings on the inner side of the white submarginal line. As the larvae of this species feed on *Orthantha lutea* (L.) Kern. (Scrophulariaceae), it would be useful to pay more attention to the localities in the southern parts of Moravia and Slovakia, where the host plant more often occurs. *N. chlamyptulalis* is a new species for Czechoslovakia.

Material. Slovakia: Jur near Bratislava, Šúr, 6. v. 1972 2 ♂♂ 1 ♀, Mužla, 15. v. 1979 1 ♂, lgt. & coll. J. Marek; Nová Vieska, 11. vii. 1981 3 ♂♂, lgt. J. Marek, coll. J. Marek & NMP; Štúrovo, 16.—18. vii. 1963 1 ♂, lgt. J. Marek, coll. NMP.

NOCTUIDAE

Rileyiana fovea (Treitschke, 1825)

(Plate I, Fig. 3)

The use of sugaring enabled to discover the numerous occurrence of this remarkable moth in the south-western part of Krupinská vrchovina-highland, about 50 km to the north of Kováčovské kopce-hills near Štúrovo, the only locality known up to date (Hrubý, 1964). The former locality comprises slopes exposed to the south or south-east and covered with bushes and scattered oaks *Quercus pubescens* Willd. and *Q. cerris* L. Besides *R. fovea* some other thermophilous moths inhabit this locality, e. g., *Oidaematophorus constanti* Ragonot, *Ocnogyna parasita* (Hübner), *Scotochrosta pulla* (Denis & Schiffermüller), *Conistra veronicae* (Hübner) and others. One specimen of *R. fovea* was also encountered at a sugar about 10 km to the south of this locality. Generally, the distribution of the species is restricted to a comparatively small territory of Europe, ranging from northern Italy, Yugoslavia to western Rumania, Hungary and the southern part of Czechoslovakia (Spuler, 1910; Warren in Seitz, 1914; Hrubý, 1964; Popescu-Gorj, 1964; Balogh, 1967; König, 1974).

Material. Slovakia: Krupinská vrchovina-highland, Medovarce, 27.—29. ix. 1979 8 ♂♂ 6 ♀♀, 13. x. 1979 5 ♂♂ 3 ♀♀, lgt. & coll. V. Elsner; 7. x. 1979 24 ♂♂ 18 ♀♀, lgt. J. Marek, coll. J. Marek & NMP; 2. xi. 1979 3 ♀♀, lgt. & coll. I. Novák; Plášťovce, 8. x. 1979 1 specimen observed at sugar by J. Marek (without document).

Blepharita amica (Treitschke, 1825)

(Plate I, Fig. 4)

One male was found on an illuminated wall of a house in the valley of the river Bílý Váh, between Západné and Nízke Tatry mts. This species is widely distributed from northern Europe and the eastern part of central Europe to Asia, throughout Siberia up to the Far East (Amur) (Warren in Seitz, 1914).

As regards countries adjacent to Czechoslovakia, it is reported from western Poland and Hungary (Forster & Wohlfahrt, 1971). In the European part of its range the species seems to be very local and rather rare. Being on wing in autumn, usually in September and October, it may easily escape the attention of collectors. We can compare its distribution with that of a few other moths, e. g., *Odontosia sieversi* (Ménétriés) or *Pygaera timon* (Hübner), reaching the south-western limit of their range in central Europe and being there very local and rather rare. *B. amica* is a new species for Czechoslovakia.

Material. Slovakia: Východná, 8. x. 1980 1 ♂, lgt. & coll. M. Hluchý.

***Heliothis nubigera* (Herrich—Schäffer, 1851)**

(Plate I, Fig. 2)

One male of this subtropical species was caught in one of the warmest parts of southern Slovakia. *H. nubigera* is distributed in the Mediterranean area including the countries around the Black and Caspian Seas and ranging eastwards up to Uzbekistan (Fergana) (Spuler, 1910; Warren in Seitz, 1914). The moths occur in several generations in a year. Like some other species of the genus *Heliothis* Hübner, this species also rarely appears in central Europe as a typical immigrant and records are known from southern Alps (Wolfsberger, 1959), Lower Austria (Sterzl, 1967), Hungary (Kovács, 1953, 1958) as well as from other European countries, France (Boursin, 1943) and Great Britain (De Worms, 1963). It undoubtedly belongs to the group of migrants represented, e. g., by *Grammodes stolidus* (Fabricius) and *Trichoplusia ni* (Hübner) which occur in central Europe quite exceptionally in contradistinction to other group of species which are comparatively regular guests in these territories, e. g. *Peridroma saucia* (Hübner), *Mythimna unipuncta* (Haworth), *Heliothis armigera* (Hübner) or even *H. peltigera* (Denis & Schiffermüller), *Autographa gamma* (Linnaeus) and others. *H. nubigera* is a new species for Czechoslovakia

Material. Slovakia: Kamenín, 21. v. 1977 1 ♂, lgt. & coll. Z. Novák.

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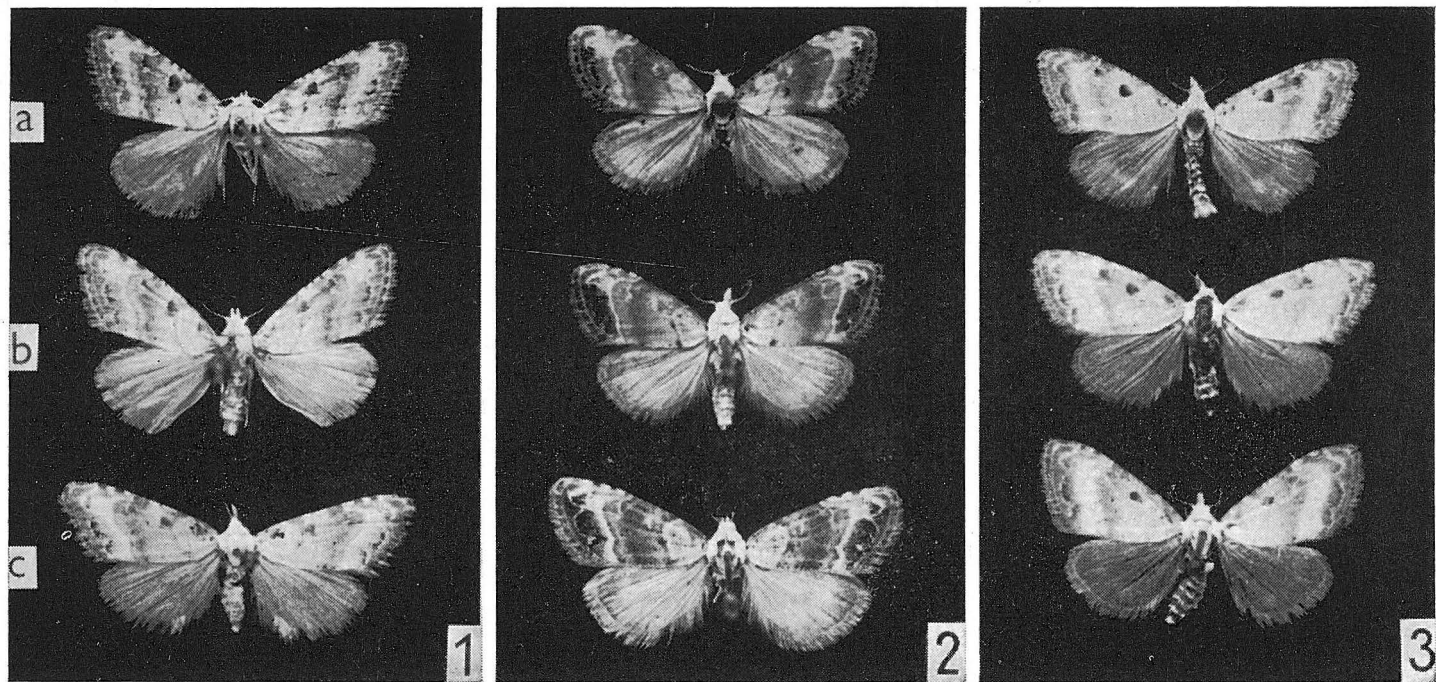
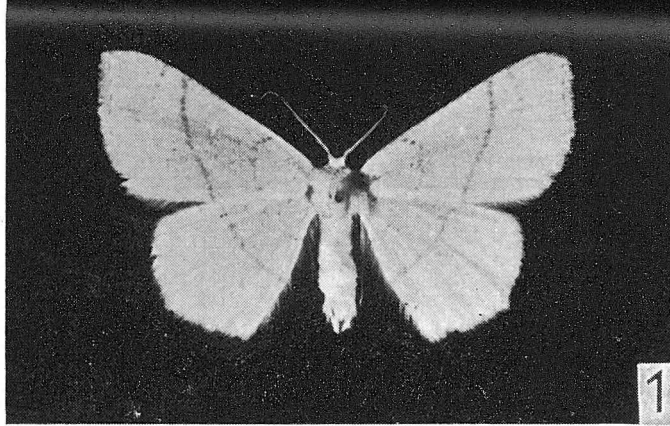
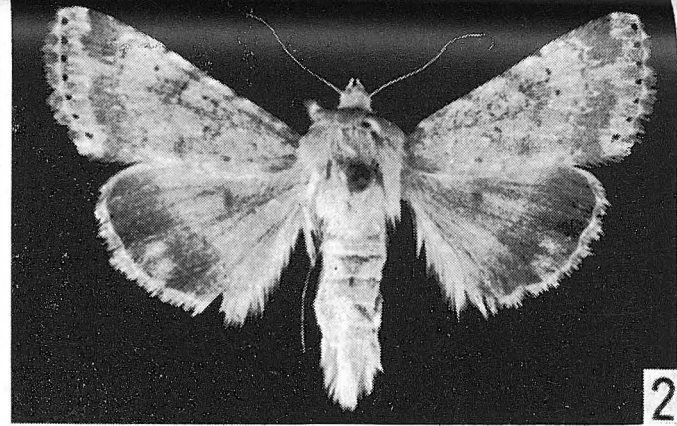


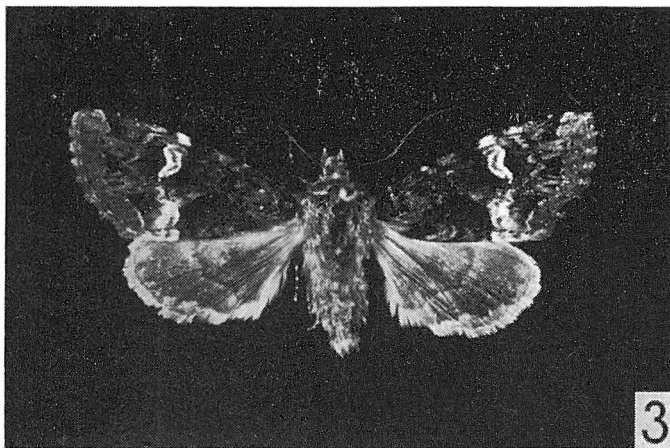
Plate II, Fig. 1. *Nola subchlamydula* Staudinger: a — Germany: Michelsberg b. Bruchsal [Baden], ♀; b — the same locality, 8. V. 1913 ♀; c — Spain: Albarracin, 10. VI. 1926 ♀. lgt. Predota, all three females in coll. NMP. Fig. 2. *Nola chlamytulalis* (Hübner): a, b — Slovakia: Nová Vieska, 11. VII. 1981 2 ♂♂; c — Slovakia: Jur near Bratislava, Šúr, 6. V. 1973 ♀, all three specimens lgt. & coll. J. Marek. Fig. 3. *Nola cristatula* (Hübner): a — Slovakia: Závod, 19. VII. 1979 ♂; b — Moravia: Bílé Karpaty mts., Radějov, 23.—29. VI. 1968 ♀; c — Slovakia: Hostice, 28. VII. 1978 ♀, all three specimens lgt. & coll. J. Marek.



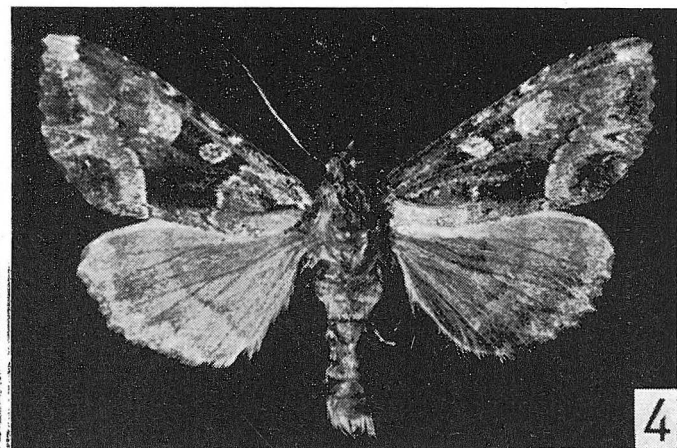
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Plate I, Fig. 1. *Cyclophora suppunctaria* Zeller, Slovakia: Jihoslovenský kras-karst, Zá-diel, 27. VII. 1973 ♂, lgt. & coll. J. Marek. Fig. 2. *Heliothis nubigera* (Herrich-Schäffer), Slovakia: Kamenín, 21. V. 1977 ♂, lgt. & coll. Z. Novák. Fig. 3. *Rileyiana fovea* (Treitschke), Slovakia: Krupinská vrchovina-highland, Medovarce, 7. X. 1979 ♀, lgt. J. Marek, coll. NMP. Fig. 4. *Blepharita amica* [Treitschke], Slovakia: Východná, 8. X. 1980 ♂, lgt. & coll. M. Hluchý.

Acta faunistica entomologica Musei Nationalis Pragae, 17, No. 201.
Redaktor RNDr. Jiří Dlabola, CSc. — Vydává Národní muzeum v Praze.
Vyšlo 25. IV. 1984. — Náklad 1000.

Vytiskly Tiskařské závody, n. p., závod 6, provoz 75 Mladá Boleslav, nám. Míru 27.