

Studies on Heterocera from Bulgaria - II (Lepidoptera)

by

Julius GANEV

Samenvatting. Studie over Heterocera uit Bulgarije - II (Lepidoptera). In dit artikel worden verspreidingsgegevens meegedeeld over zeldzame en lokale Heterocera uit Bulgarije. De soorten *Noctua tirrenica* BIEBINGER, SPEIDEL & HANIGK, *Apamea aquila funerea* HEINICKE, *Coenocalpe lapidata* HUEBNER en *Eilema pseudocomplana* DANIEL worden hier voor het eerst uit Bulgarije vermeld. Na bijkomende studies en na vergelijking met materiaal uit Spanje werd het duidelijk dat de exemplaren die ik als *Spodoptera cilium* GUENÉE vermeldde (GANEV, 1984) niet tot deze soort behoren.

Résumé. Études d'Hétérocères de Bulgarie II (Lepidoptera). Cet article mentionne des données faunistiques d'Hétérocères rares et localisés de Bulgarie. Les espèces suivantes sont répertoriées pour la première fois de Bulgarie : *Noctua tirrenica* BIEBINGER, SPEIDEL & HANIGK, *Apamea aquila funerea* HEINICKE, *Coenocalpe lapidata* HUEBNER et *Eilema pseudocomplana* DANIEL. Après avoir exécuté des études complémentaires et des comparaisons avec du matériel espagnol il s'est avéré que des exemplaires que j'avais signalé comme étant *Spodoptera cilium* GUENÉE (GANEV, 1984) n'appartiennent pas à cette espèce.

In this paper data on the distribution of rare and local Heterocera from Bulgaria are given. The species *Noctua tirrenica* BIEBINGER, SPEIDEL & HANIGK, *Apamea aquila funerea* HEINICKE, *Coenocalpe lapidata* HUEBNER and *Eilema pseudocomplana* DANIEL are reported here for the first time for the Bulgarian fauna. After additional studies and comparison with material from Spain, it is clear that the specimens which I reported as *Spodoptera cilium* GUENÉE (GANEV, 1984) do not belong to that species. Thanks to D. KIRIAKOV, N. VICHODCEVSKII and N. KRUSCHOVSKI from Sofia and P. PETKOV from Vidin.

Systematic part

Attacidae

Aglia tau LINNAEUS : Zemen gorge, Skakavitza railway-station, 500 m, 3-vi-1984, 1 ♂.

Geometridae

Orthoxistis cribraria HUEBNER : v. Boinitza near Vidin, in vi (coll. PETKOV).

Geometra papilionaria LINNAEUS : v. Boinitza in vii (coll. PETKOV).

Scopula immorata LINNAEUS : v. Boinitza in vi (coll. PETKOV).

Scopula flaccidaria ZELLER : Strandža mn., v. Gramatikovo in viii.

Aplocera efformata GUENÉE : Vidin in viii (coll. PETKOV).

Thera britannica TURNER : Pirin mn., h. Begovitza, 1750 m, in vii.

Thera stragulata HUEBNER : Pirin mn., h. Begovitza in vii.

Entephria flavicinctata HUEBNER : Pirin mn., h. Begovitza in vii; h. Damjanitza in viii (leg. SABTCHEV).

Euphyia biangulata HAWORTH : Rhodopi mn., h. Dobra voda, 900 m in vii; Pirin mn., h. Begovitza in vii; Strandža mn., v. Gramatikovo in viii.

- Euphyia luctuata* DENIS & SCHIFFERMUELLER : Pirin mn., h. Begovitza in vii.
Electrophaes corylata THUNBERG : Vitoscha mn., h. Ban in vi (leg. VIHODZEVSKI).
- Electrophaes rubidata* DENIS & SCHIFFERMUELLER : Strandža mn., m. Tár-novo in vii.
- Perizoma affinitata* STEPHENS : Stara Planina mn., Etropol cloister in vi (coll. KRUSCHOVSKI); Rila mn., Kostenetz in vi (coll. BOTCHAROV).
- Perizoma lugdunaria* HERRICH-SCHAEFFER : v. Tzegrilovtzi near Trán in vi (leg. VIHODZEVSKI); Kressna gorge in viii.
- Perizoma blandiata* DENIS & SCHIFFERMUELLER : Zemen gorge, Skakavitza in vii.
- Pelurga comitata* LINNAEUS : Stara Planina mn., Drjanovo in viii (leg. NATCHEV), v. Boinitza in viii (coll. PETKOV).
- Coenocalpe lapidata* HUEBNER : Zemen gorge, Skakavitza, 26-ix-1984, 1 ♂ (coll. KRUSCHOVSKI).
- Lomographa bimaculata* FABRICIUS : N. Bulgaria, Váltchedrám in vi.
- Epione repandaria* HUFNAGEL : v. Boinitza in vii (coll. PETKOV).
- Epione paralellaria* DENIS & SCHIFFERMUELLER : Rila mn., Kostenetz in vii (leg. BOTCHAROV).
- Nychiodes waltheri* WAGNER : Strandža mn., v. Gramatikovo in viii.
- Peribatodes perversaria* BOISDUVAL : Kressna gorge in v.
- Boarmia maeoticaria* APFELBECK : v. Rogush near Plovdiv in v.
- Ectropis crepuscularia* DENIS & SCHIFFERMUELLER : N. Bulgaria, Váltchedram in vi.

Sphingidae

- Proserpinus proserpina* PALLAS : N. Bulgaria, Váltchedrám in vi.

Notodontidae

- Clostera anachoreta* DENIS & SCHIFFERMUELLER : N. Bulgaria, v. Dálgo-deltzi near Michailovgrad in vi.

Arctiidae

- Eilema pseudocomplana* DANIEL : This species is distributed locally in warm places at low altitudes in S.W., South and S.E.-Bulgaria : river Ropotamo at Black Sea coast, 28-vii-1983, 1 ♂; Rhodopi mn., river Lukovitza near Asenovgrad, 15-viii-1983, 2 ♂; SW-Bulgaria, Kozuch near Petrić, 12-viii-1982, 3 ♂ and 1 ♀; Kressna gorge, 20-vii-1982, 1 ♂; Zemen gorge, Skakavitza, 1 ♂ and 2 ♀, 3-viii-1979; Ogražden mn., v. Drenovo, 24-viii-1984, 1 ♂; v. Lebnitza, 19-vii-1984, 1 ♂. The species flies together with *E. palliatella* SCOPOLI and *E. complana* LINNAEUS in different places.

Noctuidae

- Euxoa nigricans* LINNAEUS : Pirin mn., Bansko in vii.

- Euxoa hastifera* DONZEL : v. Pantcherevo near Sofia, 10 in feromon trap; v. Prekolnitsa near Kiustendil in ix.
- Agrotis clavus* HUFNAGEL : Rila mn., h. Skakavitza, 1856 m in vii; N. Bulgaria, v. Smoljanovtzi near Michailovgrad in vi.
- Agrotis puta* HUEBNER : v. Boinitsa in ix (coll. PETKOV).
- Ochropleura signifera* DENIS & SCHIFFERMUELLER : v. Boinitsa in vi (coll. PETKOV).
- Ochropleura flammatra* DENIS & SCHIFFERMUELLER : Pirin mn., h. Begovitza in vii.
- Eugnorisma pontica* STAUDINGER : Zemen gorge, Skakavitza in ix.
- Rhyacia latens* HUEBNER : Pirin mn., h. Begovitza in vii.
- Rhyacia lucipeta* DENIS & SCHIFFERMUELLER : Zemen gorge, Skakavitza in x (coll. KRUSCHOVSKI); Pirin mn., h. Begovitza in vii.
- Chersotis multangula* HUEBNER : Strandža mn., m. Tárnovo in vii.
- Noctua tirrenica* BIEBINGER, SPEIDEL & HANIGK : Soon after its description (1982) this species was reported in short time from Spain (DUFAY, 1983) and (DE LAEVER, 1983), from France, Yugoslavia, Greece and European Turkey (HACKER, KUHNA & GROSS, 1984) and for Greece and France (DE PRINS, 1983). I caught *N. tirrenica* in the SW part of Bulgaria, Ograzden mn., v. Jakovo, 900 m, 20-vii-1984, 1 ♂ and 1 ♀. The species flies together with *N. fimbriata* SCHREBER in correlation 5:1 for *fimbriata*. Probably *N. tirrenica* can be found in the lower parts of the mountain and in other places along the river Struma.
- Epilecta linogrisea* DENIS & SCHIFFERMUELLER : Strandža mn., v. Gramatikovo in viii; m. Tárnovo in vii.
- Diarsia mendica* FABRICIUS : Rila mn., Panitchiste, 1450 m, in vii; Pirin mn., h. Begovitza in vii.
- Diarsia rubi* VIEWEG : v. Prekolnitsa in vii; Kressna gorge in v.
- Xestia ashworthii candelarum* STAUDINGER : Kressna gorge in vii (coll. KIRIAKOV).
- Xestia cohaesa* HERRICH-SCHAEFFER : Zemen gorge, Skakavitza in ix.
- Naenia typica* LINNAEUS : Pirin mn., Bansko in vii.
- Eurois occulta* LINNAEUS : Pirin mn., h. Begovitza in vii.
- Anaplectoides prasina* DENIS & SCHIFFERMUELLER : Rila mn., Panitchiste in vii.
- Cerastis rubricosa* DENIS & SCHIFFERMUELLER : Konjavo mn., v. Tavalitchevo in iv; v. Ugljartzi in v; Belasitza mn., h. Belasitza in v; Kressna gorge in v.
- Mesogona acetosellae* DENIS & SCHIFFERMUELLER : v. Novi han in ix (coll. KIRIAKOV); Vidin in ix (coll. PETKOV); v. Prekolnitsa in ix, Stara Planina mn., h. Liuljaka in ix.
- Anarta melanopa rupestralis* HUEBNER : Pirin mn., Solisteto, 2400 m in vii.
- Hada nana* HUFNAGEL : Rila mn., Panitchiste in vii; Pirin mn., h. Begovitza in vii.
- Polia hepatica* CLERCK : Rila mn., Panitchiste in vii; Pirin mn., h. Begovitza in vii.

- Polia nebulosa* HUFNAGEL : v. Prekolnitsa in vii; Smirnenski near Michailovgrad in vi; Pirin mn., h. Begovitsa in vii.
- Sideridis implexa* HUEBNER : Asenovgrad in v (leg. JAROS).
- Mamestra thalassina* HUFNAGEL : Pirin mn., h. Begovitsa in vii.
- Mamestra blenna* HUEBNER : Svilengrad in vii (coll. KIRIAKOV); N. Bulgaria, Váltchedrárn in vi. This species was reported only from the Black sea coast.
- Mamestra pisi* LINNAEUS : Rila mn., h. Skakavitza in vii.
- Hadena compta* DENIS & SCHIFFERMUELLER : v. Prekolnitsa in ix.
- Hadena confusa* HUFNAGEL : h. Belasitsa in v.
- Hadena albimacula* BORKHAUSEN : Zemen gorge, Skakavitza in viii; Belasitsa mn., h. Belasitsa in vi.
- Hadena bicruris* HUFNAGEL : Trán in vi.
- Hadena magnolii* BOISDUVAL : Belasitsa mn., h. Belasitsa in v and vi.
- Hadena caesia bulgarica* BOURSIN : Rila mn., Panitchiste in vii, h. Skakavitza in vii.
- Eriopygodes imbecilla* FABRICIUS : Rila mn., h. Skakavitza in vii.
- Cerapteryx graminis* LINNAEUS : Pirin mn., h. Begovitsa in viii.
- Tholera cespitis* DENIS & SCHIFFERMUELLER : v. Boinitsa in ix (coll. PETKOV) v. Prekolnitsa in ix.
- Orthosia miniosa* DENIS & SCHIFFERMUELLER : Vidin in iv (coll. PETKOV); v. Tavalitchevo in iv.
- Orthosia opima* HUEBNER : Gorna Banja near Sofia in feromon trap, iv.
- Mythimna straminea* TREITSCHKE : Zemen gorge, Skakavitza in vii.
- Mythimna impura* HUEBNER : Pirin mn., Bansko, 900 m, in vii.
- Mythimna congrua* HUEBNER : N. Bulgaria, v. Dálgodeltzi in vi; Váltchedrárn in vi.
- Mythimna andereggii pseudocomma* REBEL & ZERNY : Pirin mn., h. Begovitsa in vii.
- Cucullia thapsiphaga* TREITSCHKE : Pirin mn., h. Begovitsa in vii.
- Cucullia scrophulariae* DENIS & SCHIFFERMUELLER : Trán in vi; Kressna gorge in v and vi; Kiustendil in vi.
- Copiphana olivina* HERRICH-SCHAEFFER : Asenovgrad in v (leg. JAROS).
- Brachylomia viminalis* FABRICIUS : Pirin mn., h. Begovitsa in vii, viii.
- Episema glaucina* ESPER : v. Prekolnitsa in ix.
- Episema tersa* DENIS & SCHIFFERMUELLER : Arkutino in x.
- Ulochlaena hirta* HUEBNER : Kressna gorge in xi.
- Lithophane furcifera* HUFNAGEL : Kiustendil in iii.
- Xylena vetusta* HUEBNER : Kiustendil in iv.
- Polymixis polymita* LINNAEUS : v. Prekolnitsa in ix.
- Polymixis rufocincta* GEYER : v. Boinitsa in x (coll. PETKOV).
- Conistra ligula* ESPER : Kiustendil in iv.
- Conistra rubiginosa* SCOPOLI : v. Pantcherevo near Sofia in x (in feromon trap).
- Conistra erythrocephala* DENIS & SCHIFFERMUELLER : Konjavo mn., v.

- Tavalitchevo in iv; v. Ugljartzi in iv.
- Agrochola nitida* DENIS & SCHIFFERMUELLER : v. Prekolnitsa in x; Arkutino in x; v. Boinitsa in x (coll. PETKOV).
- Agrochola helvola* LINNAEUS : v. Prekolnitsa in x.
- Agrochola humilis* DENIS & SCHIFFERMUELLER : Stara Planina mn., h. Liuljaka in ix; v. Prekolnitsa in x; v. Boinitsa in x (coll. PETKOV).
- Agrochola litura* LINNAEUS : Stara Planina mn., h. Liuljaka in ix; v. Prekolnitsa in x; Vidin in x (coll. PETKOV).
- Atethmia centrigo* HAWORTH : v. Prekolnitsa in x; Arkutino in x; Vidin in x (coll. PETKOV).
- Atethmia ambusta* DENIS & SCHIFFERMUELLER : v. Boinitsa in ix (coll. PETKOV).
- Xanthia fulvago* CLERCK : v. Prekolnitsa in x; h. Liuljaka in ix; Vidin in ix (coll. PETKOV).
- Xanthia ocellaris* BORKHAUSEN : Kiustendil in x.
- Moma alpium* OSBECK : Belasitsa mn., h. Belasitsa in v.
- Acronicta leporina* LINNAEUS : v. Prekolnitsa in viii.
- Acronicta auricoma* DENIS & SCHIFFERMUELLER : Pirin mn., h. Begovitsa in vii; Strandža mn., v. Gramatikovo in viii.
- Craniophora pontica* STAUDINGER : v. Boinitsa in viii (coll. PETKOV).
- Cryphia recepticula* HUEBNER : v. Boinitsa in vii (leg. PETKOV).
- Cryphia ochsi* BOURSIN : Svilengrad in ix (coll. KIRIAKOV).
- Amphipyra berbera* RUNGS : Pleven in viii.
- Amphipyra livida* DENIS & SCHIFFERMUELLER : v. Boinitsa in x (coll. PETKOV).
- Amphipyra micans* LEDERER : Strandža mn., Malko Tárnovo in vii.
- Mormo maura* LINNAEUS : Zemen gorge, Skakavitza in vii (coll. KRUSCHOVSKI); Stara Planina mn., Lakatnik, one dead specimen in the gage «Temnata dupka».
- Polyphaenis sericata* ESPER : Strandža mn., v. Gramatikovo in viii; Evskino-grad near Varna in vii.
- Euplexia lucipara* LINNAEUS : h. Belasitsa in v; v. Boinitsa in v (coll. PETKOV).
- Phlogophora scita* HUEBNER : v. Prekolnitsa in viii; Rila mn., Panitchiste in vii; h. Skakavitza in vii; Pirin mn., h. Begovitsa in vii.
- Calloplistria juvenina* STOLL : Stara Planina mn., Etropol Cloister in viii (coll. KRUSCHOVSKI); h. Belasitsa in vi.
- Ipomorpha retusa* LINNAEUS : v. Tzegrilovtzi in vii (leg. VIHODCEKSKII); Blagoevgrad in vii; Váltchedrám in vi.
- Ipomorpha subtusa* DENIS & SCHIFFERMUELLER : Kiustendil in vi; Kressna gorge in vi; Váltchedrám in vi.
- Cosmia affinis* LINNAEUS : Stara Planina mn., Drjanovo cloister in vi.
- Cosmia diffinis* LINNAEUS : Stara Planina mn., Drjanovo cloister in vi; Evskino-grad in vii; Kiustendil in vii.
- Cosmia pyralina* DENIS & SCHIFFERMUELLER : Drjanovo cloister in vi; N. Bulgaria, v. Dálgodeltzi in vi; Váltchedrám in vi.

- Hyppa rectilinea* ESPER : Pirin mn., h. Begovitza in vii.
- Actinotia polyodon* CLERCK : Strandža mn., v. Gramatikovo in viii.
- Apamea lithoxylaea* DENIS & SCHIFFERMUELLER : v. Prekolnitsa in vii.
- Apamea aquila funerea* HEINICKE : Rhodopi mn., river Lukovitza near Asenovgrad, 19-viii-1983, 1 ♀; Varna 20-viii-1982, 1 ♀ (det. RONKAY).
- Apamea furva* DENIS & SCHIFFERMUELLER : Pirin mn., h. Begovitza in vii.
- Apamea remissa* HUEBNER : Pirin mn., h. Begovitza in vii.
- Apamea illyria* ESPER : Pirin mn., h. Begovitza in vii.
- Apamea scolopacina* ESPER : v. Boinitsa in vii (coll. PETKOV).
- Eremobia ochroleuca* DENIS & SCHIFFERMUELLER : v. Boinitsa in vii (coll. PETKOV).
- Luperina dumerilii* DUPONCHEL : v. Prekolnitsa in ix; Arkutino in x.
- Luperina rubella* DUPONCHEL : Kiustendil in ix; v. Prekolnitsa in ix.
- Gortyna flavago* DENIS & SCHIFFERMUELLER : Vidin in ix (coll. PETKOV).
- Calamia tridens* HUFNAGEL : v. Boinitsa in vii (coll. PETKOV); Strandža mn., M. Tárnovo in vii.
- Nonagria typhae* THUNBERG : Kiustendil in vii; river Ropotamo in vii; Strandža mn., M. Tárnovo in vii.
- Oria musculosa* HUEBNER : v. Boinitsa in vi (coll. PETKOV).
- Sesamia nonagrioides* LEFEBVRE : Kressna gorge in ix.
- Hoplodrina respersa* DENIS & SCHIFFERMUELLER : Smirnenki near Michailovgrad in vi; Pirin mn., Bansko in vii.
- Atypha pulmonaris* ESPER : Rila mn., Panitchiste in vii; Stara Planina mn., Etropol cloister in vii (coll. KRUSCHOVSKI).
- Caradrina morpheus* HUFNAGEL : Evskinograd in ix; Bansko in vii; Panitchiste in vii; Kressna in v.
- Caradrina aspersa* RAMBUR : v. Prekolnitsa in vii and viii.
- Caradrina suscianja* MENTZER : Etropol cloister in vii (coll. KRUSCHOVSKI); Kiustendil in vii.
- Athetis gluteosa* TREITSCHKE : Kiustendil in vii; Strandža mn., v. Gramatikovo in viii; M. Tárnovo in vii.
- Athetis pallustris* HUEBNER : Pirin mn., h. Begovitza in vii.
- Aegle koekeritziana* HUEBNER : Kiustendil in vi.
- Rhodocleptria incarnata* FREYER : Kiustendil in vi.
- Eublemma respersa* HUEBNER : v. Boinitsa in vii (coll. PETKOV); Kressna gorge in v; Kiustendil in vi; Kostinbrod near Sofia in vi.
- Lithacodia pygarga* HUFNAGEL : Silistra in viii; v. Tzegrilovtzi in vii (leg. VIHODZEVSKI); v. Boinitsa in vii (coll. PETKOV); Váltchedrám in vi.
- Deltote candidulana* DENIS & SCHIFFERMUELLER : v. Boinitsa in vii (coll. PETKOV).
- Nycteola siculana* FUCHS : Strandža mn., M. Tárnovo in vii.
- Nycteola asiatica* KRULIKOVSKY : Váltchedrám in vi; Strandža mn., M. Tárnovo in vii; v. Gramatikovo in viii.
- Abrostola asclepiadis* DENIS & SCHIFFERMUELLER : h. Belasitza in vii.
- Euchalcia consona* TREITSCHKE : Kazankak in viii.

- Plusia festucae* LINNAEUS : Kostinbrod in vii.
Plusia putnami gracilis LEMPKKE : Kiustendil in vii.
Autographa pulchrina HAWORTH : Panitchiste in vii; Kostinbrod in vii; v. Prekolnitsa in viii; Rila mn., h. Skakavitza in vii.
Syngrapha circumflexa LINNAEUS : Botevgrad in vii; Varna in x.
Trichoplusia ni HUEBNER : Smirnenki in vi; Blagoevgrad in vi.
Chrysodeixis chalcites ESPER : h. Belasitsa in viii; Kiustendil in viii.
Catocala sponsa LINNAEUS : Sofia in viii; Bansko in vii.
Catocala electa VIEWEG : Varna in viii.
Catocala conjuncta ESPER : Pirin mn., h. Belovitsa in vii; Bansko in vii.
Catocala conversa ESPER : Strandža mn., v. Gramatikovo in viii.
Catocala hymenea DENIS & SCHIFFERMUELLER : v. Boinitsa in vii (coll. PETKOV); v. Prekolnitsa in ix.
Ephesia disjuncta GEYER : river Ropotamo in vii.
Ephesia diversa GEYER : Kressna gorge in vii.
Ephesia eutychea TREITSCHKE : h. Belasitsa in vi.
Ephesia fulminea SCOPOLI : v. Boinitsa in vii (coll. PETKOV); v. Dálgodeltzi near Michailovgrad in vi.
Catephia alchymista DENIS & SCHIFFERMUELLER : h. Belasitsa in vi; jazovir Smirnenki near Michailovgrad in vi.
Aedia leucomelas LINNAEUS : N. Bulgaria, v. Dálgodeltzi, Váltchedráh in vi.
Autophila limbata STAUDINGER : in the gave near v. St. Lisitchkovo district of Blagoevgrad in iv (leg. BERON).
Calyptra thalictri BORKHAUSEN : v. Boinitsa in vii (coll. PETKOV).
Parascotia fuliginaria LINNAEUS : v. Prekolnitsa in vii.
Simplicia rectalis EVERSMANN : N. Bulgaria, v. Dálgodeltzi in vi.
Herminia barbalis CLERCK : Etropol cloister in v (leg. KRUSCHOVSKI); Kressna gorge in v.
Herminia tarsicrinalis KNOCH : Varna in viii.
Herminia nemoralis FABRICIUS : Varna in viii; river Ropotamo in vii.
Hypena obesalis TREITSCHKE : Pirin mn., h. Begovitza in vii and viii.
Schrankia taenialis HUEBNER : Kostenetz in vii; Kressna gorge in vi; Strandža mn., v. Gramatikovo in viii.

Literature

- Biebinger A., Speidel W. & Hanigk H., 1983. Beiträge zur Lepidopterenfauna von Sardinien : *Noctua tirrenica* n. sp. (Lep. Noctuidae). *Ent. Z., Frankf.a.M.* 93 : 81-86.
Dufay, C., 1983. *Noctua tirrenica* Biebinger, Speidel & Hanigk (1983), espèce nouvelle pour l'Espagne (Noctuidae, Noctuidae). *Shilap, revta. lepid.* 11 : 197-201.
Hacker H., Kuhna P. & Gross F., 1984. Weiterer Beitrag zur Verbreitung von *Noctua fimbriata* (Schreber, 1759) und *Noctua tirrenica* Biebinger, Speidel & Hanigk, 1983 im Mittelmeerraum (Lepidoptera, Noctuidae). *Neue Ent. Nachr.* 7 : 16-20.
Laever, E. de, 1983. *Noctua tirrenica*, n. sp. en Espagne. *Shilap, revta. lepid.* 11 : 202.
Mentzer, E. von, 1980. *Eilema torstenii* n. sp. and *E. iberica* n. sp. from Spain, with notes on *E. pseudocomplana* (Daniel)(Lepidoptera : Arctiidae). *Ent. Scand.* 11 : 9-16.
Prins, W.O. de, 1983. Over de verspreiding van *Noctua tirrenica* Biebinger, Speidel & Hanigk (Lepidoptera : Noctuidae). *Phegea* 11 : 97-99.
Ganev, J. : National Natural History Museum, Boul. Russki 1, BG-1000 Sofia, Bulgaria.