

Two new scythridid species from south Europe - *Scythris jaeckhi* n. sp. and *S. nieukerkeni* n. sp. (Lepidoptera : Scythrididae)

Bengt Å. BENGTSSON

Abstract. *Scythris jaeckhi* n. sp. from Greece and Turkey, and *S. nieukerkeni* n. sp. from north Spain are described.

Samenvatting. Twee nieuwe *Scythris*-soorten uit Zuid-Europa - *Scythris jaeckhi* n. sp. en *S. nieukerkeni* n. sp. (Lepidoptera : Scythrididae)
Scythris jaeckhi n. sp. uit Griekenland en Turkije en *S. nieukerkeni* n. sp. uit Noord-Spanje worden beschreven.

Résumé. Deux nouvelles espèces du genre *Scythris* d'Europe méridionale - *Scythris jaeckhi* n. sp. et *S. nieukerkeni* n. sp. (Lepidoptera : Scythrididae)
Scythris jaeckhi n. sp. de Grèce et Turquie, et *S. nieukerkeni* n. sp. du nord d'Espagne sont décrits.

Zusammenfassung. Zwei neue *Scythris*-Arten aus Südeuropa - *Scythris jaeckhi* n. sp. und *S. nieukerkeni* n. sp. (Lepidoptera : Scythrididae)
Scythris jaeckhi n. sp. aus Griechenland und der Türkei, und *S. nieukerkeni* n. sp. aus Nordspanien werden beschrieben.

Bengtsson, B.Å. : Box 71, S-380 74 Lötторp, Sweden.

In 1988 Mr. Willy DE PRINS, Antwerp, sent me for determination some scythridid moths found in Turkey. Among the specimens were two that appeared to belong to an undescribed species. When searching for more specimens I discovered in unpublished material by Mr. Eberhard JÄCKH that Dr. Josef KLIMESCH had found some specimens in Greece. I wrote to Dr. KLIMESCH for a loan of his material and he generously handed over three specimens at my disposal.

At about the same time Dr. Eric J. VAN NIEUKERKEN, Leiden, also presented me some undetermined scythridid material. From an expedition in mountain area Picos de Europa, Spain, he and Dr. S. RICHTER had the fortune to come across two undescribed *Scythris* sp. of which *S. nieukerkeni* n. sp. will be introduced in this paper. The other undescribed species will emerge in a future article dealing with the 'restigerella-group' to which that new species belongs.

Scythris jaeckhi n. sp.

Type locality : Turkey, Gümüşhane, Kopdağı Geçidi.

Holotype :

1 male, labelled : Kopdağı Geçidi, 2400-2600 m, W side, 28-29.VII.1987, St. 429 (white label); Türkiye Gümüşhane, H. & Th.v.Oorschot, W. de Prins & F. Coenen (white label); Holotypus, *Scythris jaeckhi* Bgts. (red label). In coll. Instituut voor Taxonomische Zoölogie (Zoölogisch Museum), Amsterdam.

Paratypes :

1. 1 male, labelled as in holotype; Gen.prep.nr 242X ♂, *Scythris jaeckhi* Bgts., B.Å. Bengtsson (yellow label); Paratypus, *Scythris jaeckhi* Bgts. (red label). Genitalia mounted on slide. In coll. DE PRINS.

2. 1 male, labelled: Graecia, Pelop., Chelmos, 2200 m, 24.VI.1958, J. Klimesch (white label); Genitalpräparat No. 123 ♂, J. Klimesch, Linz (white label); Sc. spec.?, det. E. Jäckh, 1973, 7717 (white label); Paratype, *Scythris jaeckhi* Bgts. (red label). Genitalia mounted on slide. In coll. KLIMESCH.
3. 1 female, labelled as in paratype 2; Genitalpräparat No. 124 ♀, J. Klimesch, Linz (white label); Foto: 7301.53 [referring to a photographic file in coll. Jäckh] (white label); *Scythris* spec.??, det. E. Jäckh 1973, 7727 (white label); Paratype, *Scythris jaeckhi* Bgts. (red label). Genitalia mounted on slide. In coll. KLIMESCH.
4. 1 female, labelled as in paratype 2 (no genitalia preparation); Paratype, *Scythris jaeckhi* Bgts. (red label). In coll. KLIMESCH.
5. 1 female, labelled : Graecia, Pelopones, Chelmos, 2300 m, 24.VI.1958, leg. Klimesch (white label); Genitalpräparat Jä 8392 (white label); Paratype, *Scythris jaeckhi* Bgts. (red label). Genitalia mounted on slide. In coll. KASY. [The paratype was not seen by me but identified by a photo].

Diagnosis : *Scythris jaeckhi* n. sp. (Fig. 1) is characterized by its slender yellowish plical streak on a brown ground with violet tinge, thus resembling several species with such markings. *S. jaeckhi* differs from *S. salviella* (MEESS), *S. scipionella* (STAUDINGER) and certain well-marked specimens of *S. cuprella* (STAUDINGER) by its size (wing expanse less than 14 mm, that of the latter usually more than 16 mm). *S. scorpionella* JÄCKH has a white-scaled streak, not yellowish, the labial palpi are very slender, and above eye a dash of yellowish scales is missing. *S. moldavicella* CARADJA, *S. vernusella* JÄCKH, *S. balcanica* JÄCKH, *S. emichi* (ANCKER) and *S. libanotica* JÄCKH are considerably smaller (at most 12 mm). Besides, *S. jaeckhi* n. sp. belongs to quite another group of Scythrididae on the base of its genitalia morphology (cf. JÄCKH 1977, 1978) and as the external features often are insufficient for a safe determination the examination of the genitalia is strongly recommended.

Wing expanse 12-14 mm, length of forewing 5-6 mm.

Head fuscous, behind and above eye with ivory scales, those above eye particularly long.

Haustellum of same colour as in head, fuscous, with few pale scales.

Collar paler than head, laterally light brown ochreous.

Antennae reaching about two thirds of forewing, of same colour as head; cilia in male rather short, length only half of the thickness of flagellum, in female very short; scape fuscous above, ivory beneath, pecten prominent, ivory; the flagellum has a ventral patch of ivory scales on every joint, towards apex slightly darkening.

Labial palpi curved, ascending, reaching height of crown; first joint ivory with few dark scales, second and third joint fuscous with complete subdorsal streak of ivory scales, the second one with an additional basal ring of ivory scales.

Thorax and tegulae fuscous.

Foerwing rather dark brown, somewhat glossy, with slight violet tinge, at base

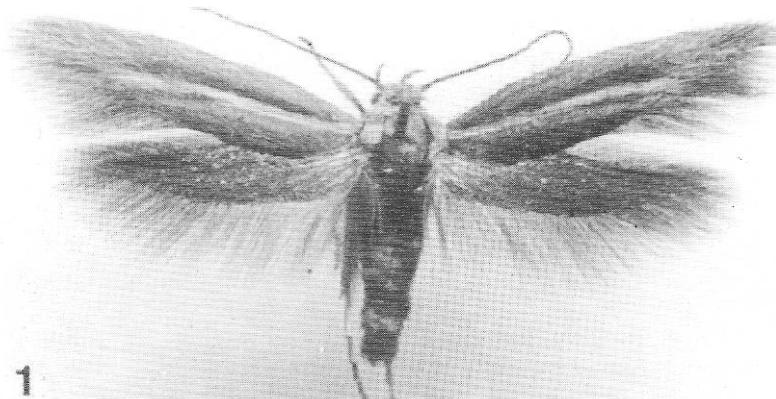


Fig. 1. *Scythris jaeckhi* n. sp., Holotype, Turkey, Gümüşhane, Kopdağı Geçidi, 2400-2600 m, W side, 28-29.VII.1987, H. & Th. VAN OORSCHOT, W. DE PRINS & F. COENEN leg.

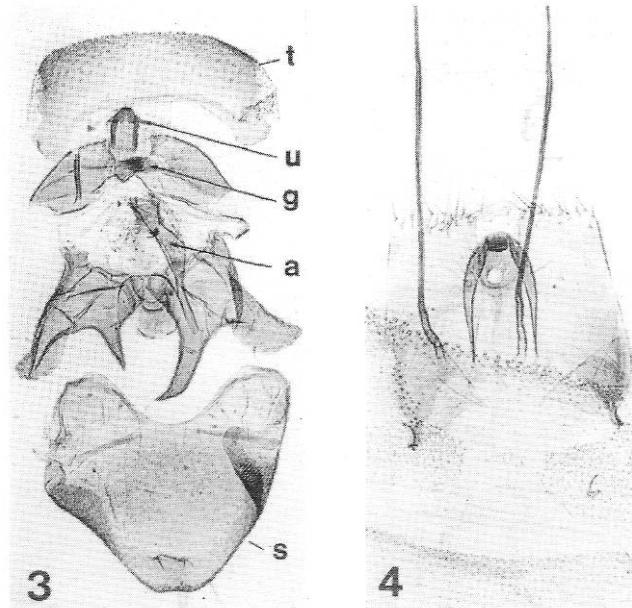


Fig. 3. Male genitalia of *S. jaeckhi* n. sp., paratype no. 2; t = tergum 8, u = uncus, g = gnathos, a = aedeagus, s = sternum 8.

Fig. 4. Female genitalia of *S. jaeckhi* n. sp., paratype no. 3.

of costa and from about mid costa to apex with pale brownish scales, increasing in number outwards, culminating in subapical area; plical streak yellowish and narrow, from base of forewing to somewhat beyond tornus, above tornus with small indication of interruption. Cilia fuscous.

Hindwing almost as broad as forewing, with dark brown-tipped scales. Cilia dark fuscous.

Legs covered with brown ochreous and ivory scales, coxae in their entirety paler than tarsi.

Abdomen in male dark brown dorsally, ivory ventrally with some ochreous-tipped scales; anal tuft gathered, partly bent inwards posteriorly. Female abdomen dark brownish dorsally, on ventral side gradually paler posteriorly, last three penultimate segments dirty ivory.

Male genitalia (Fig. 3) : Uncus a shield-like sclerotization with some lateral bristles; gnathos a short, transverse band with parallel callosities, uniting sublateral parts of tegumen; tegumen broad. Valvae somewhat asymmetrical, bifurcate, the outer branches more or less rounded, moderately sclerotized, the inner branches pointed and somewhat more sclerotized. Vinculum a rounded plate. Aedeagus rather long, slightly bent near middle, tapering posteriorly. Juxta pear-shaped. Tergum 8 a broad girdle (Fig. 3, t), sternum 8 (Fig. 3, s) subtriangular, laterally with sclerotized, projecting «hips».

Female genitalia (Fig. 4) with conspicuous sterigma, spatular, with subapical ostium. Antrum shortly sclerotized, ductus bursae narrow and discernible. Apophyses anteriores very short, a morph *S. jaeckhi* n. sp. is sharing with the females of the *aerariella* group (cf. e.g. BENGTSSON & PASSERIN D'ENTRÈVES 1988 and PASSERIN D'ENTRÈVES 1982).

Biology : The adults have been found in June and July at altitudes between 1600-2600 m.

Distribution : Greece and Turkey.

Etymology : *Scythris jaeckhi* n. sp. is dedicated to the great lepidopterist Mr. Eberhard JÄCKH, Hörmanshofen, who has contributed so much to the knowledge of the European lepidopterous fauna, and especially to the family Scythrididae.

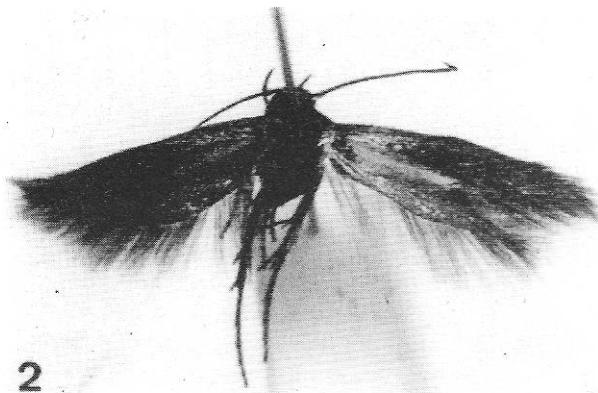
Scythris nieukerkeni n. sp.

Type locality : Spain, Cantabria, Picos de Europa, Peña Vieja.

Holotype :

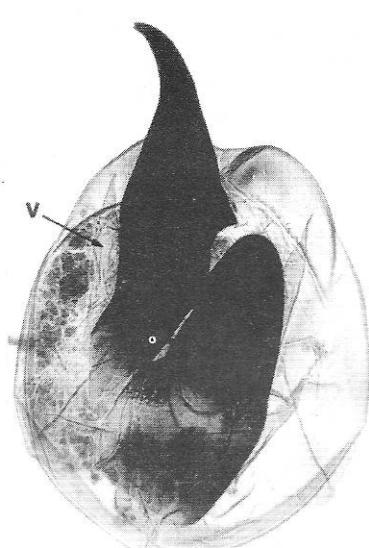
1 male, labelled : Espana (Cantabria), Picos de Europa: 3 km ESE Pena Vieja. UN5280, 28.vii.1986. S. Richter, E.J. van Nieukerken (white label); EvN 86070, at midday, 1950 m, dry limestone rock (white label); Gen.prep.nr. 238X ♂, *Scythris nieukerkeni* Bgts., B.Å. Bengtsson (yellow label); Holotypus, *Scythris nieukerkeni* Bgts. (red label). Genitalia mounted on slide. In coll. Rijksmuseum van Natuurlijke Historie, Leiden.

Diagnosis : It is impossible to determine *S. nieukerkeni* n. sp. safely only by the external appearance. The species is similar to a great number of other dark,

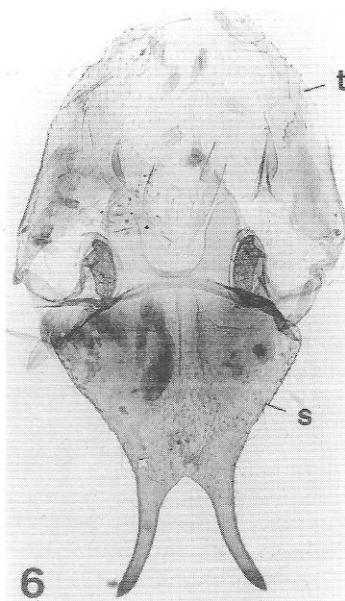


2

Fig. 2. *Scythris nieukerkeni* n. sp., Holotype, Spain, Cantabria, Picos de Europa, 3 km ESE Peña Vieja, 28.VII.1986, S. RICHTER & E.J. VAN NIEUKERKEN leg.



5



6

Fig. 5. Male genitalia of *S. nieukerkeni* n. sp., holotype; v = valva.

Fig. 6. Eighth abdominal segment of *S. nieukerkeni* n. sp., holotype; t = tergum 8, s = sternum 8.

small scythridids. However, the genitalia are quite different from all other known species.

Wing expanse 9.5 mm.

Head dark brown, paler above eye.

Neck tuft brown, laterally with pale scales.

Antennae dark brown, scape with pecten. Cilia length equal to half the thickness of flagellum.

Labial palpi ascending, curved, reaching the height of antennae base, dark brown with numerous white scales, especially on the basal joint.

Tegulae and thorax dark brown.

Forewing dark brown with few, isolated pale scales; at costa just beyond middle a small line of whitish scales reaching cilia, more extended on ventral side of forewing. Dark scales of forewing with paler base as in e.g. *S. picaepennis* (HAWORTH).

Hindwing dark fuscous, breadth 0.8 of forewing.

Cilia of all wings fuscous, somewhat darker in forewing.

Femur and tibia in all legs mottled with fuscous and whitish scales.

Tarsi dark brown.

Abdomen dark fuscous dorsally, dirty ochreous ventrally; anal tuft small.

Male genitalia (Fig. 5-6) very compact, asymmetrical and difficult to interpret. Valvae small, bristled flaps. Tegumen oval. Aedeagus strongly sclerotized, tapered, apically bent, with a short projection in middle. A sclerotized, large, rounded projection may be a proximal arm of gnathos. Tergum 8 a weak subtrapezoid membrane with indented, posterior margin. Sternum 8 with deep bifurcation posteriorly, the distal arms diverging and strongly sclerotized at the ends.

Female unknown.

Biology : No further information is available than what is stated on the labels of the holotype.

Distribution : Only known from the type locality.

Etymology : I name this species after the nepticulid specialist Dr. Eric J. VAN NIEUKERKEN, Leiden, who has found this species and generously handed it to me for description.

Acknowledgments

I owe great debt to Mr. Willy DE PRINS, Antwerp, and Dr. Eric J. VAN NIEUKERKEN, Leiden, for making it possible to describe *Scythris jaeckhi n. sp.* and *S. nieukerkeni n. sp.* by generous loan of material for determination. I also thank Dr. Josef KLIMESCH, Linz am Donau, for supplying with paratype specimens and Mr. Eberhard JÄCKH for letting me use his important photographic file at valuating the described species. Finally I express my gratitude to Prof. Pietro PASSERIN D'ENTRÈVES, Torino, for giving his opinion of the two taxa.

Literature

Bengtsson, B.Å. & Passerin d'Entrèves, P., 1988. Description of two new species from southwest

- Europe, *Enolmis vivesi* n.sp. and *Scythris lhommei* n.sp. (Lepidoptera : Scythrididae). - *Shilap Revta.lepid.* **16** (61) : 21-27.
- Jäckh, E., 1977. Bearbeitung der Gattung *Scythris* Hübner. 1. Die 'grandipennis'-Gruppe' (Lepidoptera, Scythrididae). - *Dt.ent.Z., N.F.* **24** : 261-271.
- Jäckh, E., 1978. Bearbeitung der Gattung *Scythris* Hübner. 3. Arten mit einer weissen Längstrieme [sic!] (Lepidoptera, Scythrididae). - *Dt.ent.Z., N.F.* **25** : 71-89.
- Passerin d'Entrèves, P., 1982. Note su alcuni Scitrididi della fauna italiana (Lepidoptera, Scythrididae). - *Boll.Ist.Mus.Zool.Univ.Torino* **6** : 79-86.

Boekbespreking

Baehr, B. & W. : Welche Spinne ist das?

11 x 18 cm, 127 p., 113 kleurenfoto's, 8 tekstfiguren, Franckh'sche Verlagshandlung W. Keller & Co., Postfach 640, D-7000 Stuttgart 1, gebonden met plastic omslag, 1987, DM 19,80 (ISBN 3-440-05798-4).

De ondertitel «Kleine Spinnenkunde für jedermann» zegt het meteen : geen diepgaand determinerwerk voor de ca. 850 Middeneuropese spinnensoorten, maar een wandeling in de vormen- en kleurenrijkdom en - opvallend - ook een blik op de interessante levenswijzen en gedragssporen van de verschillende spinnenfamilies.

Traditioneel begint zo'n boekje met een paar inleidende hoofdstukken over bouw en levenswijze van spinnen, zo ook hier. Maar in al hun bondigheid zijn ze toch ook voor de wat gevorderde natuurvriend interessant en vermelden soms weinig bekende gegevens (b.v. dat bij een paar geslachten het wijfje de kleine spinnen aktief voedt). Het hoofdstukje over web- en webbouw geeft beknopt een lezenswaard inzicht in de evolutieve lijnen.

Aan de hand van uitstekende kleurenfoto's (en habitustekeningen) plaatst men de spinnen die we rondom ons tegenkomen binnen families en groepen. Over deze families wordt dan algemene informatie i.v.m. levenswijze en ecologie gegeven. Interessant en plaatsbesparend is daarbij het gebruik van codes om levensgebied, webbouw en dag-nachtaktiviteit aan te geven. De uitleg is steeds vlot leesbaar en boeiend en verbindt vaak anatomische aanpassingen aan milieumstandigheden of aan een specifieke levenswijze; ook paringsgedrag en webbouw komen vaak aan bod.

Nogal wat Zuideuropese soorten zijn afgebeeld omwille van de kleur- en vormenrijkdom. Dit is een beetje jammer en eigenlijk overbodig want men is er anderzijds in geslaagd een aantal algemene soorten uit de inheemse fauna zeer herkenbaar op de gevoelige plaat vast te leggen. Storend is alleszins dat de afmetingen van de spinnen vaak helemaal niet aangegeven zijn en uit de (meestal vergrote) foto's blijken zij uiteraard niet. Het veelgebruikte systeem van het maatstreepie was hier zeker aangewezen.

Positief dan weer is dat het boekje afsluit met een korte bespreking van enkele minder bekende, aan spinnen verwante, groepen. Een goede kwaliteit papier en een stevige plastic kaft maken gebruik in het veld mogelijk. Wie zich zonder collectie en zonder uitgebreid determinerwerk toch wat in de spinnen wil verdiepen, zal in dit boek zeker heel wat aanvullende gegevens over de waargenomen dieren vinden.

Marc Missoorten