

New Species of *Aethes* BILLBERG (Tortricidae)

Józef RAZOWSKI

Institute of Systematic and Experimental Zoology, Polish Academy of Sciences,
Ślawkowska 17, 31-016 Kraków, Poland.

Abstract

Four species of the widely distributed Cochyliid genus *Aethes* are described from the western part of the Palaearctic Subregion. Three of them belong in the group formerly called *Lozopera* STEPHENS.

Aethes elpidia sp. nov.

Externally very similar to *Ae. bilbaensis* (RÖSSLER) ; cf. RAZOWSKI (1970 : 353, pl. 21, fig. 224).

Male genitalia (figs. 1, 2) characterized by the stout central part of the transtilla terminating in two fairly long, wedge-shaped apical processes. Lateral processes of aedeagus with irregular, somewhat asymmetrical teeth.

Holotype, male : "Tunisia, Tozeur, 14.4.1977, lamp., Debreczy et Mahunka, No. 109" ; G. Sl. 8692.

Comments. The new species is very close to *bilbaensis*, but differs in the shape of the central part of the transtilla. The systematic importance of the shape of the lateral processes of the aedeagus is insufficiently known and the group of the species allied to *bilbaensis* requires a thorough revision. The holotype is deposited in the collection of the Hungarian Natural History Museum, Budapest and was kindly provided by Dr. Laszlo GOSMÁNY to whom I express my sincere thanks.

Aethes eichleri sp. nov.

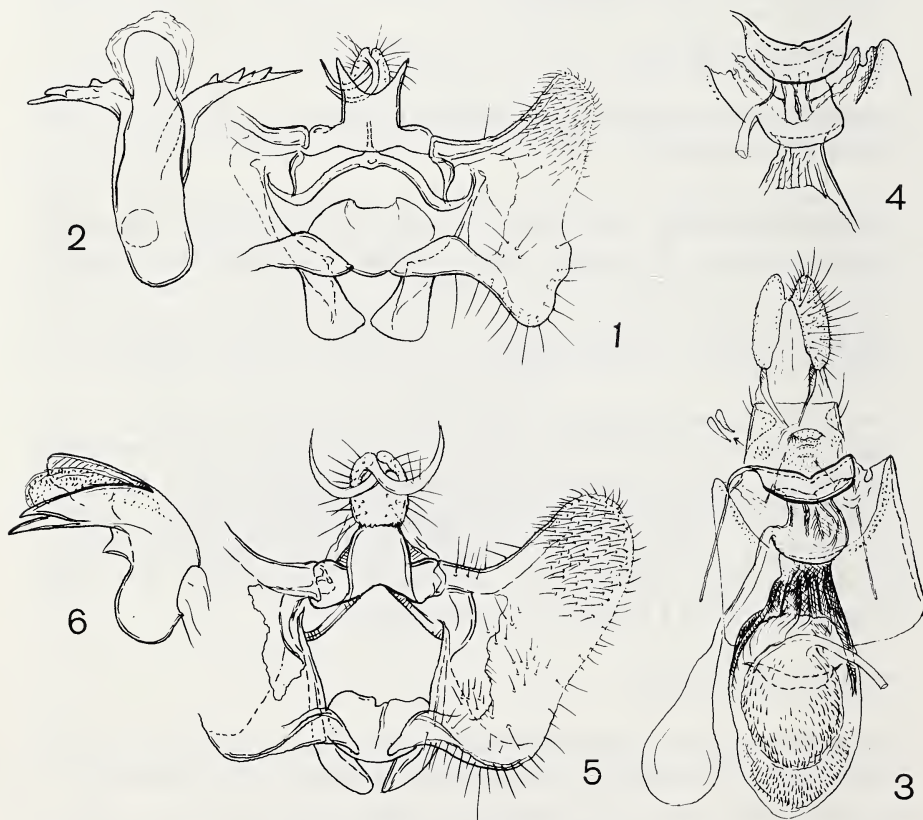
Alar expanse, 14 mm. Externally similar to *Ae. beatricella* (WALSINGHAM), but with more ferruginous, almost complete fasciae of the forewing.

Female genitalia (figs. 3, 4) : Sterigma plate-shaped, somewhat convex proximally ; antrum broad anteriorly, membranous except for distal half ; ductus bursae and distal part of corpus bursae strengthened by

longitudinally folded sclerite ; remaining part of the latter membranous, minutely spined, with shallow dorsal prominence medially ; ductus seminalis ventral, extending from median, broad convexity ; ductus of accessory bursa originating from anterior part of antrum, dorso-laterally.

Holotype, female : "Bulgaria merid., Pirin mont., Bez. Sandanski, Lilianovo, 800 m, 26.V.81-21.VI.81, leg. F. EICHLER44. In coll. F. EICHLER.

Comments. *Ae. eichleri*, named in honour of its collector, Dr. F. EICHLER of Wittenberg, is closely related to *Ae. lateritia* RAZOWSKI, known from Iran and Pakistan, but differs in the shape of the antrum which in the new species is much shorter and lacks the proximal sclerite. From another close species, *Ae. vicina* (MANN), it differs in the antrum and the much stronger sclerite of the bursa copulatrix.



Figs. 1-6. Male and female genitalia :
1, 2 - *Aethes elpidia* sp. nov., holotype ; 3, 4 - *Ae. eichleri* sp. nov., holotype ;
5, 6 - *Ae. afghana* sp. nov., holotype.

***Aethes afghana* sp. nov.**

Alar expanse, 20-23 mm. Ground colour pale yellow ; fasciae of the forewing ferruginous brown, anterior fascia incomplete, often vestigial in coastal portion of the wing or interrupted subcostally.

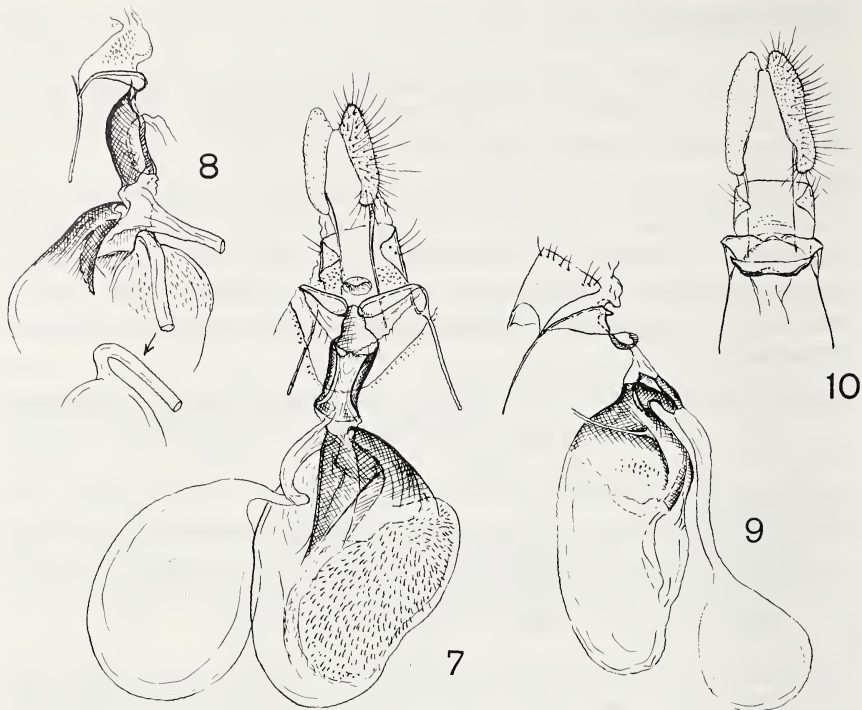
Male genitalia (figs. 5, 6) : Socii strong, extending from fairly large apical portion of tegumen ; central part of transtilla broad, hardly broadening postmedially, marked with some small apical teeth. Valva broad, rounded apically ; sacculus convex ventro-terminally. Aedeagus short, curved, with lateral process (right side) tapering postmedially, almost reaching end of median part.

Female genitalia (figs. 7, 8) : sterigma consisting of rather slender lateral arms followed by rounded sclerite situated in membrane beyond it, medially. Antrum long, strongly sclerotized dorsally and laterally, producing dorso-medially. Ductus bursae very short ; corpus bursae with dorsal and lateral sclerites situated just at base of ductus bursae, remaining areas membranous, minutely spined. Accessory bursa originating laterally from juncture of ductus and corpus bursae, laterally ; ductus seminalis from before ductus of accessory bursa, also laterally.

Holotype, male "Z-Afghanistan, Koh-i-Baba, s. Seite, Panjao 2650 m, 20-22.7.1966, H.-G. AMSEL leg" ; G. Sl. 10168, in coll. of the Landessammlungen für Naturkunde, Karlsruhe. Paratypes, 4 females labelled as follows : "29.6.-8.7.1963, Afghanistan, Pagman, 30 km. N.W. v. Kabul, 2200 m, KASY & VARTIAN", "4.-8. 8.1965, Afghanistan, 30 km N.W. v; Kabul, 2500 m, KASY & VARTIAN" (both in the collection of the Naturhistorisches Museum, Vienne) ; "S.O. Afghanistan, Safed Koh, s. Seite, Kotkai, 2350 m, 14.-23.6.1966" (coll. Landessammlungen für Naturkunde) and "Afghanistan, Salang, 2700 m, 3.-6.7.1975, leg. W. THOMAS" (coll. Dr. Franz EICHLER, Wittenberg).

Comments. The new species resembles *Ae. pamirana* RAZOWSKI status nov. from Afghanistan but differs in the shape of the lateral process of the aedeagus which is broader and rather straight and in almost uniformly broad antrum. Further differences are in the shapes of the sclerites, of the corpus bursae and transtilla. *Ae. pamirana*, described as a subspecies of *Ae. amseli* RAZOWSKI, is a distinct species differing from it in the more strongly sclerotized antrum and the much shorter lateral process of the aedeagus.

My thanks are due to the collectors of the above material, especially to Dr. F. KASY, Vienna and Dr. H.-G. AMSEL who provided it for study.



Figs. 7-10. Female genitalia :

7, 8 – *Aethes afghana* sp. nov., paratype, Salang ; 9, 10 – *Ae. destituta* sp. nov., holotype.

***Aethes destituta* sp. nov.**

Alar expanse, 14 mm. Labial palpus ca. 2, white, remaining parts of head grey, thorax somewhat browner. Forewings hardly broadening medially, with costa weakly convex and broad, and rounded apex ; termen obliquely convex. Ground colour white, with glossy areas near grey pattern ; the latter consisting of basal diffuse blotch fused in dorsal half of wing with hardly oblique median fascia. Curved, pale grey subapical marking and some smaller diffuse spots beyond median fascia. Fringes cream. Hindwings white, suffused with pale brownish grey on peripheries, with some diffuse stringulae at apex ; fringes whitish with ill-defined, greyish median line.

Female genitalia (figs. 9, 10) : Sterigma with well developed lateral arms and small median process of postvaginal lamella and short antevaginal

part ; antrum not differentiated ; distal part of corpus bursae sclerotized ; strong ventral sclerite of base of ductus bursae fused with sclerite of the ductus of accessory bursa ; ductus seminalis lateral.

Holotype, female : "S Iran, Khusestan, 30 km. S. Yassudi, Kuschak, 2200 m, EBERT & FALKNER, leg., 12.6.1972" ; G. Sl. 20083, in the collection of the Landessammlungen für Naturkunde, Karlsruhe. Kindly provided by Dr. H.-G. AMSEL.

Comments. Externally *destituta* resembles to some degree *Ae. spirana* (KENNEL) of Central Asia and Iran (c.f. RAZOWSKI, 1970), but differs in the shape of the forewing and more grey shade of the pattern. In the female genitalia the new species differs in lack of antrum and presence of the sclerites of the base of the ductus bursae.

Reference

RAZOWSKI, J., 1970. Cochylidae [in :] AMSEL, H.-G., GREGOR, F., REISSER, H. : *Microlepidoptera Palaearctica*, 3. Wien.