

First record of *Aethes fennicana* (M. HERING, 1924) (Lepidoptera: Tortricidae, Cochylini) in Romania

Zoltán KOVÁCS, Sándor KOVÁCS, Constantin CORDUNEANU

Abstract

Aethes fennicana (M. HERING, 1924) is reported from Romania for the first time. Description of the adult and the male and female genitalia, distributional and biological data are given. With 5 figures.

Rezumat

Prima semnalare a speciei *Aethes fennicana* (M. HERING, 1924) (Lepidoptera: Tortricidae, Cochylini) în România

Aethes fennicana (M. HERING, 1924) este semnalată pentru prima dată din România din județul Botoșani. Identificarea speciei pe baza caracterelor externe este dificilă, speciile *A. francillana* F., *A. beatricella* WLSM., *A. tornella* WLSM. și *A. fennicana* M. HERING sunt foarte asemănătoare, având toți două benzi transversale complete. O identificare sigură este posibilă numai prin examinarea armăturilor genitale. *Aethes fennicana* se identifică pe baza șirului lung de spini așezați pe suprafața internă a valvelor la masculi, respectiv pe baza rândului circular de spini fine situate pe ostium bursae la femele.

Studiul armăturii genitale a evidențiat că exemplarele aparțin subspeciei *adelaidae* TOLL. Aceasta se diferențiază de subspecia nominativă la masculi prin socii mai lungi și transtilla mai lată, iar la femele prin ostium bursae acoperit mai dens cu spini și un corpus bursae mai larg.

Este o specie răspândită în nord-estul Europei (Suedia, Finlanda, Letonia și Lituania) prin subspecia nominativă și părțile nordice ale Europei Centrale (Franța, Germania, Austria, Polonia, Cehia și Slovacia) prin subspecia *adelaidae* TOLL, localitatea din județul Botoșani reprezentând actualmente cel mai sud-estic punct al răspândirii ei.

Key words: *Aethes fennicana*, Romania, faunistics.

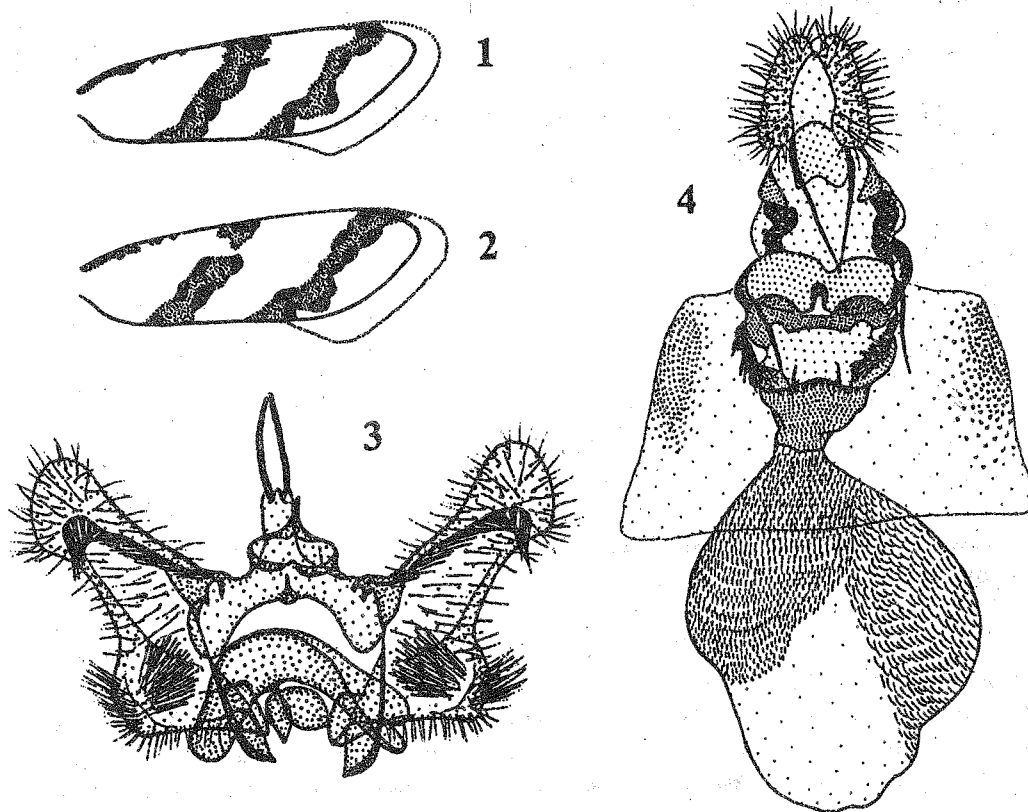
Introduction

With the occasion of the revision of the Romanian Cochylini (KOVÁCS & KOVÁCS, in preparation) we found a few species which wasn't included in the checklist of the Romanian microlepidoptera (POPESCU-GORJ 1984). One of them was *Aethes fennicana* (M. HERING 1924), found in the collection of C. CORDUNEANU. After the study of the male and female genitalia it becomes obvious that this specimens belongs to the ssp. *adelaidae* (TOLL 1955). In the followings we give a short description of the adults, male and female genitalia and data to the biology and distribution of the species.

Aethes fennicana adelaidae (TOLL, 1955)
(Figs. 1 - 5)

Material examined: 1 male and 1 female: jud. Botoșani, Orășeni Vale, 150 m, Curtești, lumină, 10. VII. 1997. (♀), (genitalia preparation no. 892/♀/ KOVÁCS); jud. Botoșani, Orășeni Vale, 150 m, lumină, 26. VI. 1998. (♂), (genitalia preparation no. 865/♂/ KOVÁCS), legit & coll. C. CORDUNEANU (Botoșani, România).

Description: Male: Wingspan 14 mm. Head, labial palps, thorax and tegulae ochre. Lateral side of labial palps slightly brownish yellow. Antennae slightly longer than half of the forewing. Forewing (Fig. 1) long and slender, ground colour slightly shiny light ochre. The rusty brown drawing is formed by a short and narrow line at the base of the costa, followed by three small spots and two transversal fasciae. The transversal fasciae are parallel with the termen and on their edges there are very shiny, lead-coloured spots. The basal transversal fascia reaches costa at



Figs. 1 - 4: *Aethes fennicana adelaidae* TOLL: 1, forewing pattern of male, 2, forewing pattern of female, 3, male genitalia, 4, female genitalia.

the middle of the wing, its edges are slightly sinuous and parallel. The subapical transversal fascia reaches posterior margin of the wing at the tornus, its basal edge is only slightly sinuous, but the apical edge is very sinuous. Fringes light ochre. Hindwing is broad, elongate, brownish grey.

Female: The basal transversal fascia is broken under the costa (Fig. 2). Hindwing is darker.

Male genitalia: (Fig. 3) Socii long, transtilla broad, valvae short and broad, costa and sacculus straight and divergent, costa almost twice as long as sacculus, on the inner surface of the valvae a long and distally curved row of long setae. Aedeagus short, curved, distal part forked, without cornuti.

Female genitalia: (Fig. 4) Papillae anales, apophyses and antrum short, sterigma broad, the membrane of ostium bursae densely covered with fine setae on a circular line, ductus bursae broad and well sclerotized, corpus bursae large, distal part densely covered with minute setae.

Discussion: *Aethes fennicana* (M. HERING, 1924) is similar to other *Aethes* species such as: *A. francillana* F., *A. beatricella* WLSM. and *A. tornella* WLSM., it can be recognized by the presence of long and distally curved row of long setae on the inner

surface of the valvae of the male genitalia and by the dense covering of fine setae of ostium bursae of the female genitalia. The ssp. *adelaidae* TOLL differs from the nominate ssp. by the longer socii and broader transtilla of the male genitalia and by the most dense setae covering of the ostium bursae and larger corpus bursae of the female genitalia.

Biology: Adults were collected at light in a valley, in the inundation area of a stream. In the same habitat was collected also the interesting noctuid species *Arytrura musculus* (MÉNÉTRIÈS, 1859).

Distribution: Subspecies *fennicana* (M. HERING, 1924) occurs in the northeastern part of Europe (Sweden, Finland, Lithuania and Latvia). Subspecies *adelaidae* TOLL was described from the mountainous regions of southeastern Poland (RAZOWSKI 1970) and it was hitherto only known from the northern part of Europe (France, Germany, Austria, Czechia, Slovakia and Poland). Its presence in the northeastern part of Romania (Fig. 5) represents the southeastest limit of its distribution in Europe.

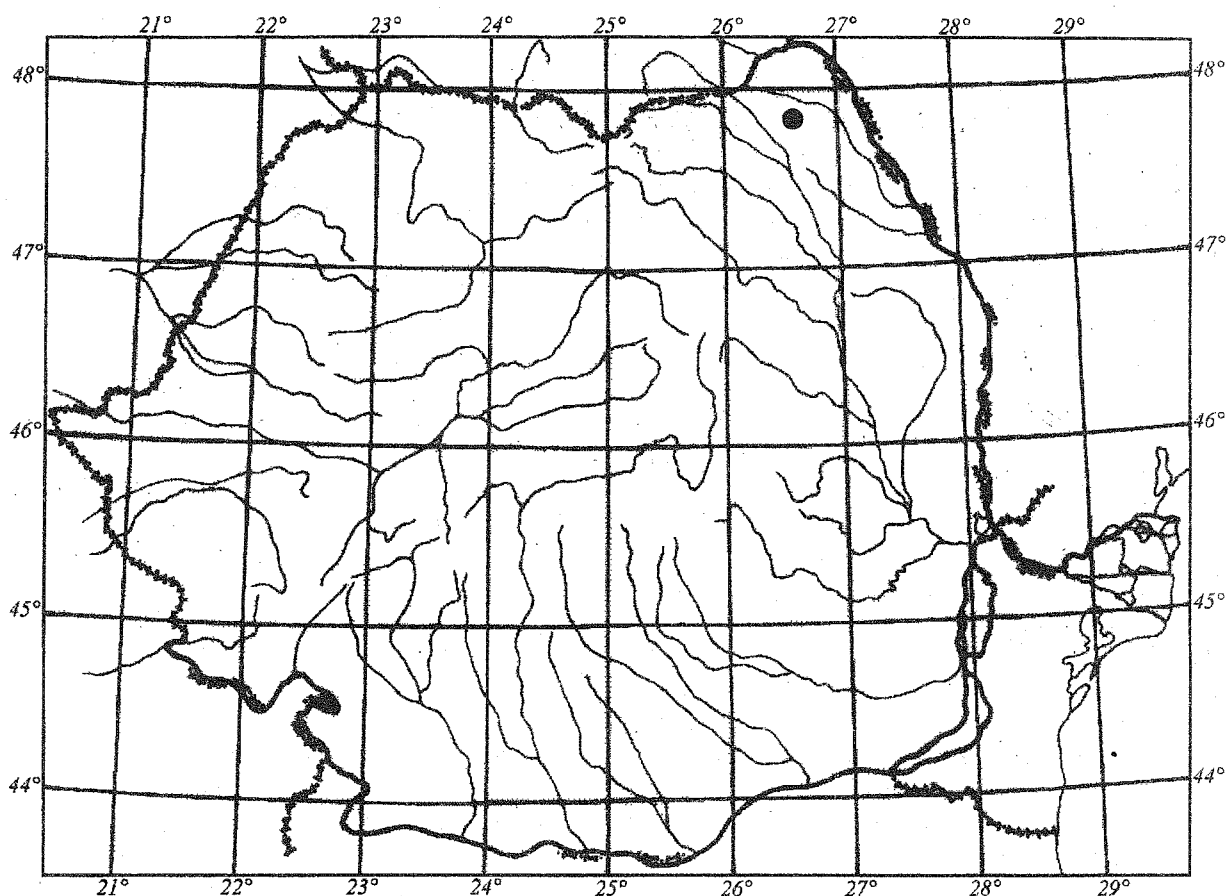


Fig. 5: The distribution of *Aethes fennicana adelaidae* TOLL in Romania (●).

References

POPESCU-GORJ A. 1984. La liste systématique des espèces de Microlépidoptères signalées dans la faune de Roumanie. Mise à jour de leur classification et nomenclature. Trav. Mus. natl. Hist. nat. "Grigore Antipa", 24: 111 - 162.

RAZOWSKI J. 1970. Cochylidae. In: AMSEL, H. G., GREGOR, F. & REISSER, H., (Eds.): *Microlepidoptera Palaearctica*. 3. Wien.

RAZOWSKI J. 1996. Tortricidae. In: KARSHOLT, O. & RAZOWSKI, J., (Eds.): *The Lepidoptera of Europe. A Distributional Checklist*. Apollo Books. Stenstrup.

Zoltán KOVÁCS & Sándor KOVÁCS
 RO - 4000 SF. GHEORGHE
 str. László Ferenc nr. 3A/16
 e-mail: kovacs@nextra.ro
 adonis@cosys.ro
 Romania

Constantin CORDUNEANU
 RO - 6800 BOTOȘANI
 Aleea Transilvaniei 4, Bl. A7, et. 2, ap. 5
 Romania

Received: 3.04.2000
 Accepted: 4.04.2000
 Printed: 28.04.2000