

Summary

Group VI of the work on palaearctic Tineidae deals with the genus *Euplocamus* Latr., the systematic position of which is dubious. The species may be separated by external characters as well as by the male genitalia, while the female genitalia were found so similar that they could not be used for determination of species.

Резюме

Группа VI работы о палеарктических тинеидах занимается родом *Euplocamus* Latr., систематическая позиция которого сомнительна. Виды можно различать, как по внешним признакам, так и по мужским половым органам, в то время, как женские половые органы настолько сходны между собой, что ими нельзя пользоваться при определении вида.

(Fortsetzung im nächsten Heft.)

A Note on Microlepidoptera from South China

(*Lepidoptera: Tortricidae & Oecophoridae*)

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(With 1 plate)

Professor Dr. H. SACHTLEBEN of the Deutsches Entomologisches Institut, Berlin-Friedrichshagen, forwarded to me for identification some material of Microlepidoptera from South China, containing species injurious to *Citrus*. The material has been sent by Professor SHIN-FOON CHIU, Director of the Department of Plant Protection, South China Agricultural College, Canton.

The Microlepidoptera fauna of South China is very fragmentarily known. Still, this subtropical area at the border of the Palearctic and Palearctic regions is of the greatest interest both to the taxonomist and the zoogeographer.

However small the present material is, containing four species only, it proved to be of interest. One species is new to science; I am greatly indebted to both the above mentioned institutions for the permission to retain the type specimens in the Leiden Museum. Furthermore I wish to express my gratitude to Mr. J. D. BRADLEY, British Museum (Natural History), London, for his kind assistance; he compared some of the present material with MEYRICK's types, and provided me with other material for comparison.

*Tortricidae**Adoxophyes cyrtosema* Meyrick 1886

Adoxophyes cyrtosema Meyrick, Trans. Ent. Soc. Lond., 1886, p. 276, 1886 (♂, ♀ Tonga, Fiji), 1886.

Adoxophyes fasciculana Meyrick (non Walker 1866), Proc. Linn. Soc. N. S. Wales, 35, p. 209, 1910 (partim *cyrtosema* syn.) — Gen. Ins., fasc. 149, p. 18, 1913.

Adoxophyes asciculana (sic) Meyrick (lapsus pro *fasciculana*; *cyrtosema* syn.), Lepid. Cat., pars 10, p. 14, 1912.

Distribution: Southern Pacific Region (,Tonga, Fiji“).

South China, Canton, on *Citrus*, 28. X. 1956 (S. K. LIU). 1 ♂, 1 ♀: Leiden; 2 ♂♂, 2 ♀♀: Canton; 2 ♂♂, 1 ♀: Berlin-Friedrichshagen¹⁾.

I owe the identification of this species to Mr. J. D. BRADLEY, who provided me with photographs of the genitalia of the (male) type specimen, and drew my attention to the fact that the species is distinct from *A. fasciculana* Walker 1866, contrary to MEYRICK's opinion, maintained for a long time. The differences are slight but obvious, viz., the much less clavate uncus with a rounded top (arrowhead-like in *fasciculana*), the longer valva with a transverse fold along base, the straight aedoeagus (slightly bent in *fasciculana*), and the shorter signum of *cyrtosema*. Since *cyrtosema* and *fasciculana* have been confounded, it is not possible to exactly determine their distributions at present.

Cacoecia micaceana var. *compacta* Meyrick 1918

Cacoecia micaceana Walker, Cat. Lep. Het. B. M., 28, 314, 1863.

Cacoecia compacta Meyrick, Exot. Microl., 2, 164—165, 1918.

Cacoecia micaceana var. *compacta* Diakonoff, Rec. Indian Mus., 41, 232, 1941. — Treubia, 18, pl. 4, figs. 2—3, 1941.

Distribution: India.

South China, Canton, on *Citrus*, 28. X. 1956 (S. K. LIU). 1 ♂, 1 ♀: Leiden; 1 ♂, 1 ♀: Canton; 2 ♂♂: Berlin-Friedrichshagen. Females with rather bright orange hind wings, but still belonging to this variety. It has been recorded from India where the larvae feed on leaves of a number of plants and shrubs, belonging to various families.

Cacoecia eucroca n. sp.

♂ 16—19 mm (holotype 17 mm). Head deep ferruginous, loose scales on vertex tinged ochreous-fulvous. Antenna deep ferruginous, scape fulvous. Palpus rather appressed to face, smooth, terminal segment short, rounded; orange-ochreous, suffused with ferruginous-fulvous along lower edge and, more so, towards apex. Thorax deep ferruginous, slightly mixed with fulvous-ochreous anteriorly. Abdomen bright orange, anal tuft paler. Legs bright orange, variably suffused with fulvous-ferruginous.

Fore wing oblong-subtruncate, strongly dilated, broadest before termen. Costa with a rather narrow fold to $\frac{1}{3}$, this fold edged by a longitudinal ridge of moderately raised scales; between fold and ridge, a cavity, filled with snow-white hair-scales (often this cavity entirely concealed); costa strongly sinuate, apex rectangular-obtuse, termen slightly concave above, broadly rounded and prominent beneath, almost outwards-oblique. Deep reddish-ferruginous, with a strong purple gloss, with oblique, rather broad greyish-purple submetallic fasciae and round spots, visible in certain lights; terminal third pale ochreous; an oblique submetallic fascia from

¹⁾ Leiden = Rijksmuseum van Natuurlijke Historie, Leiden; Canton = Department of Plant Protection, South China Agricultural College, Canton; Berlin-Friedrichshagen = Deutsches Entomologisches Institut, Berlin-Friedrichshagen.

lower edge of costal fold before its apex crossing wing to middle of dorsum; base of wing before this fascia almost entirely covered with roundish submetallic grey-purple spots (on pale ochreous ground, of which only narrow edges are visible); a series of three large round submetallic spots, the two upper connected, oblique, from well before middle of costa to upper edge of cell, third spot isolated, filling posterior third of cell; a direct, submetallic fascia to dorsum before tornus, rather straight and vertical, on costa furcate and preceded by one or two more slender costal marks; costal patch appearing in certain lights, semiellipsoid, dark ferruginous, from $\frac{1}{2}$ of costa to well before apex; terminal fourth of wing ochreous, upper half of this area suffused with light tawny; a moderately oblique shining whitish-ochreous thick fascia before apex, to middle of termen, emitting a narrow, interrupted similarly shining marginal line along upper part of termen and around apex; a short horizontal mark of dull black scales between veins 6 and 7, traversing space between two submetallic markings; a few blackish scales above vein 7. Cilia purplish in apex, fulvous-tawny along upper, pale tawny-ochreous along lower half of termen, and in tornus.

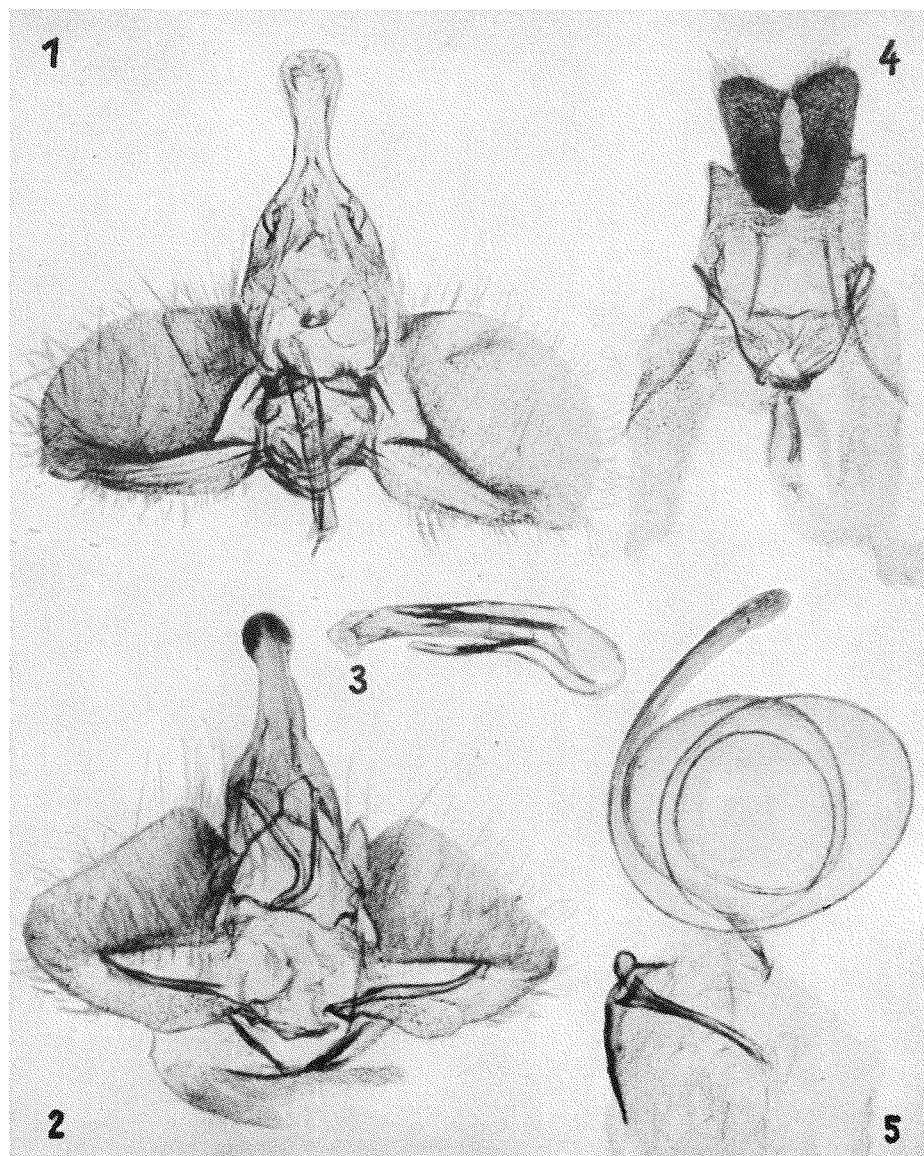
Hind wing semioval; bright orange, without a trace of grey, dorsum somewhat paler along edge. Cilia bright orange, with a strong golden gloss.

♀ 18—19 mm (allotype 19 mm). Head, palpus, antenna and abdomen as in male. Thorax unicolorous deep ferruginous.

Fore wing slightly longer and less dilated than in male. Costa strongly sinuate, apex prominent, termen strongly sinuate, rounded and prominent beneath. Light tawny-ochreous, traversed with sinuate ochreous-whitish fasciae with a strong gloss; markings reddish-brown. Basal patch extended on costa hardly to $\frac{1}{5}$, on dorsum, beyond $\frac{1}{3}$, its edge angulate just above fold, with upper half very oblique, lower vertical; transverse fascia formed by a reddish suffused oblique wedge-shaped mark on $\frac{1}{3}$ of costa, connected by a narrow suffused brownish-tawny streak with a subquadrate suffused reddish-brown blotch on dorsum before tornus, reaching half across wing; costal patch deep reddish-brown, semioval, small, occupying about the fourth fifth of costa, connected along end of cell by a tawny strigula, centred blackish, with dorsal patch; glossy transverse strigulae becoming grey-purplish instead of ochreous-whitish where they traverse dark markings; these glossy fasciae leaving on terminal area some three sinuate dull pale tawny-ochreous streaks of ground colour; apex also dull pale tawny ochreous. Cilia as in male, but a tinge darker.

Hind wing glossy bright orange, costal fourth before apex pale yellowish, costa before apex with a thick patch of modified black scales.

Male genitalia (Pl. 1, figs. 2,3), Tegumen small and narrow. Uncus slender, slightly dilated beyond base, top gently clavate. Socius „parietal“, a series of bristles only. Gnathos long, with slender arms and a large hook. Transtilla, a rather narrow straight band. Valva triangular, about as high



A. Diakonoff, Microlepidoptera from South China

Explanation of plate 1

- Fig. 1. *Adoxophyes cyrtosema* Meyrick, male genitalia.
 Fig. 2. *Cacoecia eucroca* n. sp., genitalia of the holotype, male.
 Fig. 3. *Cacoecia eucroca* n. sp., aedoeagus.
 Fig. 4. *Cacoecia eucroca* n. sp., genitalia of the female, allotype.
 Fig. 5. *Cacoecia eucroca* n. sp., ductus bursae with cestum and corpus bursae with signum.

as broad, with a peculiar additional lobe at base of costa; sacculus rather broad, upper edge developed into a slightly sinuate harpe, with top projecting obliquely upward. Aedoeagus little curved, with a long, sinuate caulis. Cornuti, a sheaf of long spines. (Slide no. 2394, holotype.)

Female genitalia (Pl. 1, figs. 4, 5). Very similar to those of *C. atrolucens* Diakonoff 1941, but with the lamella antevaginalis more sclerotized, colliculum longer, basal plate of signum more extended (Slide no. 2396, allotype).

South China, Canton, on *Citrus*, 28. X. 1956 (S. K. LIU). 1 ♂ holotype, 1 ♀ allotype, 1 ♂ paratype: Leiden; 2 ♂♂, 3 ♀♀ paratypes: Canton: 2 ♂♂, 2 ♀♀ paratypes: Berlin-Friedrichshagen.

Judging from the male genitalia, the species is nearly allied to *Cacoecia atrolucens* Diakonoff 1941, from the Malay Archipelago (Java), which species also has a parietal socius, but further possesses a not clavate uncus and a much longer aedoeagus; superficially *eucroca* is widely differing. It is readily recognisable by the bright orange hind wings and the submetallic markings.

In some male specimens the costal fold and the costal portion of wing before the costal patch are light tawny or ochreous-tawny.

Oecophoridae

Psorosticha zizyphi Stainton 1859

Depressaria zizyphi Stainton, Trans. Ent. Soc. Lond., new ser., 5, 115, 1859. — Walker, Cat. Lep. Het. B. M., 29, 564, 1864. — Moore, Proc. Zool. Soc. Lond., 1857, p. 670, 1867. — Cotes & Swinhoe, Cat. Moths India, p. 717, no. 4905, 1889.

Depressaria angusta Walsingham, in MOORE: Lep. Ceylon, 3, 508, pl. 209, f. 5, 1887.

Tonica zizyphi Meyrick, Journ. Bombay N. H. Soc., 20, 167, 1910. — Fletcher, South Ind. Ins., p. 459, f. 335, 1914. — Proc. 2nd Ent. Meet. Pusa, p. 211, 1909. — Mem. Dept. Agr. Ind., Ent., 6, 108, pl. 35 f. 1, 1920.

Psorosticha zizyphi Meyrick, Gen. Ins., fasc. 180, p. 168, 1922.

Distribution: India, Ceylon; Philippine Islands?

South China, Canton, on *Citrus*, 28. X. 1956 (S. K. LIU). 1 ♂, 1 ♀: Leiden; 2 ♀: Canton; 1 ♂, 1 ♀: Berlin-Friedrichshagen.

It may be stated here that the common *Citrus* pest in Java, usually identified as *Psorosticha zizyphi* Stainton (e. g., in KALSHOVEN, „De Plagen van Cultuur-gewassen in Indonesië“, 1, 382, 1950), is certainly not this species. It is much larger and has distinctly different genitalia (in the two sexes). I identified it previously as *P. acrolopha* Lower, an Australian species, but the matter needs confirmation which I hope to provide in due course. Records of *zizyphi* from the Malay Archipelago, the Papuan Region, and Australia, pertain, in my opinion, not to *zizyphi*, but to the larger species or to a third one.

Summary

A new species of *Tortricidae* injurious to *Citrus*: *Cacoecia eucroca* is described, based upon material from the Department of Plant Protection, South China Agricultural College, Canton, which was forwarded to the author by the Deutsches Entomologisches

Institut. The taxonomy of *Adoxophyes cyrtosema* Meyrick, *Cacoecia micaceana* var. *compacta* Meyrick, and *Psorosticha zizyphi* (Stainton), also injurious to *Citrus*, is discussed.

Zusammenfassung

Aus Material, das vom Department of Plant Protection, South-China Agricultural College, Canton, dem Deutschen Entomologischen Institut eingesandt wurde, wird eine neue an *Citrus* schädliche Tortricide: *Cacoecia eucroca* beschrieben. Die Taxonomie von *Adoxophyes cyrtosema* Meyrick, *Cacoecia micaceana* var. *compacta* Meyrick und *Psorosticha zizyphi* (Stainton), die ebenfalls in Süd-China schädlich an *Citrus* aufgetreten sind, wird behandelt.

Резюме

Из материала, полученного Немецким Энтомологическим Институтом от Department of Plant Protection, South-China Agricultural College, Canton, описывается новая тортрицида — вредитель цитрусовых: *Cacoecia eucroca*. Описывается таксономия *Adoxophyes cyrtosema* Meyrick, *Cacoecia micaceana* var. *compacta* Meyrick и *Psorosticha zizyphi* (Stainton), которые также в Южном Китае повреждают цитрусовые.

Die deutschen Arten der Gattungen *Elmis*, *Esolus*, *Oulimnius*, *Riolus*, *Aptyktophallus*

(Coleoptera: Dryopoidea)

Genitalmorphologisch-taxionomische Studie
an *Dryopoidea* I

Von

AUGUST WILHELM STEFFAN

Fuldastation der Hydrobiologischen Anstalt der
Max Planck-Gesellschaft, Schlitz in Hessen

(Mit 55 Textfiguren)

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