

NEW TAXA OF THE
EUGNORISMA–EUGRAPHE GENERIC COMPLEX
(LEPIDOPTERA, NOCTUIDAE)*

Z. VARGA¹, L. RONKAY² and P. GYULAI³

¹Zoological Institute, Kossuth Lajos University, H-4010 Debrecen, Hungary

²Department of Zoology, Hungarian Natural History Museum

H-1088 Budapest, Baross u. 13, Hungary

³Mélyvölgy u. 13/A, H-3530 Miskolc, Hungary

Descriptions of *Eugnorisma jubilans* sp. n. from Uzbekistan, W Tien Shan Mts, in comparison with the members of the *E. trigonica* species group and *Oligarcha* gen. n. for "*E.*" *coryphaea* PÜNGELER are given. With 12 figures.

Key words: Noctuidae, *Eugnorisma*, taxonomy, new taxa

During our recent studies of various large collections we had to face some new taxonomic problems and found two unrecognized taxa. Thus, after the taxonomic revision (Part I) and phylogenetic-biogeographical survey (Part II) of the genus *Eugnorisma* we decided to separate of some curious and seemingly isolated taxa (Part III and present paper). We propose to erect a new genus for "*Agrotis*" *coryphaea* PÜNGELER, 1900, which represents a partly specialised, partly transitional stage within some related genera of Xestiini and describe a new species from the "*trigonica*"-species group of the genus *Eugnorisma* s. str.

***Oligarcha* gen. n.**

Type species: *Agrotis coryphaea* PÜNGELER, 1900

Gender: feminine.

Description. External morphology: the description of the species is satisfactorily made by PÜNGELER (1900) in the original description and given also by VARGA & RONKAY (1987). The newly found male specimen is illustrated in Fig. 1.

Male genitalia (Figs 5, 6): uncus short, flattened, medially dilated, apex slightly recurved, rounded. Tegumen narrow, weak, moderately high, fultura inferior a rather weakly sclerotized, subdeltoidal plate with truncated apex; vinculum strong, V-shaped. Clavus absent. Valvae elongated-triangular with apex acute, cucullus shortly triangular, corona absent. Ventral margin slightly wrinkled distally, pollex (and digitus) absent. Sacculus relatively short, narrow, without differentiated clavus; pulvillus elongated, densely setose. Harpe strong, relatively short, thick, slightly arcuate with acute apex, apical part covered with fine, short sensory setae. Aedeagus moderately long, cylindrical, dorsal part of carina a broad, sclerotized plate covered with minute teeth, continued in a

* Revision of the genus *Eugnorisma* BOURSIN, 1946, IV.

long, rather broad lamina. Ventral part of carina bearing a small, dentate crest passing into a narrow, sclerotized bar which is connected with a strong, large, eversible, dentate ventral plate. Vesica broadly tubular, basal part with fine dorsal-dorsolateral wrinkles. Medial part inflated, distal part narrow-tubular, with a strong, reticulated ribbon running on ventral side to ductus ejaculatorius. Diverticulum small, semiglobular, originated laterally from base of distal tube, armed with a fine, small apical cornutus.

Female genitalia: ovipositor short, broad, weak, gonapophyses short. Ostium and ductus bursae heavily sclerotized, attached by a fine membranous neck. Ostium broad, relatively short with lateral margins finely sinuous, ductus bursae long, flattened, slightly constricted at middle, medial part bearing fine dorsal crests. Cervix bursae less developed, rounded, corpus bursae large, spacious, weakly membranous, without signa.

The figure of the genitalia of the holotype female is given in VARGA & RONKAY (1987, p. 254, Fig. 132).

The new genus belongs to the *Eugraphe*-*Eugnorisma* generic complex. It contains only a single species, displaying a special mixture of genitalic features of various Xestiini groups, together with several autapomorphic ones.

The general impression of the male genital capsula is similar to that of *Amogrotis suavis* STAUDINGER, 1888, but with some essential differences. The entirely different shape and structure of harpe and the complete reduction of clavus indicate that the resemblance of the two taxa is only a superficial one. The long, tubular vesica with a retroflexed, small, needle-like subbasal cornutus shows also only some parallelisms, because the distal dentition of the aedeagus and the structure of carina display several essential differences (see Figs 67-70 in VARGA, RONKAY & YELA 1989). The heavily sclerotised, dentate carina with the ribbon-like ventral extension has essentially the same general features as in the presumably related genera *Eugraphe* and *Xestia*, esp. subgenus *Pachnobia* of the latter (see Figs 50-64, l.c.).

Female genitalia very simplified, displaying only some similarities with the general features of some Xestiini genera, e.g. *Sinognorisma*, ductus bursae not folded and/or twisted, cervix bursae reduced, smooth, corpus bursae membranous, without signa.

***Eugnorisma jubilans* sp. n.**

(Figs 2-4, 7-12)

Holotype: female, Uzbekistan, Chimgan, 1600 m, 20.IX.1992, leg. L. MISKÓ. Slide No. 595 P. GYULAI. Coll. P. GYULAI (Miskolc), deposited in coll. Hungarian Natural History Museum (= HNHM), Budapest.

Paratypes: Uzbekistan, Chimgan: 1 female, 1-6.IX.1982, 1 male, 1 female, 1300 m, 23.IX.1991, leg. U. JÜRIVETE (coll. Zoological Museum Helsinki and Z. VARGA); 2 males, 1600 m, 20.IX.1992, leg. L. MISKÓ (coll. P. GYULAI and HNHM Budapest).

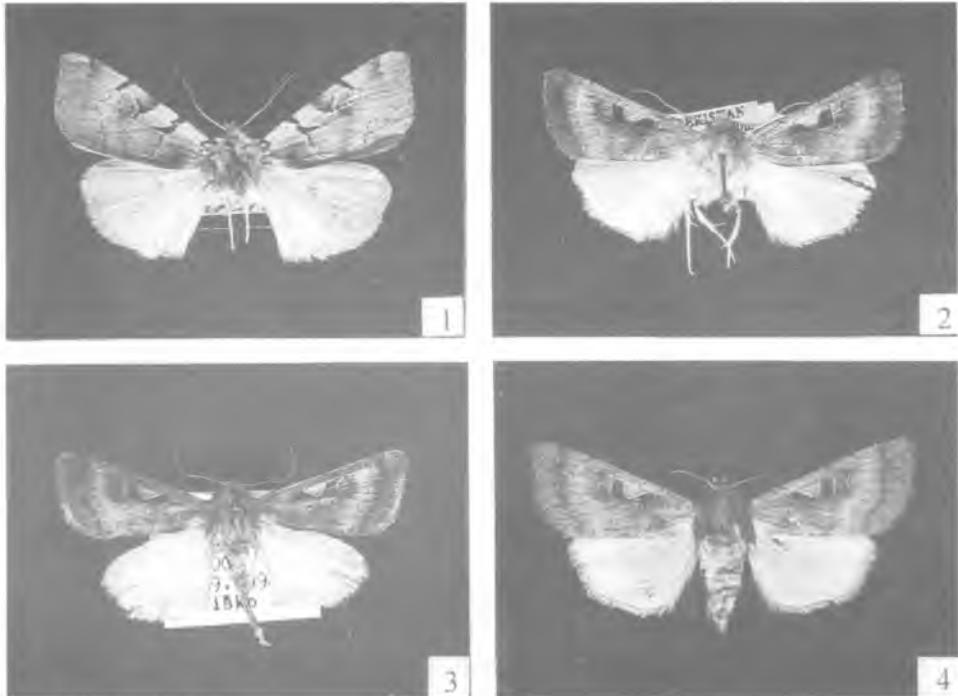
Slide Nos 4596, 4597 RONKAY (males), 4577, 4598 RONKAY (females).

Description. Wingspan 36.6-37 mm (males), 34-36 mm (females); length of forewing 16.5-18 mm (males) 16.5-17.5 mm (females). Head grey-brown, with light grey hairs on frons and

around eyes; antennae of male filiform, grey. Thorax brown-grey, tegulae mixed with reddish hairs, abdomen light ochreous grey. Ground colour of forewings brown-grey with reddish suffusion, basal and marginal areas somewhat darker. Reniform large, encircled with ochreous grey and filled with dark grey-brown, orbicular broad triangular, upper part without sharp outline; filling of cell dark red-brown or blackish brown. Claviform small, obsolescent. Antemedial line double, arcuate, interrupted, with a darker patch at costa, postmedial double, oblique, subterminal an interrupted, sinuous shadow; cilia as ground colour with dark spots at base. Hindwing of males silky whitish, cilia whitish, with weak brownish marginal irroration, that of females with stronger marginal suffusion. Underside of wings pale reddish or brownish grey, marginal fields somewhat darker, shadow of reniform regularly present.

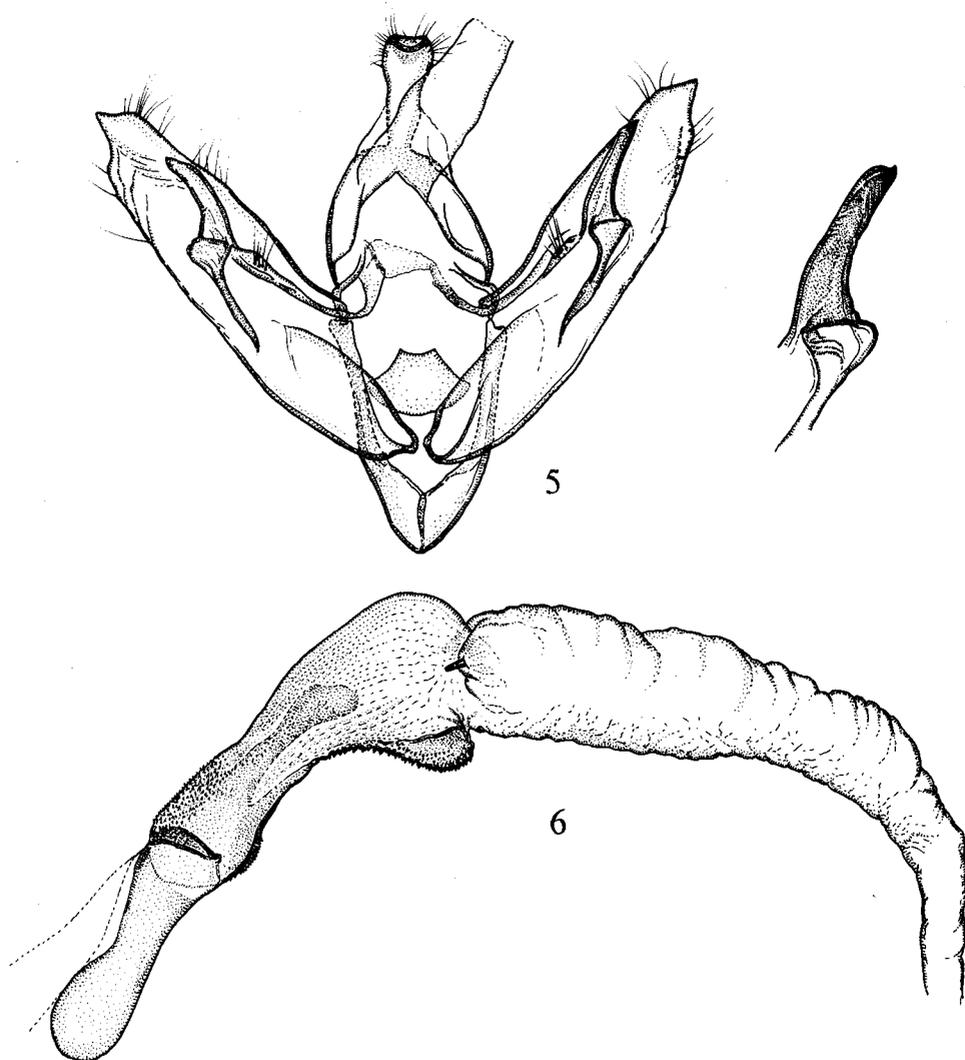
Male genitalia (Figs 7-10): uncus short, rather broad, tegumen high, narrow, fultura inferior a weak plate, vinculum relatively long, V-shaped. Valvae relatively broad, dilated at base and at medial part. Apex pointed, apical lobe short, less acute, pollex broad, triangular, weakly sclerotized, without macrotricha. Harpe strong, falcate, broad-based. Aedeagus short, broad, slightly curved. Carina sclerotized, nail-like, covered with short, strong teeth. Vesica huge, spacious, semi-globular, spinulose field very large. Basal diverticulum long, apically tapering, with a thorn-like terminal cornutus.

Female genitalia (Figs 11, 12): ovipositor weakly sclerotized, covered by fine, moderately long setae. Ostium bursae broad but short, ductus bursae long, sclerotized, laterally folded. Anterior part of ductus narrow, caudally gradually dilated. Cervix bursae large, rounded, weakly plicate; corpus bursae membranous, signa absent.



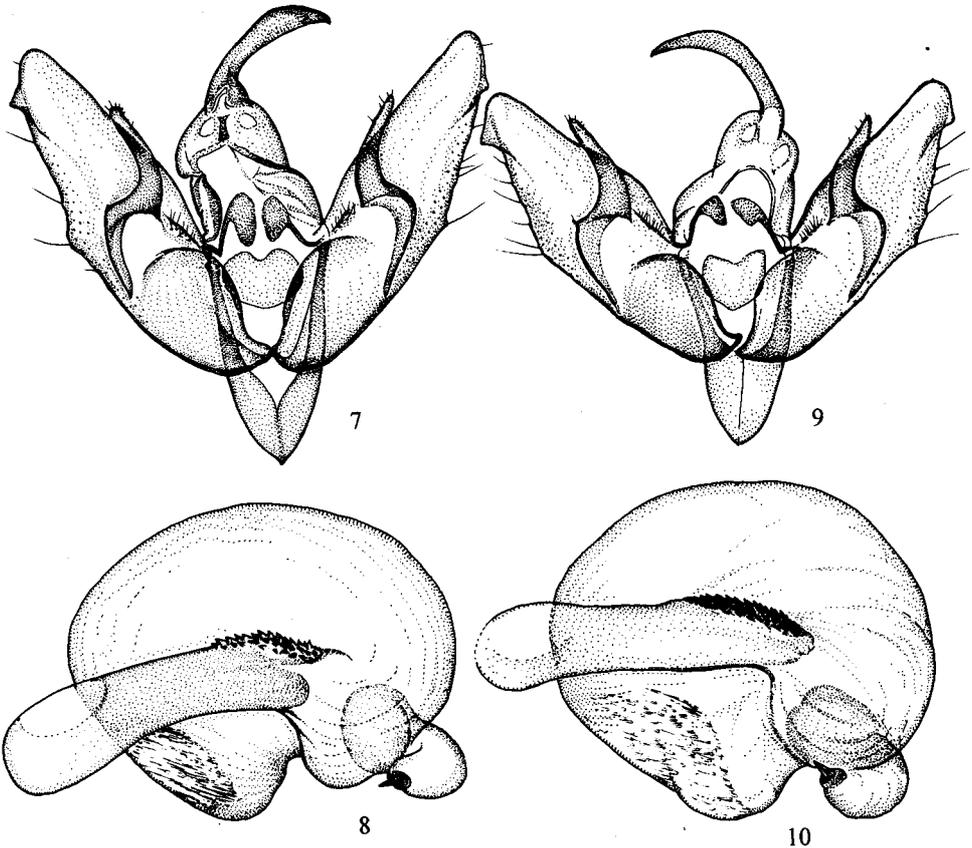
Figs 1-4. 1 = *Oligarcha coryphaea* PÜNGELER, male, Kuku-Noor; *Eugnorisma jubilans* sp. n.: 2 = paratype male, Uzbekistan, Chimgan, 3 = holotype female, Uzbekistan, Chimgan, 4 = paratype female, Uzbekistan, Chimgan

Figs 5–6. Male genitalia of *Oligarcha coryphaea* PÜNGELER, Kuku-Noor, slide No. 4904 RONKAY



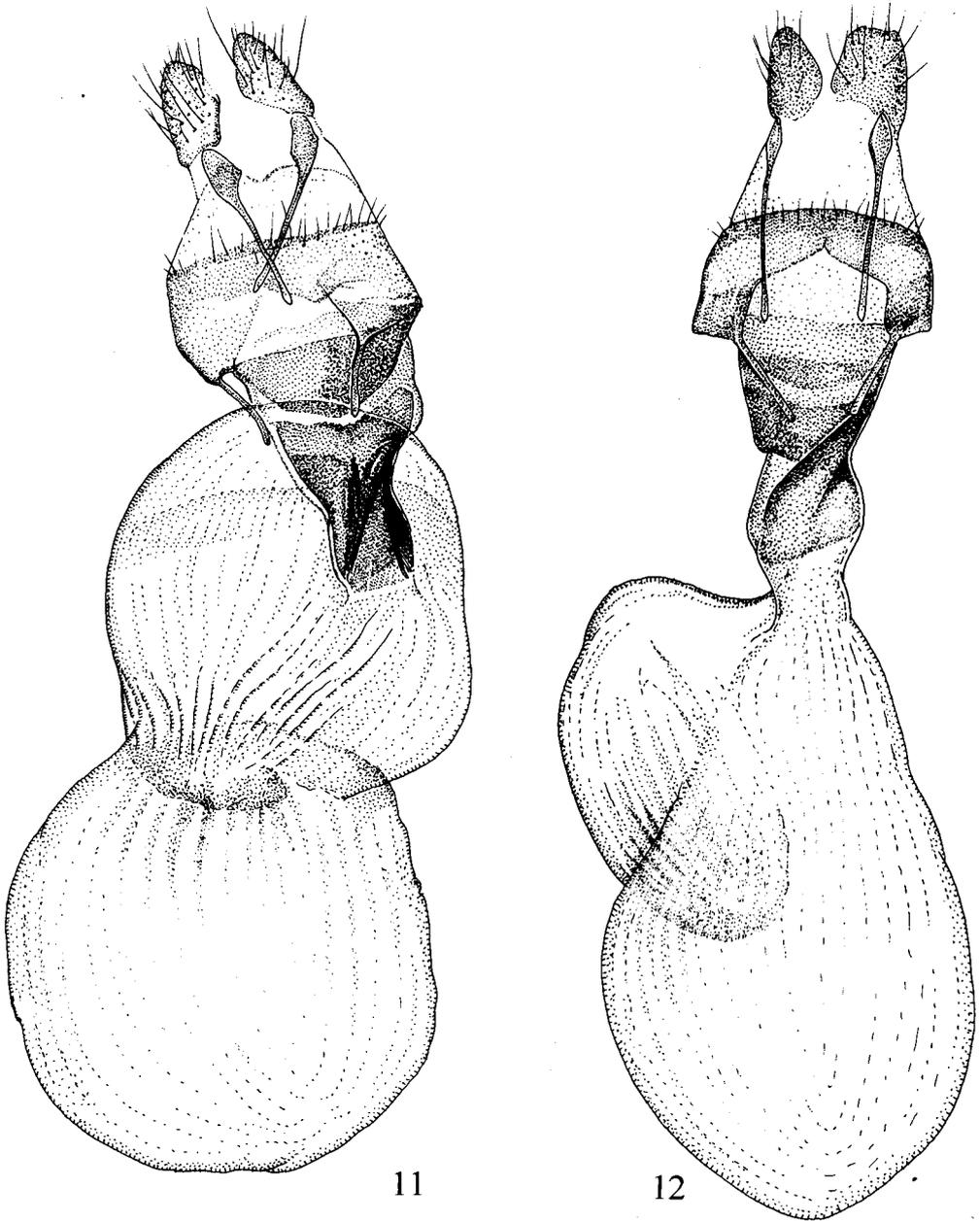
The new species differs externally from *E. deleasma* BOURSIN, 1967 and *E. gaurax* (PÜNGELER, 1900) by its brownish, not black(ish) marking of the cell and the less pure white hindwings. Its closest relative is *E. trigonica* (ALPHÉRAKY, 1872) in which reddish-brownish specimens having pale forewing pattern may often occur. The correct identification of the specimens with such coloration requires the study of the genitalia.

The genitalia of *E. jubilans* are the same type as those of the *E. trigonica* group (see the Figs 42-61, 134-137, in VARGA & RONKAY 1987), the most important differences are as follows: *E. jubilans* is the only known species of the group having no macrotricha on the pollex, the apical lobe is less pointed, the harpe is proportionally shorter and thicker than those of *E. trigonica*. The tube of aedeagus is also short, the dentation of the carina is the strongest within the group. The shape and size of the vesica is close to that of *E. trigonica*, but broader, the subbasal diverticulum is longer with the apical cornutus larger. The



Figs 7-10. Male genitalia of *Eugnorisma jubilans* sp. n. paratypes, Uzbekistan, Chimgan. 7-8 = slide 4596 RONKAY, 9-10 = slide 4597 RONKAY

Figs 11–12. Female genitalia of *Eugnorisma jubilans* sp. n., paratypes, Uzbekistan, Chimgan:
11 = slide 4577 RONKAY, 12 = slide 4598 RONKAY



ostium bursae of the new species is broader, the ductus bursae is longer and proximally significantly narrower than those of the related species.

The new species belongs to the *E. trigonica* group, showing close relationships with *E. trigonica*, *E. gaurax* and *E. deleasma*. The majority of the external and genital features fits well with those of the mentioned species though displaying some unique, derived, taxonomically important characteristics. The pollex covered with macrotricha is mentioned as a synapomorphy of the *trigonica* and *insignata* species groups (VARGA, RONKAY & YELA 1990). The absence of the macrotricha in this species cannot be regarded, however, as an evidence for some closer relationship with other species of the genus, because all the other genitalic features of both sexes are in contradiction (see the description of the new species). The configuration of the carina, the vesica and the ductus bursae, respectively, is so consistent for the whole *E. trigonica* group that this deviate feature of the newly discovered taxon cannot refute the monophyly of the species group.

The reduction of these macrotricha – and partly the sclerotization of the pollex itself – should be considered as an autapomorphy of a marginally isolated, stenochorous species.

Distribution. The new species is known only from the type locality, the north-western border of the area of the species group (and *E. trigonica*, the most widely distributed species of the group).

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