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Two new Cuculliinae species from the Pamir Mountains (Lepidoptera, Noctuidae)

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Abstract

Descriptions of *Dasypolia minuta* sp.nov. and *Eupsilia delicata* sp.nov. from the Pamir Mts. are given. The genus *Dasythorax* is downgraded to subgeneric level: *Dasythorax* WARREN, 1910, = *Dasypolia* GUENEE, 1852, (*Dasythorax* WARREN, 1910) stat.nov.

Zusammenfassung

Es werden zwei neue Noctuidae-Arten aus dem Pamir-Gebirge beschrieben: *Dasypolia minuta* sp.nov. und *Eupsilia delicata* sp.nov. Die Gattung *Dasythorax* wird in den Rang einer Untergattung heruntergestuft: *Dasythorax* WARREN, 1910, = *Dasypolia* GUENEE, 1852, (*Dasythorax* WARREN, 1910) stat.nov.

Dasypolia minuta sp.nov.

(Figs. 1, 7)

Holotype: male, "Tadjikistan, Chorog, IV.1969, Nik. KUZNECOV", slide No. 3112 RONKAY; coll. THÖNY (Ingolstadt, BRD).

Paratype: Male, from same locality and data, slide No. 4048 BEHOUNEK; coll. BEHOUNEK (Deisenhofen, BRD).

Description: wingspan 26,5 mm; length of forewing 12 mm. Head and thorax ochreous-grey, strongly hairy, palpi porrect, covered with greyish scales and longer, dark grey hairs. Antennae bipectinate, branches fine and short. Ground

colour of forewing light ochreous-grey mixed with some greenish and irrorated with dark grey and brown scales. Subbasal line represented by two blackish spots at costa, antemedial and postmedial lines single, sharp, strongly sinuous, dark grey. Orbicular and reniform stigmata minute, black, claviform absent. Subterminal line a diffuse brownish shadow, terminal line very fine, interrupted. Inner part of cilia ochreous, outer part greyish, spotted with ochreous. Hindwing ochreous-grey, marginal field slightly darker, transverse line and cellular lunule obsolete. Terminal line brown, cilia ochreous with two diffuse, greyish lines. Underside pale grey with ochreous-brownish shade, transverse line and cellular lunule diffuse but present on both wings.

Male genitalia (Fig.7): Uncus short and slender with quadrangular apex. Tegumen wide and low, fultura inferior with two falciform lateral extensions and a short medial processus; vinculum strong, V-shaped. Valvae short, triangular, apically tapering, apex rounded. Costal margin less sclerotized, costal processus reduced. Harpe strong, curved, distally dilated with finely truncate apex. Sacculus small, clavus rounded, densely setose. Aedeagus short, cylindrical, with a small, dentated lamina at dorsal edge. Vesica membranous, finely granulose; everted forward and ventrally reclinate.

Diagnosis: The new species differs externally from all the known taxa of the genus by smaller size, the conspicuous dark pattern of forewing, especially the very small stigmata and the sharp transverse lines. These two features can be found in the species of the genus *Cteipolia* STAUDINGER, 1896, but the species of *Cteipolia* have more straight transverse lines, larger reniform spot and the shape of the forewing is more elongated with rounded outer margin (Figs. 2, 3). The male genitalia of *minuta* sp.nov. is similar in type to that of *D. fani* STAUDINGER, 1893, but differs from it by its shorter and more tapering valvae, shorter and broader harpe, the significantly shorter medial processus of fultura inferior and the absence of the costal processus. The new species differs from the taxa of the *ferdinandi*-group by its shorter and broader harpe and the absence of the costal processus. The costal processus reduced also in *D. psathyra* BOURSIN, 1967, but the harpe of this species known from Afghanistan is essentially longer and slender, the valva is more elongate and narrower than those of *minuta* sp.nov. The genitalia of the two *Cteipolia* species are illustrated on Figs. 9, 10, 11.

Taxonomic remarks

The configuration of the male genitalia of *Dasythorax* WARREN, 1910 (*polianus* (STAUDINGER, 1889) and *anartinus* (PÜNGELER, 1902)) and *Dasyptolia* GUENEE, 1852 species (listed in HACKER & MÖBERG 1988) shows the same ground plan (Fig.8). The presence of fasciculate cornuti in the distal part of the vesica can be considered as a plesiomorphic character in this phylogenetic line. Therefore the ge-

neric separation of *Dasypolia* and *Dasythorax* is not sufficiently founded. The manifold similarity in their morphological and life history features suggest to treat them as congeneric species-groups, and, by the mentioned plesiomorphic character, *Dasythorax* can be interpreted as a more ancient subgenus within *Dasypolia*: *Dasythorax* WARREN, 1910, = *Dasypolia* GUENEE, 1852, (*Dasythorax* WARREN, 1910) *stat.nov.*

Eupsilia delicata sp.nov.
(Figs. 4, 12)

Holotype: female, "Chorog IV. 68"; slide No. 3104 RONKAY; coll. THÖNY (Ingolstadt, BRD).

Description: wingspan 41 mm, length of forewing 18 mm. Head and thorax densely hairy, palpi porrect, short, covered by greyish scales and long, dark hairs. Antennae finely ciliate with four longitudinal rows of minute, straight cilia. Shape of forewing wide and elongate, apex acute, outer margin slightly concave. Ground colour of forewing and thorax light reddish-brown (deer-brown), wing pattern diffuse, pale, veins finely, covered with brown. Transverse lines sinuous, double, grey-brownish, filled with ochreous. Orbicular an ochreous circle, filled with ground colour, reniform narrow, encircled with ochreous, lower part filled with bluish-grey. Subterminal line ochreous, waved, terminal line orange, cilia reddish-brown. Hindwing greyish-brown, shiny and slightly translucent, veins covered with brown. Cellular lunule and transverse line diffuse, shadow-like; terminal line brown, cilia orange-yellowish, outer part finely darker. Underside of wings whitish-ochreous, median area of forewing suffused with brown, transverse line a wide, diffuse ribbon on both wings, cellular lunules small but well-discernible.

Female genitalia (Fig.12): Ovipositor short, posterior gonapophyses long and gracile. Dorsal plate of ostium bursae a finely dentated, arcuate ribbon, ventral lamina heavily sclerotized, with a large, rounded protuberance. Ductus bursae membranous, proximally dilated, inner surface densely covered with short spiculi. Apex bursae conical, bearing fine spiculi inside, corpus bursae a large, spacious, rounded sac.

Male unknown.

Diagnosis: The new species is related to *E. eriophora* (PÜNGELER, 1902) (Figs. 5, 13), but easily separable by both external and genital features. The main distinctive characteristics are as follows: the apex of the forewing is more acute with concave outer margin, the stigmata of *delicata* sp.nov. are not encircled with black, the streak of the submedian fold and the claviform spot are absent, the subterminal line is without blackish arrowhead-spots, the hindwing is with stronger transverse line on both surfaces. The female genitalia of the two related species have a very different structure of the ostium bursae; the spiculi of ductus bursae and apex

bursae of the new species are significantly longer and the anterior part of ductus bursae of *delicata* sp.nov. is about twice as wide as in *eriophora*.

Taxonomic remarks

The new species and its sibling, *E. eriophora*, are known only by females. Therefore, without the knowledge of the males, the erection of a new supraspecific taxon would be rather doubtful. The relegation of this pair of species as *Eupsilia* is a pragmatic solution.

The comparative studies on the external morphology and the genitalia of both sexes show that the originally monsoonic forest genera e.g. *Eupsilia*, *Orbona*, *Conistra* and the nearctic *Epiglaea* consists of a compact, seemingly monophyletic group. The irradiation of the ancient "collective" forms from SE Asia (e.g. the montane forest regions of Taiwan, Vietnam, Thailand, the southern Himalaya and possibly from the N Philippines) has led to a successive divergences in the temperate broad-leaf forest belts. The taxonomic ranking of the mentioned genera and their possible close relatives could be correctly be given only after the detailed survey of the Holarctic taxa, including the southern Himalayan and SE Asian species.

Acknowledgements

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Figures

Fig.1: *Dasyptolia minuta* sp.nov., Holotype: Pamir/Chorog.

Fig.2: *Cteipolia sacelli* STAUDINGER, 1896: Issyk-Kul.

Fig.3: *Cteipolia isotima* PÜNGELER, 1914: Pamir/Chorog.

Fig.4: *Eupsilia delicata* sp.nov., Holotype: Pamir/Chorog.

Fig.5: *Eupsilia eriophora* PÜNGELER, 1902: Aksu.

Fig.6: *Eupsilia contracta* BUTLER, 1878: Japan.

Fig.7: *Dasyptolia minuta* sp.nov., Holotype male: Pamir/Chorog.

Fig.8: *Dasyptolia (Dasythorax) anartinus* PÜNGELER, 1902, male: Aksu.

Fig.9: *Cteipolia sacelli* STAUDINGER, 1896, male: Issyk-Kul.

Fig.10: *Cteipolia isotima* PÜNGELER, 1914, female: Pamir/Chorog.

Fig.11: *Cteipolia sacelli* STAUDINGER, 1896, female: Issyk-Kul.

Fig.12: *Eupsilia delicata* sp.nov., Holotype female: Pamir/Chorog.

Fig.13: *Eupsilia eriophora* PÜNGELER, 1902, female: Aksu.

Fig.14: *Orbona fragariae* VIEWEG, female: Austria.

Fig.15: *Eupsilia contracta* BUTLER, female: Japan.

Fig.16: *Epiglaea apicata* GROTE, male: USA.

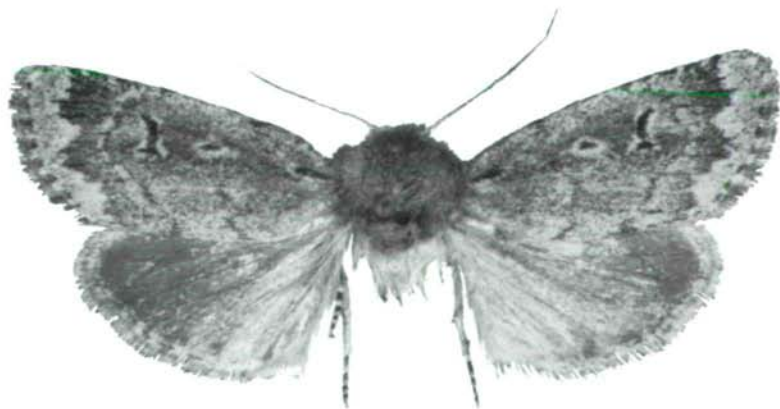
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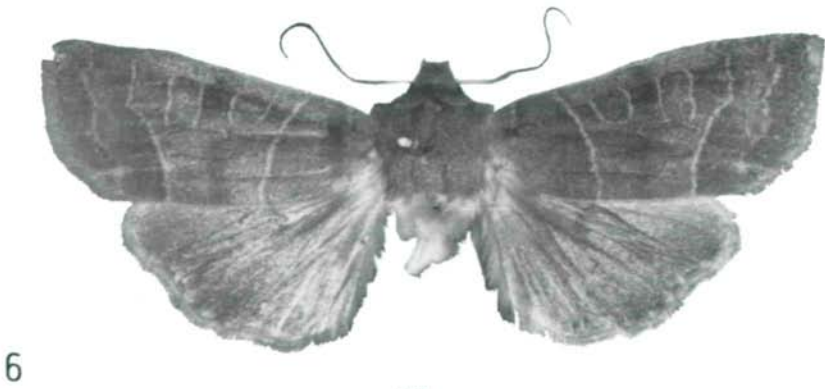
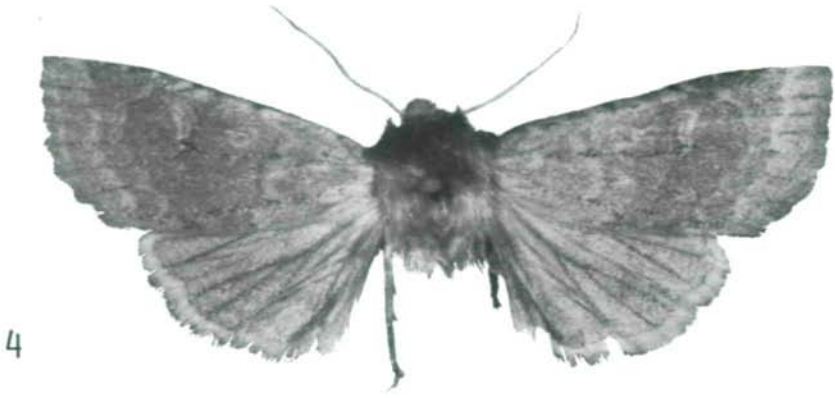


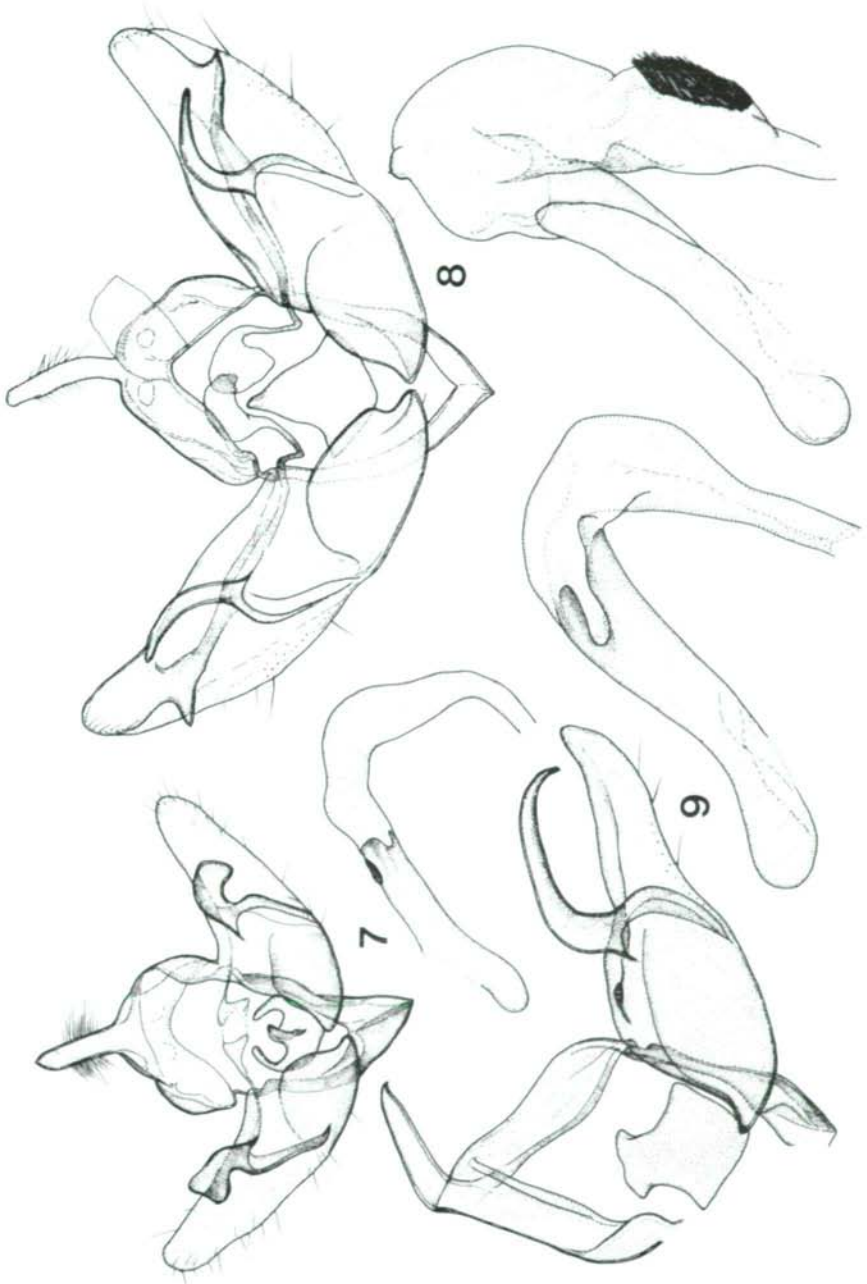
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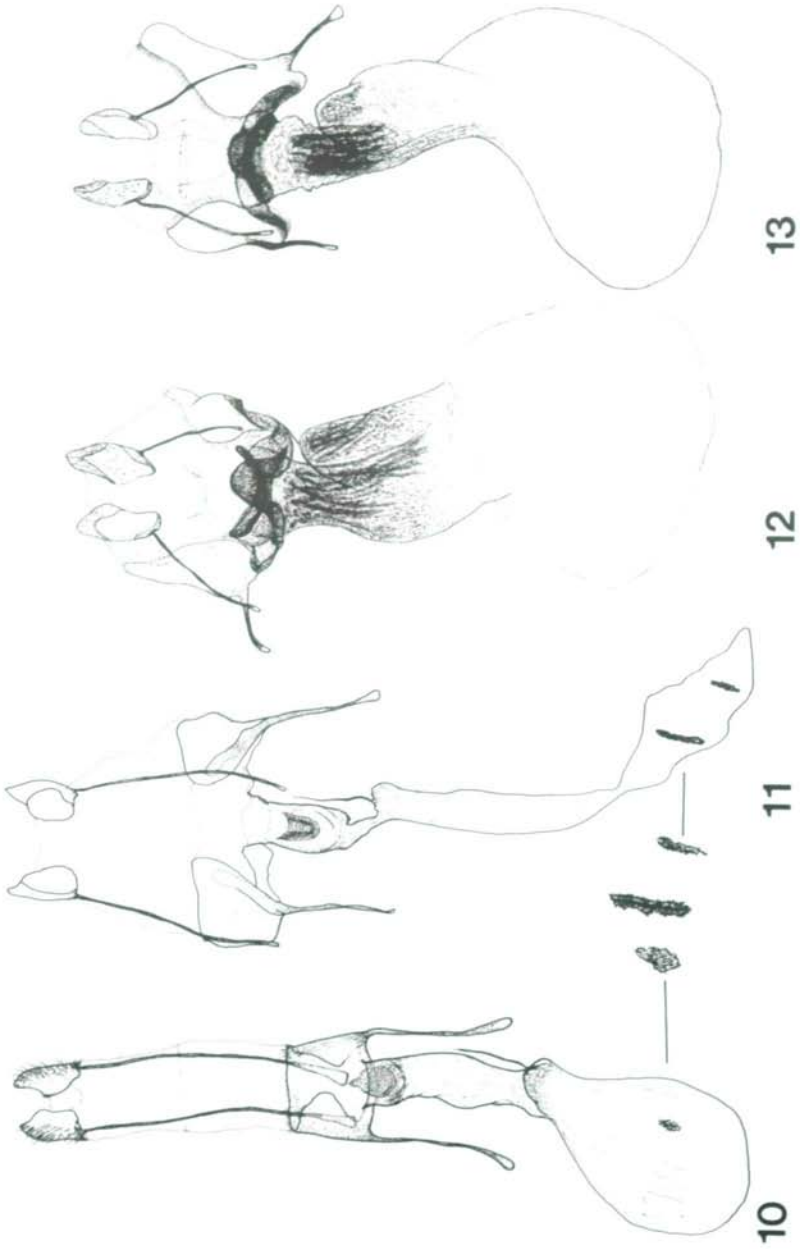


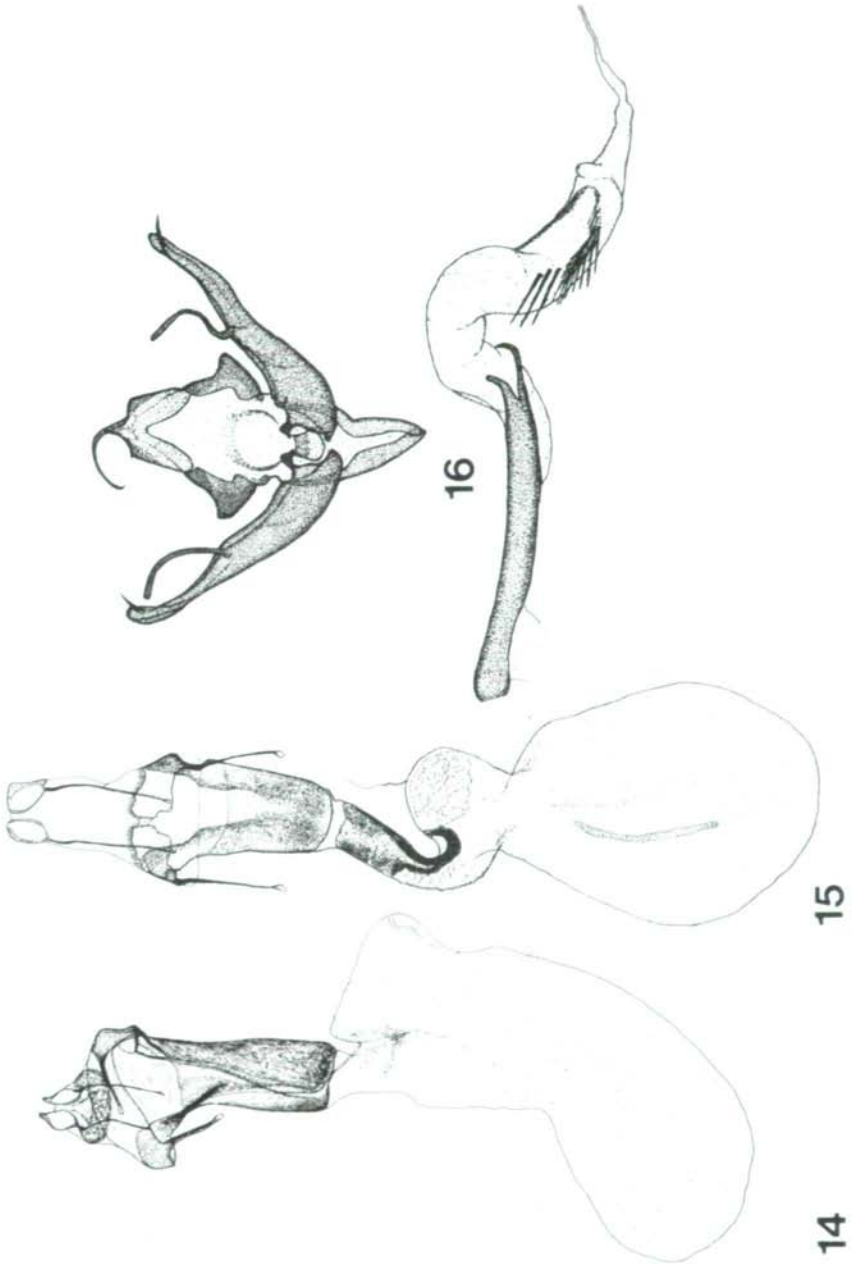
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Literaturbesprechung

KLOTZ, G. (1990): Hochgebirge der Erde. - Urania-Verlag, Leipzig/Jena/Berlin. 355 S.

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Roland GERSTMEIER

GOULD, E., MCKAY, G. (eds.) (1990): Encyclopedia of Animals: Mammals. - Merehurst Press, London. 240 S.

Dieser Foto-Bildband bringt einen Ausschnitt aus der reichhaltigen Welt der Säugetiere. Im ersten Teil werden allgemeine Dinge wie Klassifizierung, Ursprung, Habitat und Anpassung, Verhalten sowie bedrohte Arten behandelt. Im zweiten Teil werden die wichtigsten Gruppen und charakteristische Vertreter eingehender vorgestellt. Klare Gegenüberstellungen, erläuternde Graphiken (z.B. Skelettmerkmale), Verbreitungskarten (leider nur für die Gruppen), fantastische (großformatige) Farbfotos und ein klarer, gut lesbarer Text machen diesen Bildband für die ganze (englisch-sprachige) Familie empfehlenswert.

Roland GERSTMEIER

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