

On *Bhima potanini* ALPHÉRAKY, 1895 as one of the undeservedly forgotten species of Lasiocampidae

(Lepidoptera)

by

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Summary. *Bhima potanini* ALPHÉRAKY, known from Kham only, is redescribed. This species is similar to *B. eximia* and *B. idiota* but is clearly differentiated by the sum of its external characters and by the structure of the male genitalia. The type (♂) is kept in the Zoological Institute of the USSR Academy of Sciences (Leningrad – St. Petersburg).

The small palearctic genus *Bhima* MOORE, according to the catalogue of the Lasiocampidae of the world (COLLIER, 1936, with the registration of modern taxonomic notices), includes 4 species that were shown by LAJONQUIÈRE (1975). HOU (1983) recorded all these 4 species of *Bhima* (*eximia* OBERTHÜR, *idiota* GRAESER, *undulosa* WALKER and *rotundipennis* JOANNIS) from China and cited data on their distribution. In 1895 S. ALPHÉRAKY described just one additional species, *Bhima potanini*, from China. But nothing has been written about this species in the above-mentioned papers. Moreover, it is astonishing that the description in French was once more repeated by the author two years later. The only reference was found in LEECH's article (1899) in which he states: "ALPHÉRAKY records this species, which apperas to be closely allied to "*Pyrosis*" *eximia*, OBERTH., and "*Pyrosis*" *idiota*, GRAESER, from the Kham country" We would like to remedy this injustice by citing the redescription of this species below.

Original description

Pyrosis Potanini Alph. ♂ = 35 mm. A P. *Eximia* Ob. differt alis anticis latoribus, minus protractis, alarumque posticarum pagina basali nigricante nec non margine lato postico nigro integro.

Cette espèce, plus petite que l'*Eximia* Ob., a les premières ailes plus larges, moins allongées, mais dessinées tout à fait comme dans cette dernière. Seul le point blanc discocellulaire est plus rond et non évasé sur son côté externe.

Les ailes postérieures, du même jaune brunâtre que dans *Eximia*, sont moins transparentes et elles ont tout le tiers basilaire envahi par le noir. Leur marge postérieure noire est large et entière et elle contourne presque toute l'aile régulièrement, sauf le milieu de la côte, où elle est interrompue par la bande médiane jaune-brunâtre et le bord anal, où aboutit cette même bande. Or cette bande jaune-brunâtre est resserrée par le noir de la base, tant près de la côte, que

près du bord anal et elle s'élargit très considérablement sur le milieu de l'aile.

Un seul ♂ fut pris, le 22 Mai 1893, dans le pays Kham, près du village Si-o-lo, par l'expédition Potanine.

Male genitalia (figs. 4, 5, 10): Tegumen narrow band-shaped adhered to the vinculum. Socii large, obviously haired. Cucullus branch of valva massively cone-shaped, saccus branch reduced to a great extent. Saccus poorly developed. Distal processes of Vinculum plate, round at the tops, without teeth or spines. Aedoeagus with the fastening in front of the vesica and at its top bearing six strong conical teeth. Vesica large globe-shaped. Juxta strongly adhered to the aedoeagus.

Female is unknown.

Remarks

As was mentioned above, this species is really similar to *B. eximia* rather than *B. idiota* but is clearly differentiated by the sum of its characters.

Key to the external characteristics

- 1(2) Hindwings with a blurred greenish-yellow spotted pattern which is not confined to the medial band (figs. 1, 12) *B. idiota* GRAESER
- 2(1) Hindwings with a sharply defined yellow transverse band on the dark brown background (figs. 11, 13)
- 3(4) Black spot on the hindwings situated at the tornal angle. Yellow transverse band large, with an obvious proximal blob in the discocellula (figs. 3, 11). Autumn species *B. eximia* OBERTHÜR
- 4(3) Black spot on the hindwings situated along the proximal part of the narrow yellow transverse band. Proximal blob is virtually absent (figs. 2, 13). Spring species *B. potanini* ALPHÉRAKY.

Key to the male genitalia

- 1(2) Distal processes of the vinculum fine and regularly jagged on all surfaces (fig. 7). Aedoeagus unfastened in front of the vesica (fig. 9) *B. eximia* OBERTHÜR
- 2(1) Distal processes of the vinculum smooth without teeth.
- 3(4) Aedoeagus unfastened in front of the vesica (fig. 8). Saccus with lateral cuts (fig. 6) *B. idiota* GRAESER
- 4(3) Aedoeagus fastened in front of the vesica (fig. 10). Saccus without lateral cuts (fig. 4) *B. potanini* ALPHÉRAKY

Supplementary information on *Bhima potanini* is unavailable. The type is labelled "vill. Si-o-la, Khama montes, 22.V.1893, POTANIN", "gen. praep. N 16007" and is kept in the collection of the Zoological Institute of the Academy of Sciences of the USSR (St. Petersburg).

Acknowledgement

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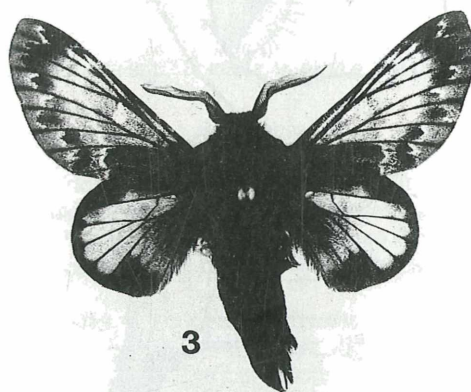
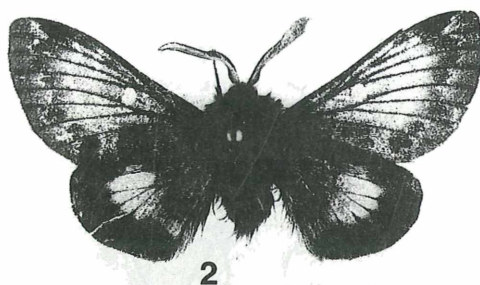
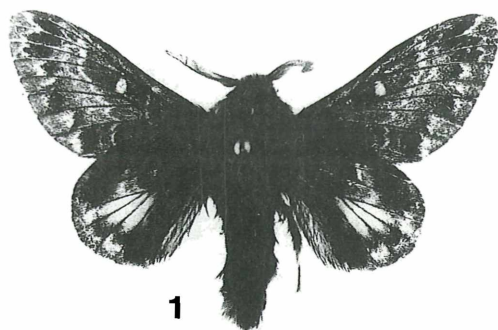


Fig. 1: *Bhima idiota* GRAESER, ♂, Khabarovsk.

Fig. 2: *Bhima potanini* ALPHÉRAKY, ♂, holotype.

Fig. 3: *Bhima eximia* OBERTHÜR, ♂, Wladiwostock.



Fig. 4-7: Male genitalia of *Bhima* spp.; 4) *potanini* (ventral view), 5) *potanini* (side view), 6) *idiota* (ventral view), 7) *eximia* (ventral view) (in 6 and 7 left halves are not represented).

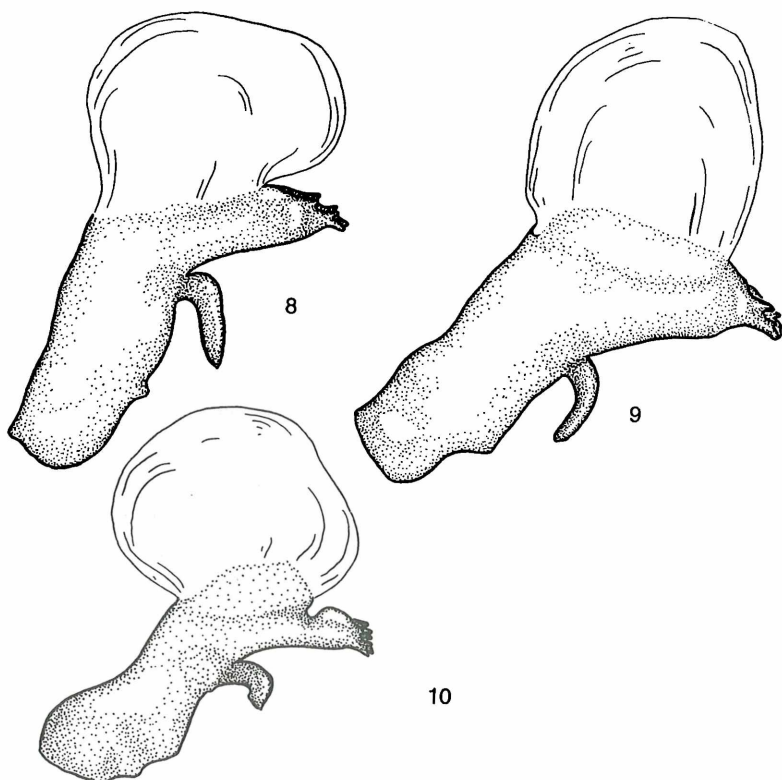


Fig. 8-10: Aedoeagi of *Bhima* spp.; 8) *idiotia*, 9) *eximia*, 10) *potanini*.

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Colour plate XI (p. 311)

Figs. 11-13: Hindwings of *Bhima* spp. (males); 11) *eximia*, 12) *idiotia*, 13) *potanini*.

11	12	13
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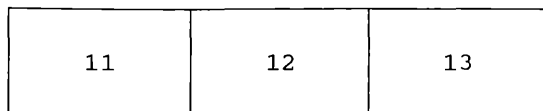
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Colour plate XI

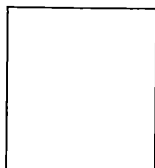
ZOLOTUHIN, V. V.: On *Bhima potanini* ALPHÉRAKY, 1895 as one of the undeservedly forgotten species of Lasiocampidae (Lepidoptera). – *Atalanta* **23**(1/2):219-224.

Fig. 11-13: Hindwings of *Bhima* spp. (males); 11) *eximia*, 12) *idiota*, 13) *potanini*.

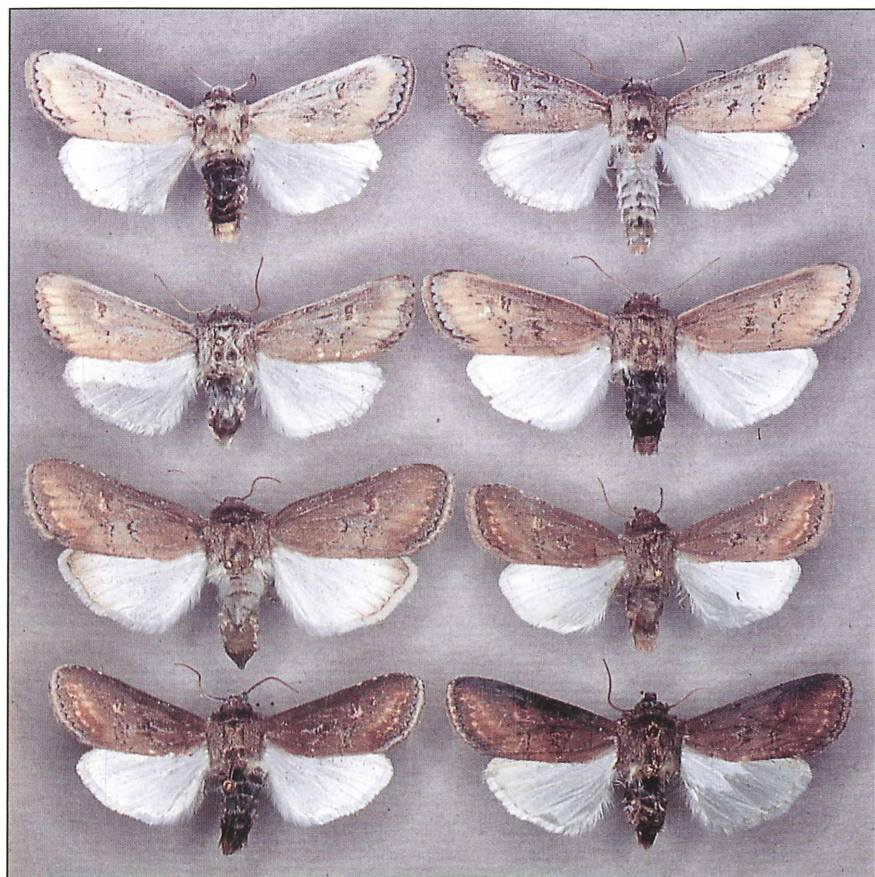
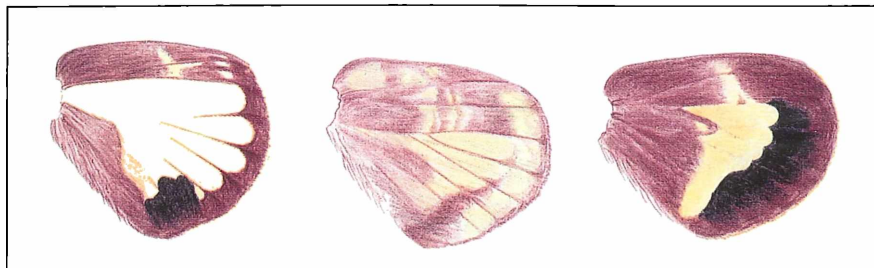


ZILLI, A. & F. P. ROMANO: The moth that contravened the GAUSE's principle: a solution to the "*Brithys encausta/pancratii*" dilemma (Lepidoptera, Noctuidae, Ipimorphinae). – *Atalanta* **23**(1/2):275-282.

Fig. 1: *Brithys crini pancratii* CYRILLO: transitional series from *encausta* HB. (top left) to *pancratii* CYR. (down right) phenotypes in a sicilian population. All the specimens were collected from the wild at the same spot in the same night (Sicily, prov. Siracusa, Torre Vendicari, a.s.l., 25.III.1989, A. ZILLI leg.).



Colour plate XI



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