

Taxonomic studies on Oriental HesperIIDae, 2.
A new species and a new subspecies of *Celaenorrhinus* HÜBNER, 1819

(Lepidoptera, HesperIIDae)

by

A. L. DEVYATKIN

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Summary: Two new taxa, *Celaenorrhinus subsimilis* spec. nov. (Burma) and *C. aurivittata insularis* subspec. nov. (Andamans) are described and illustrated. Possible relations with similar taxa are discussed.

In the course of the current study of the Oriental HesperIIDae, two odd specimens, both previously listed under the names of the known species, were found in the collection of The Natural History Museum (London). After a careful examination, both proved to represent hitherto undescribed taxa, the description of which is given below.

Celaenorrhinus subsimilis spec. nov.

(colour plate IIIb, figs. 1, 2)

Holotype ♀: [Burma,] S. Shan States, Loimwe, 3–28 (handwritten label).

Description

Antennae (only one remaining) above and below brown, club above paler, apiculus below reddish.

Upperside (colour plate IIIb, fig. 1). Ground colour brown. Forewing with 3 conjoined subequal subapical spots in spaces 6 to 8; two smaller conjoined spots in spaces 4 and 5, which look like a short streak directed to the lower half of termen; a wide irregular band from mid-costa to space 1b, not reaching tornus; the two spots of the band in space 1b are much smaller than others, the lower of them being diffusely shaped. All markings hyaline (except that above radius), creamy-whitish.

Underside (colour plate IIIb, fig. 2). Ground colour the same as on the upperside. Forewing markings the same; spots in space 1b extended to termen; space 1a entirely pale, of the same colour as other markings. Hindwing with small pale diffuse spots in spaces 1c to 7 and a small double spot at the end of cell.

Fringes of both wings brown from both sides.

Length of forewing 24 mm.

♀-genitalia (fig. 1)

Postvaginal plate transversal, 2 times wider than long, rounded laterally and slightly projected distally; antevaginal plate wide, with a central triangular-shaped, distally rounded projection and two widely separated ear-like lateral lobes; ductus bursae long, strongly sclerotized, with

longitudinal folds inside, slightly curved and proximally rounded; bursa copulatrix membranous.

Discussion

This specimen was listed by EVANS (1949) under the name *C. nigricans nigricans* (DE NICÉVILLE, 1885) as "1 ♀ S. Shan St.", with a remark "The ♀ from the S. Shan St. is a large aberration". At the first glance, it is rather similar externally to the large subspecies *C. nigricans mindanus* DE JONG, 1981, described from the Philippines (Mindanao) (DE JONG, 1981), but in fact it has nothing to do with the species *C. nigricans*, its female genitalia being totally different (see DE JONG, 1981). This specimen also bears some resemblance to *C. munda munda* (MOORE, 1884) and to *C. tibetana* (MABILLE, 1876), differing from both, apart from the shape of the band, in the uniformly brown fringe of hindwing; in these characters the new species is more similar to the taxa belonging to the *C. dhanada* (MOORE, [1866])-group.

The genitalia of the new species are very peculiar and are most of all similar to those of *C. tibetana*, differing sharply from those of all other above mentioned taxa.

Interesting, that the shape of the wings of this single specimen is rather suggestive of a male than of a female; however, a careful examination has shown that the female abdomen of the new species is original and has never been removed or glued.

Thus, all the above considerations lead to the conclusion that we deal not with an aberration but with a new species which seems to be rather intermediate between *C. tibetana* and the *C. dhanada*-group.

Celaenorrhinus aurivittata insularis subspec. nov. (colour plate IIIb, figs. 3, 4)

Holotype ♂: Andamans (typewritten label).

Description

Antennal shaft (only one fragment remained of the antennae) above and below plain brown. Palpi above brown, below predominantly brown with an admixture of yellow. Ventral side of the head covered with dense yellow hair-like scales.

Upperside (colour plate IIIb, fig. 3). Ground colour brown. Forewing with 3 small yellow subapical spots in spaces 6 to 8, completely conjoined, that in space 6 being conspicuously displaced towards termen; a narrow yellow band from mid-costa to tornus, somewhat irregularly shaped and constricted at costa and at vein 2. Hindwing unmarked.

Underside (colour plate IIIb, fig. 4). Ground colour and markings the same as on the upper-side; space 1a of forewing conspicuously paler than the rest of the wing.

Fringes brown from both sides.

Length of forewing 19.5 mm.

♂-genitalia (fig. 2).

The description below is rather incomplete because the original preparation made by EVANS and placed under the specimen in a dry condition proved to consist of only 4 fragments, viz. two separate clasps, distal half of aedeagus and tegumen with uncus. However, this seems to be enough to see the differences from other related taxa.

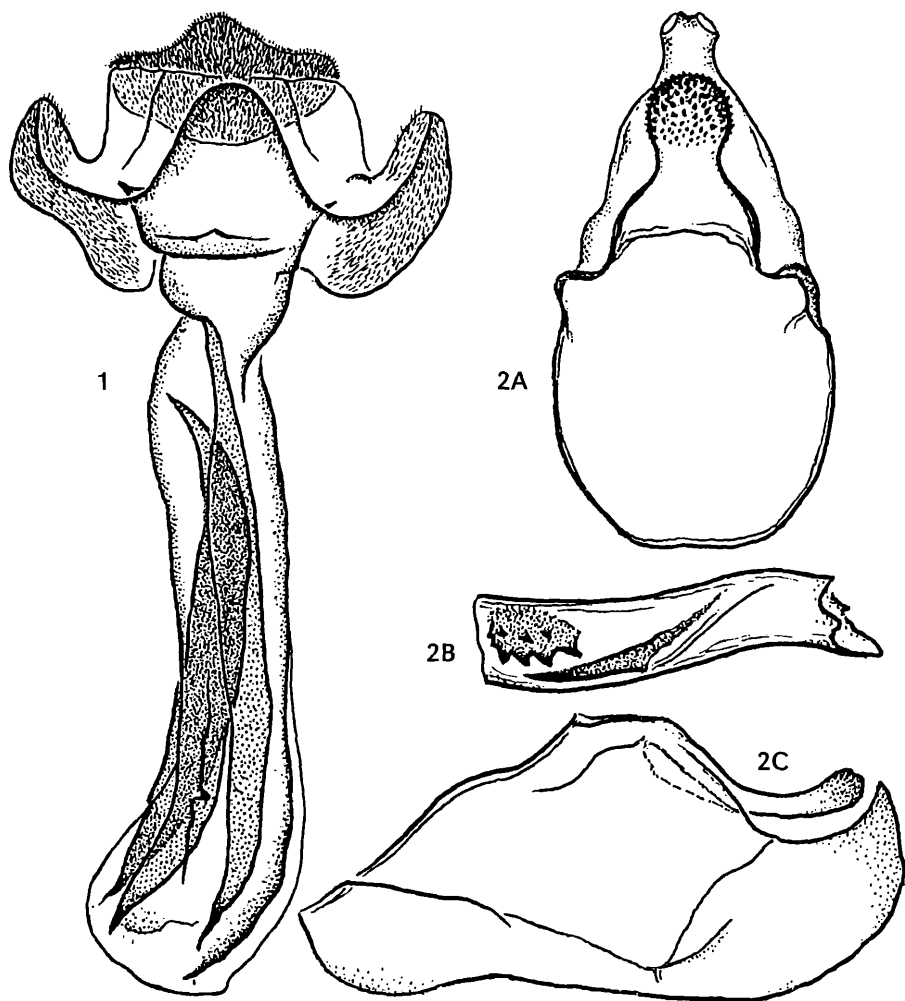


Fig. 1: *Celaenorrhinus subsimilis* spec. nov, female genitalia, ventral view (without papillae anales and bursa copulatrix).

Fig. 2: *Celaenorrhinus aurivittata insularis* subspec. nov., male genitalia (A – tegumen, uncus and gnathos, ventral view; B – aedeagus, lateral view; C – right clasp, inner view).

Uncus short and relatively broad, bluntly ending; its tip is broken, but the remaining part suggests that it might be bifid (fig. 2A); gnathos broad, of a very characteristic shape, being somewhat intermediate between those of *C. vietnamicus* DEVYATKIN, 1998 and *C. cameroni* DISTANT,

1882 (see DEVYATKIN, 1998), with a well-defined rounded "head" which is finely spined only in the distal part (unlike other taxa of this group). Clasp compact, its costal side steep but not angled as in other species; costal process relatively long, almost reaching the end of cuiller, rounded at the end; cuiller rather short and stout, its end pointed and bent inwards. Aedeagus curved in the median part (seen even from the remaining fragment), with two strong cornuti, the proximal one being rather slender and pointed, and the distal one being short and broad, with few strong teeth.

Discussion

The specimen being described was listed by EVANS (1949) under the name *C. aurivittata aurivittata* MOORE, 1879 as "1 ♂ Andamans". This is the only specimen of this species known from the Andamans (the nearest locality being in Burma); it is rather unusual and may prove to represent a separate species, but I am placing it tentatively to *C. aurivittata* towards which it tends in its general features and in the short seemingly bifid uncus.

Externally, the new subspecies differs from the nominate *C. aurivittata* in the very narrow forewing band, constricted at costa; the last character can be found in some females of *C. aurivittata* and is almost never expressed in *C. vietnamicus*. In the male genitalia, apart from the uncus, the following differences from the nominate *C. aurivittata* (as well as from *C. vietnamicus*) can be outlined: gnathos broad and rounded, spined only in the distal part; costal side of clasp without conspicuous angle; cuiller shorter and broader; costal process relatively longer and rounded at the end; distal cornutus of aedeagus more compact, with fewer number of stronger teeth.

Individual variation (which is considerable in all taxa of the group) cannot be indeed completely excluded, but the number of differences almost in all characters of the genitalia makes this idea not highly probable referring to this particular specimen. In fact, a revision of the *C. aurivittata*-complex involving all available material is required to clarify the relations between the known taxa.

Acknowledgements

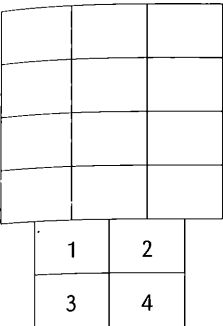
I am deeply grateful to Mr. P. ACKERY and Mrs. K. GOODGER (The Natural History Museum, London) for the permission to study the collections, for their friendly help during the work in the museum and for the arrangement of loan of these valuable specimens.

References

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- DEVYATKIN, A. L. (1998): HesperIIDae of Vietnam, 3. A new species of *Celaenorrhinus* HÜBNER, 1819 from Vietnam, with revisional notes on the *C. aurivittata* (MOORE, 1879)-group. – Neue Entomol. Nachr. **41**: 289–294.
- EVANS, W. H. (1949): A catalogue of the HesperIIDae from Europe, Asia and Australia in the British Museum (Natural History). Trust. Brit. Mus., London, 502 pp., 53 pls.

Explanation of colour plate IIIb (p. 15/):

- Fig. 1: *Celaenorrhinus subsimilis* spec. nov., holotype ♀, upperside.
Fig. 2: Id., underside.
Fig. 3: *Celaenorrhinus aurivittata insularis* subspec. nov., holotype ♂, upperside.
Fig. 4: Id., underside.



Address of the author

ALEXEY L. DEVYATKIN
Department of Entomology
Faculty of Biology
Moscow State University
119992 Moscow, Russia

Colour plate IIIa

DEVYATKIN, A. L.: Taxonomic studies on Oriental Hesperiidæ, 1. A revision of the *Scobura conciata* HERING, 1918-group (Lepidoptera, Hesperiidæ). – *Atalanta* **35** (1/2): 57–66.

Fig. 1: *Scobura conciata* HERING, 1918, ♂, North Vietnam, Hai Phong Province, Cat Ba National Park, 18.V.2001, A. L. MONASTYRSKII leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Scobura conciata* HERING, 1918, ♀, North Vietnam, Hai Phong Province, Cat Ba National Park, 3.VI.2001, A. L. MONASTYRSKII leg., upperside.

Fig. 4: Id., underside.

Fig. 5: *Scobura evansi* spec. nov., holotype ♂, [South East China], Kwangtse – Fukien, 10.VII. 1937, J. KLAPPERICH leg., upperside.

Fig. 6: Id., underside.

Fig. 7: *Scobura lyso* (EVANS, 1939), paratype ♂, [South East China], W. Tienmüshan, 21.VII.1930, upperside.

Fig. 8: Id., underside.

Fig. 9: *Scobura youngi* spec. nov., holotype ♂, South East China, Guangdong Province, Tianjing Shan Mts., Jin Dong River, 16.IX. 1996 (reared ex ovo), J. YOUNG leg., upperside.

Fig. 10: Id., underside.

Fig. 11: *Scobura phuongi* spec. nov., holotype ♂, North Vietnam, Tuyen Quang Province, Ban Bung district, Na Hang Nature Reserve, 10.VI.2003, BUI XUAN PHUONG leg., upperside.

Fig. 12: Id., underside.

1	3	5
2	4	6
7	9	11
8	10	12

Colour plate IIIb

DEVYATKIN, A. L.: Taxonomic studies on Oriental Hesperiidæ, 2. A new species and a new subspecies of *Celaenorrhinus* HÜBNER, 1819 (Lepidoptera, Hesperiidæ). – *Atalanta* **35** (1/2): 67–71.

Fig. 1: *Celaenorrhinus subsimilis* spec. nov., holotype ♀, upperside.

Fig. 2: Id., underside.

Fig. 3: *Celaenorrhinus aurivittata insularis* subspec. nov., holotype ♂, upperside.

Fig. 4: Id., underside.

1	2	
3	4	

Colour plate IIIa/b



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