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Hesperiidae of Vietnam, 14¹ A new species of the genus *Celaenorrhinus* Hübner, 1819

(Lepidoptera, Hesperiidae) bv

A. L. DEVYATKIN received 28.IV.2004

Summary: A new species, Celaenorrhinus victor spec. nov., from several localities of North Vietnam, is described and illustrated. The new species is similar to *C. patula* DE NICEVILLE, 1889, differing in the details of the external features and male genitalia.

Celaenorrhinus victor spec. nov. (colour plate Xb, figs. 1-4)

Holotype $\vec{\sigma}$: North Vietnam, Ninh Binh Province, Cuc Phuong National Park, 2.IV.1998, LE TRONG DAT leg.

Paratypes (7 & &, 4 \circ 2): 1 &, the same label as the holotype; 1 \circ 2, Cuc Phuong, 24.III.1998, Vu Van Lien leg.; 2 & &, North Vietnam, Lang Son Province, Huu Lien Nature Reserve, 260 m, 1.VIII.2000, FRONTIER leg. (R.S.); 1 &, North Vietnam, Tuyen Quang Province, Sinh Long Community, 960 m, 18.V.2001, Bui Xuan Phuong leg.; 2 & &, Tuyen Quang Province, Na Hang Nature Reserve, Khau Top, 15. and 16.X.2002; 1 \circ 2, the same loc., 17.X.2002; 1 \circ 3, Na Hang Nature Reserve, Nam Trang loc., 10.XI.2002, all Bui Xuan Phuong leg.; 2 \circ 9, North Vietnam, Bac Can Province, Kim Hy Nature Reserve, 17.VIII.2001, 31.X.2001, FRONTIER leg.

The holotype and most of the paratypes are deposited in the collection of the Department of Entomology, Moscow State University (MSU); part of the paratypes is in the collection of The Natural History Museum, London (BMNH).

Description

Male (col. pl. Xb, figs. 1, 2).

Antennae above totally white, below plain brown. Palpi above brown, below whitish. Abdomen stripped at both sides.

Upperside (col. pl. Xb, fig. 1). Forewing: ground colour dark brown; subapical spots in spaces 6-8 almost in line, subequal or that in space 6 slightly larger; spots in spaces 4-5 very small or dot-like, detached; the spot in space 3 small, elongate (absent in one male specimen), well separated from the spots in cell and space 2; the latter two large and subequal, the cell spot never being produced above radius; two small spots in space 1b (the lower one being much smaller or even absent, as in the holotype), directed to dorsum; all spots hyaline white. Fringes brown, with a slight shade of white in space 1b. Hindwing: ground colour the same as on the forewing, covered with yellowish hairs in the basal part of the wing. A small basal spot is present in the

For (13) see DEVYATKIN, A. L. (2003): A new species and a new subspecies of *Potanthus* Scudder, 1872.
 Atalanta 34 (1/2):111-114.

most of the specimens; a large transversal discal spot at the end of cell is well developed; small discal spots in spaces 1c (double) and 2 are rather obscure (or absent in two specimens); the submarginal series is represented by a double spot in space 1c and spots in spaces 2 and 3; small yellow dots in spaces 4–5 are present in most cases. Fringes chequered brown and yellow.

Underside (col. pl. Xb, fig. 2). Ground colour is the same as on the upperside, being much paler in space 1a and base of space 1b of the forewing; all markings also the same, but yellow spots of the hindwing are slightly larger and more sharply defined. In some specimens the cell spot of the forewing is slightly produced above radius, however not reaching costa. Length of forewing 22–24 mm.

Female (col. pl. Xb, figs. 3, 4). Similar to male, slightly larger and wings more square; white markings slightly extended. Length of forewing 24–25 mm.

 σ -genitalia (fig. 1). Lateral processes of tegumen far not reaching the ends of uncus, acutely triangular and rather pointed in lateral view; uncus V-wise bifid, its ends indented in lateral view. Gnathos long and narrow, inconspicuously finely spined at the end. Clasp robust, its costal side conspicuously angled at the middle; costal process long, equal to or slightly longer than cuiller, wide at base and tapered distally, curved inwards and ventrally, ending blunt; cuiller produced, rather broad but tapered, curved inwards. Juxta very broad, rounded in lateral view. Aedeagus as long as clasp, with two strong cornuti, placed alongside. Sacculus long and broad, with its end expanded.

Q-genitalia (fig. 2). Antevaginal plate membranous; postvaginal plate broad, almost parallel-sided, with with a rounded triangular projection at the middle of its distal side; lateral and central (distally) lobes covered with microtrichia. Ostium about as twice as narrow as postvaginal plate; antrum strongly sclerotized, parallel-sided in the distal part but strongly extended and rounded in the proximal part, abruptly ending before the long membranous ductus bursae. Bursa copulatrix elongate, with a spined field at one side.

Discussion

Externally, the new species is most similar to *C. patula* DE NICEVILLE, 1889, except the forewing is more square in the former; there is also a certain similarity to *C. patuloides* DE JONG, described from N. India (DE JONG, 1981), and to *C. dayaoensis* Koiwaya, from S.E. China (Guanxi Province) (Koiwaya, 1996), especially in the forewing cell spot not being produced above radius on the underside.

The male genitalia are clearly those of the *C. patula-putra* (Moore, [1866]) group, being however considerably larger compared to the relative size of the butterflies; the costal process of the clasp is longer and more robust and at the same time more bent inwards; the broad and rounded juxta is very different from the acute one in *C. patula* and *C. putra*. The cornuti of the aedeagus are paired alongside, unlike in any other species of the genus. The description of *C. dayaoensis* Koiwaya, based on a single specimen, is of a rather poor quality; however, the figures of the male genitalia, especially the two asymmetrical cornuti, arranged in a line, leave no doubt that it is quite different from the new species, leaving aside the taxonomic status of *C. dayaoensis* itself, which was synonymized with *C. patula* by K. Maruyama (2000).

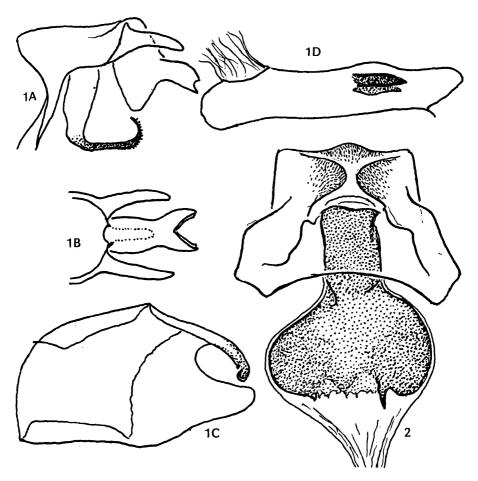


Fig. 1: Celaenorrhinus victor spec. nov., male genitalia (A - tegumen, uncus and gnathos, lateral view; B - tegumen and uncus, dorsal view; C - right clasp, inner view; D - aedeagus, lateral view). Fig. 2: Celaenorrhinus victor spec. nov., female genitalia, ventral view (without papillae anales and bursa copulatrix).

The female genitalia seem to be unique within the related group in the yellow-spotted section of the genus *Celaenorrhinus*, forming a peculiar-shaped structure which readily distinguishes the new species from other taxa.

This species was listed as *C. patula* in a previous publication (DEVYATKIN & MONASTYRSKII, 2002); after the study of the type and other material from different localities deposited in The Natural History Museum (London) it became clear that the male and female genitalia of true *C. patula*

are in fact very close to those of *C. putra*, differing in details. In view of this, the synonymization of *C. dayaoensis* Koiwaya with *C. patula* still remains under some question.

The species is named after my late friend, VICTOR A. AREFYEV.

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- MARUYAMA, K. (2000): Some notes on hesperiid butterflies of South East Asia (1). Butterflies 27: 4-11.

Explanation of colour plate Xb (p. 273):

- Fig. 1: Celaenorrhinus victor spec. nov., holotype &. Cuc Phuong National Park, 2.IV.1998, LE TRONG DAT leg., upperside.
- Fig. 2: Id., underside.
- Fig. 3: Celaenorrhinus victor spec. nov., paratype \mathfrak{P} . Cuc Phuong, 24.III.1998, Vu Van Lien leg., upperside.
- Fig. 4: Id., underside.

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Colour plate Xa

DEVYATKIN, A. L.: Hesperiidae of Vietnam, 13. A new species and a new subspecies of Potanthus Scupper, 1872 from Vietnam and Burma (Lepidoptera, Hesperiidae). - Atalanta 34 (1/2): 111-114.

Fig. 1: Potanthus tibetana laocai subspec. nov., holotype ♂. North Vietnam, Lao Cai Province, Hoang Lien Nature Reserve, 2.VIII.1998, FRON-TIER leg. (F.T.V.), upperside.

Fig. 2: Id., underside.

Fig. 3: Potanthus eugenius spec. nov., holotype ♂. North Burma, Cachin State, Indawgyi Lake, 400 m, 25.III.1997, E. TARASOV leg., upperside.

Fig. 4: Id., underside.

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Colour plate Xb

DEVYATKIN, A. L.: Hesperiidae of Vietnam, 14. A new species of the genus Celaenorrhinus Hübner, 1819 (Lepidoptera, Hesperiidae). - Atalanta 34 (1/2): 115-118.

Fig. 1: Celaenorrhinus victor spec. nov., holotype 3. Cuc Phuong National Park, 2.IV.1998, LE TRONG DAT leg., upperside.

Fig. 2: Id., underside.

Fig. 3: Celaenorrhinus victor spec. nov., paratype ♀. Cuc Phuong, 24.III. 1998, Vu Van Lien leg., upperside.

Fig. 4: Id., underside.

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Colour plate Xc

DEVYATKIN, A. L. & A. L. Monastyrskii: Hesperiidae of Vietnam, 15. New records of Hesperiidae from southern Vietnam (Lepidoptera, Hesperiidae). - Atalanta 34 (1/2): 119-133.

Fig. 1: Pyroneura callineura natalia subspec. nov., holotype ♂, Cat Tien Nature Reserve, 10.V.2001, A. L.Monastyrskii leg., upperside.

Fig. 2: Id., underside.

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Colour plate Xa-c



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