

## Hesperiidae of Vietnam, 16<sup>1</sup>

### A new species and a new record of the Hesperiidae from Central Vietnam, with a revisional note on the genus *Hidari* DISTANT, 1886

(Lepidoptera, Hesperiidae)

by

ALEXEY L. DEVYATKIN

received 1.XI.2007

**Summary:** A new species, *Zela zeta spec. nov.*, is described and illustrated. *Hidari doesoena* MARTIN, 1895 is recorded from Vietnam for the first time; its former Bornean subspecies is raised to a species, *H. gloria* EVANS, 1949 **stat. nov.**, due to distinct differences in the wing pattern.

#### *Zela zeta spec. nov.* (colour plate 16, figs. 1-4)

Holotype ♂: Central Vietnam, Thua Thien Hue Province, Huong Thuy district, Duong Hoa commune, evergreen primary forest, 100-400m, 13.V.2005, PHAM MINH HUNG leg.

Paratypes: M, same data as the holotype, 11.V.2005; F, same data, 13.V.2005; F, Thua Thien Hue Province, Phong Dien district, loc. Khe Lau, 20.VI.1998, T. H. MINH leg.

**Description:** ♂ (colour plate 16, figs. 1-2), palpi and antennae brown. Shape of wings rounded. Upperside uniform dark chocolate brown; forewing with a small rounded white hyaline spot in space 3 near cell. Base of hindwing with a broad hair tuft, which is only slightly darker than the ground colour.

Underside unmarked, except the forewing hyaline spot; ground colour the same as on the upperside, slightly paler at forewing termen; dorsal area of forewing polished. Fringes pale brown on forewing, orange on hindwing, elongated at tornus. Length of forewing 20 mm.

♀ (colour plate 16, figs. 3-4).

Upperside slightly paler than in the ♂, forewing with the same hyaline spot in space 3.

Underside brown with a slight yellowish tinge and very faint purplish wash, paler at costa, termen and especially at forewing dorsum; both forewing and hindwing with small yellowish markings at cell end. Length of forewing 20.5 mm.

♂ genitalia (fig. 1, A-D): In general similar to those of *Z. zenon* (DE NICÈVILLE, 1895). Uncus broad, angled at the base, slightly tapered, with a smaller rounded tip, gently curved down in the lateral view. Tegumen with a peak above uncus, its end slightly concave. Clasp rather long and narrow; cuiller with two spined dorsal processes, the proximal one being smaller and directed slightly backwards. Aedeagus stout, equal in length to clasp, gently curved at the middle.

♀ genitalia (fig. 1, E): Papillae anales large; apophyses posteriores shorter than papillae, very thin, thread-like. Antevaginal plate of a complex U-shape, very large, covered with

<sup>1</sup> For (15) see DEVYATKIN, A. L. & A. L. MONASTYRSKII (2003): New records of Hesperiidae from southern Vietnam (Lepidoptera, Hesperiidae). - *Atalanta* 34 (1/2): 119-133, Würzburg.

microtrichia throughout, with a number of large folds and a pair of broad irregular inner lobes. Postvaginal plate consists of two separate transversal angled sclerites, each with a short distal process at the end. Ductus bursae membranous, with a spot of sclerotization at the base.

**Diagnosis:** The new species clearly belongs to the *Z. zenon* - *cowani* EVANS, 1939 group and is most similar to the first species, but differs in the shape of the wings and the absence of a hyaline spot in space 2; the  $\sigma$  genitalia in general also look similar to those of *Z. zenon* (DE NICÉVILLE) (figured in MARUYAMA, 1991) except that both processes of clasp are close to each other and more pointed.

*Hidari doesoena* MARTIN, 1895 (colour plate 16, figs. 5-6)

Material:  $\sigma$ , Central Vietnam, Thua Thien Hue Province, A Luoi district, A Roang commune, 100-350m, restore forest, 24.V.2005, PHAM MINH HUNG leg.;  $\sigma$ , same locality, 700-900m, evergreen primary forest, 5.VI.2005, DO ANH TUAN leg.

This is the first Vietnamese record of this species, otherwise distributed in Sumatra (type locality), Batoe and Sipora islands (EVANS, 1949), Peninsular Thailand (Kimura, 1997) and the Malay Peninsula (CORBET & PENDLEBURY, 1992). This area has been considered to be populated by the nominate subspecies. Another subspecies, viz. *gloria* EVANS, 1949, was described from Borneo (Kina Balu) and erroneously figured under the name *doesoena* MARTIN, as it is clear from the original description. Both sexes of the Bornean taxon are also illustrated in MARUYAMA (1991). Since the continental specimens from different localities show relatively little variation and quite agree with the type from Sumatra (the two Vietnamese  $\sigma\sigma$  seem to have some minor differences, but the material is insufficient to make any decisions), the more striking seem the differences of the taxon *gloria* EVANS. These are larger size and greatly extended forewing spots in cell, space 2 and especially in space 1b, which reaches both veins 1 and 2 and is thus conjoined with the spot in space 2. On the underside this spot together with its pale shading fills most area of spaces 1a and 1b. Even more significant is that the spot in space 1b in *gloria* is placed conspicuously nearer to termen than in *doesoena*, in which it is situated rather close to the middle of vein 1. Thus, it becomes clear that the above differences are rather of a specific than of a subspecific level, and the rank of the taxon *gloria* EVANS should be raised to specific rank, *Hidari gloria* EVANS, 1949 **stat. nov.** This is not surprising since the area of Kina Balu gives home to a number of other hesperiid species not known even from other areas of Borneo.

Both new records seem to be very interesting from the zoogeographical point of view. No species of *Zela* DE NICÉVILLE, 1895 have ever been found in Vietnam till now; the main distribution area of the genus lies much further to the south except that of *Z. zeus* DE NICÉVILLE, 1895 [subspec. *optima* (FRUHSTORFER, 1911), the range of which extends as far north as to Assam]. The only record of the genus *Hidari* DISTANT, 1886 was that of *H. bhawani* DE NICÉVILLE, [1889], the northernmost species of the genus, by INOU & KAWAZO (1970) from South Vietnam (Trang Bom, Dong Nai Province).

These facts, apart from confirming the idea stated earlier that the low-mountain (mostly limestone) coastal zone of Central Vietnam represents one of the main areas of endemism in the eastern Indochina (DEVYATKIN, 2001; DEVYATKIN & MONASTYRSKII, 2002), may be an evidence of that it also has rather ancient connections with the southerly Malayan-Sundanian fauna.

This means, in its turn, that further records of largely Malayan, and possibly undescribed taxa, may be expected from the coastal provinces of Central Vietnam.

### References

- CORBET, A. S. & H. M. PENDLEBURY (1992): The butterflies of the Malay Peninsula (Fourth edition, revised by J. N. ELIOT). - Malayan Nature Society, Kuala Lumpur.
- DEVYATKIN, A. L. (2001): Hesperiiidae of Vietnam, 9. Three new species and one new subspecies from the subfamily Pyrginae (Lepidoptera, Hesperiiidae). - *Atalanta* **32** (3/4): 403-410, Würzburg.
- DEVYATKIN, A. L. & A. L. MONASTYRSKII (2002): Hesperiiidae of Vietnam, 12. A further contribution to the Hesperiiidae fauna of North and Central Vietnam (Lepidoptera, Hesperiiidae). - *Atalanta* **33** (1/2): 137-155, Würzburg.
- EVANS, W. H. (1949): A catalogue of the Hesperiiidae from Europe, Asia and Australia in the British Museum (Natural History). - Trust. Brit. Mus., London.
- INOUE, S. & A. KAWAZO (1970): Hesperiid butterflies from South Vietnam (5). - *Tyo to Ga* **21** (1 & 2): 1-14, Tokyo.
- KIMURA, YU. (1997): Newly recorded hesperiid butterflies from Thailand since 1985 (II). - *Butterflies* **17**: 38-50, Tokyo.
- MARUYAMA, K. (1991): Butterflies of Borneo. Vol.2 (2). Hesperiiidae (in Japanese and English).

### Address of the author

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

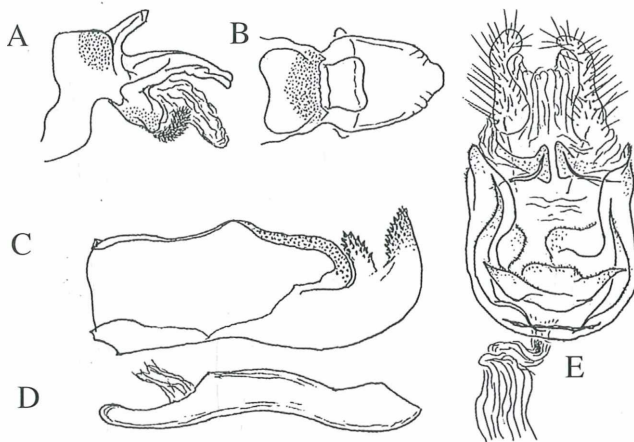


Fig. 1: *Zela zeta* spec. nov., genitalia A-D, ♂ genitalia.

A: tegumen, uncus and gnathos, lateral view; B: id., dorsal view; C: right clasp, inner view; D: aedeagus, lateral view. E: ♀ genitalia (without bursa copulatrix).