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Hesperiidae of Vietnam 6¹ Two new species of the genera *Suada* DE NICEVILLE, 1895 and *Quedara* SWINHOE, 1907

(Lepidoptera, Hesperiidae) by A. L. DEVYATKIN received 14.XI.1999

Summary: Two new species, Suada albolineata spec. nov., from North and Central Vietnam, and Quedara flavens spec. nov., from North Vietnam, are described and figured. S. albolineata is allied to S. swerga (DE NICÉVILLE, [1884]); Q. flavens is most similar to Q. albifascia (MOORE, [1879]), but differs in the colour of the forewing band.

The new species of Suada DE NICÉVILLE, described below, was incorrectly listed by me as S. swerga suava Evans, 1949 in my last paper on the Hesperiidae of North and Central Vietnam (DEVYATKIN & MONASTYRSKII, 1999); upon examination of the type specimens and other material on S. swerga (DE NICÉVILLE, [1884]) deposited in the Natural History Museum (London) (BMNH), it proved to be different both superficially and in the male genitalia.

The terminology of external morphology and genitalia is after EVANS (1949).

The holotypes and most of the paratypes of both new species are deposited in the collection of the Department of Entomology, Moscow State University; paratypes partly in BMNH.

Suada albolineata spec. nov. (colour plate XVa, figs. 1, 2)

Holotype &: North Vietnam, Vinh Phu Prov., Tam Dao, 26.V.1996 (leg. A. Monastyrskii). Paratypes: 3 &&, the same labels as the holotype, except dates: 1 &, 15.X.1994; 1 &, 4.VI.1995; 1 &, 21.IX.1996 (all A. Monastyrskii leg.). 3 &&, North Vietnam, Ninh Binh Prov., Cuc Phuong National Park: 1 &, 7.IV.1998 (leg. Vu Van Lien); 1 &, 19.IV.1998; 1 &, 8.V.1998 (both A. Monastyrskii leg.). 4 &&, Central Vietnam: 2 &&, Nghe An Prov., Pu Mat Nature Reserve, 1. u. 2.V. 1998 (M. J. Hill leg.); 1 &, Quang Nam Da Nang Prov., Ba Na Nature Reserve, 30.III.1995 (leg. FRONTIER expedition); 1 &, Thanh Hoa Prov., loc. Xuan Lien, 31.X.1998 (leg. A. L. Monastyrskii).

Description

ਰੇ (colour plate XVa, figs. 1, 2). Antennae plain brown. Palpi: 2nd segment below grey, covered with long hairs; 3rd segment black, long, thin and pointed. Wings above dark brown. Upper-

¹ For (5) see Devyatkin A. L. & A. L. Monastyrskii: An annotated list of the Hesperiidae of North and Central Vietnam (Lepidoptera). – Atalanta 29 (1/4): 151–184.

Fig. 1: Suada albolineata spec. nov., male genitalia: A – tegumen and uncus (lateral view); B – id. (dorsal view); C – right clasp (from inside); D – aedeagus (lateral view).

Fig. 2: Quedara flavens spec. nov., genitalia: A – tegumen and uncus (lateral view); B – id. (ventral view); C – right clasp (from inside); D – aedeagus (lateral view); E – female genitalia, without bursa copulatrix (ventral view).

side: forewing with a small rounded spot in cell, a spot of larger size in space 2, adjoining the cell spot; a minute spot at base of space 3 may be present or absent; 1–3 very small apical spots in spaces 6 to 8, the one in space 6 the largest and often the only one present (all spots hyaline white); a small diffuse yellowish dash in space 1b near the middle of vein 1. Hindwing unmarked. Underside: forewing ground colour the same as on the upperside, slightly dusted whitish all-over, the dusting becoming stronger at base, near apex and in the median part of space 1b, with all hyaline markings present; veins of the apical portion of wing pale, almost white, and contrasting. Hindwing ground colour dark brown, all veins nearly white. Length of forewing 15–16.5 mm (holotype 16 mm).

& genitalia (fig. 1, A-D). Tegumen about twice as long as wide, with 2 short triangular dorsolateral projections in the distal part. Uncus beak-like, relatively long, about 0.7 the length of the tegumen, narrow in dorsal and lateral aspects, slightly constricted in the basal part, with a very short but prominent dorsal fold at base. Clasp elongate, with 2 closely situated sub-equal triangular dorsal projections in the distal part; cuiller triangular, pointed, its ventral edge straight or slightly concave. Aedeagus relatively short, slightly longer than clasp, stout; its distal part surmounted dorsally with a strong sclerite of roughly semilunar shape; vesica with a rather short bunch of strong cornuti.

Discussion

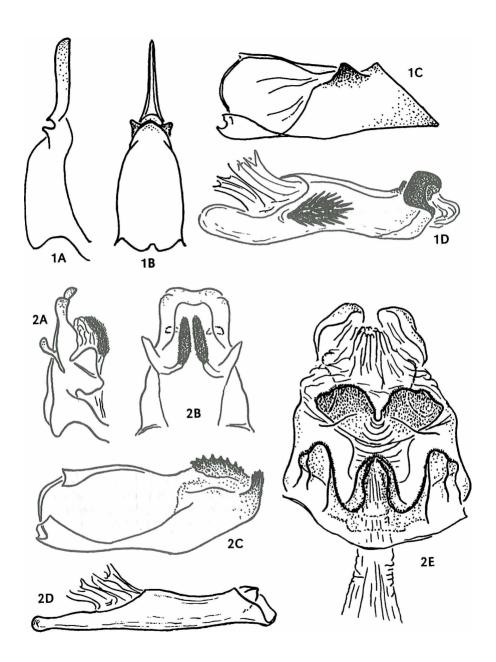
The new species is most closely related to *S. swerga* (DE NICÉVILLE, [1884]), the upperside pattern of both species being practically identical. Fresh specimens of *S. albolineata* can be easily distinguished by the strikingly contrasting veins of the underside; for worn specimens examination of the genitalia is helpful. A good figure of the male genitalia of *S. swerga suava* EVANS, 1949 is given by INOUE & KAWAZOE (1967): in this species the tegumen is wider, without dorsolateral "horns"; uncus shorter, with much longer dorsal fold; cuiller longer, with the ventral concavity more pronounced; cornuti of vesica more slender and numerous. Apart from this, the male genitalia in the new species are definitely larger, as compared to the size of the butterfly.

Since *S. swerga* seems to have a continuous distribution from Sikkim to the Malay Peninsula, both species are likely to be sympatric in North and Central Vietnam.

Quedara flavens spec. nov. (colour plate XVa, figs. 3-6)

Holotype $\vec{\sigma}$: North Vietnam, Ninh Binh Prov., Cuc Phuong National Park, 21.V.1998 (leg. M. J. Hill).

Paratypes: 1 ♀, the same locality as the holotype, 23.IV.1998 (Dat & Duc leg.); 2 ♀♀, North Vietnam, Bac Can Prov., Ba Be National Park, 5. u. 6.VI.1997 (leg. A. Monastyrskii).



Description

of (colour plate XVa, figs. 3, 4). Antennae dark brown. Palpi brown above and below. Upperside of both wings dark chocolate brown, unmarked except for a rather short and curved forewing band, consisting of 3 golden-yellow hyaline spots: a spot in the cell, with its costal side rounded and not extending above the radius; a spot in space 2, with its inner edge in line with that of the cell spot and its outer part extended towards termen; a smaller spot in space 1b, adjoining the outer half of the spot in space 2, tapering and reaching halfway to vein 1. No trace of yellow in space 3.

Underside: dark brown, slightly paler than the upperside; the spot in space 1b large and diffuse, extending to vein 1; outer part of space 1a suffused yellow, thus forming the continuation of the band.

Length of forewing 19 mm.

♀ (colour plate XVa, figs. 5, 6). Similar to male, wings broader. Upperside differs from that of the male in the cell spot being larger and almost rectangular; underside spot in space 1b more diluted, and yellow suffusion extended.

Length of forewing 21-22 mm.

of genitalia (fig. 2, A-D). Tegumen broad, with 2 broad ventro-lateral and 2 dorsal ear-like projections in the distal part. Uncus very wide, slightly narrower than tegumen, roughly parallel-sided, with its shoulders indented and its distal edge gently concave. Branches of gnathos long and narrow, covered with microtrichia throughout. Clasp elongate, its costal side distally convex and serrate; cuiller produced dorsally, its distal end serrate. Aedeagus as long as clasp, relatively slender, irregularly and gently curved, its distal open end slightly produced ventrally; vesica without cornuti.

Q genitalia (fig. 2, E). Papillae anales broad; apophyses posteriores very slender and curved. Postvaginal plate very broad, about 3 times as wide as long, deeply divided; antevaginal plate of a complex 3-dimensional shape, divided into 3 roughly subequal lobes. Ductus bursae short, proximally sclerotized and gently striped with fine longitudinal wrinkles; bursa copulatrix elongate, membranous throughout.

Discussion

The new species shows typical pattern for the genus *Quedara* with respect to external characters and genitalia, being most similar to *Q. albifascia* (MOORE, [1879]), especially in view of the absence of spots in space 3 (present in *Q. monteithi* (WOOD-MASON & DE NICÉVILLE, [1887]) and *Q. singularis* (MABILLE, 1893)); the golden-yellow colour of the forewing band, recalling *Celaenorrhinus aurivittata* (MOORE, [1879]), prevents its confusion with any other species of the genus. Male genitalia also show definite similarity to *Q. albifascia*, the uncus being shorter and the clasp being less convex distally in the latter.

Acknowledgements

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Explanation of colour plate XVa (p. 411):

- Fig. 1: Suada albolineata spec. nov., holotype &. N. Vietnam, Vinh Phu Prov., Tam Dao, 26.V. 1996, А. Монаsтукки leg., upperside.
- Fig. 2: id., underside.
- Fig. 3: Quedara flavens spec. nov., holotype &. N. Vietnam, Ninh Binh Prov., Cuc Phuong National Park, 21.V.1998, M. J. HILL leg., upperside.
- Fia. 4: id., underside.
- Fig. 5: Quedara flavens spec. nov., paratype Q. N. Vietnam, Bac Can Prov., Ba Be National Park, 5.VI.1997, A. Monastyrskii leg., upperside.
- Fig. 6: id., underside.

1	3	5
2	4	6

address of the author

ALEXEY L. DEVYATKIN
Department of Entomology
Faculty of Biology
Moscow State University
119899 Moscow, Russia

Colour plate XVa

DEVYATKIN, A. L.: Hesperiidae of Vietnam 6. Two new spwcies of the genera *Suada* DE NICEVILLE, 1895 and *Quedara* SWINHOE, 1907 (Lepidoptera, Hesperiidae). – Atalanta **31** (1/2): 193–197.

Fig. 1: Suada albolineata spec. nov., holotype & N. Vietnam, Vinh Phu Prov., Tam Dao, 26.V. 1996, A. Monastyrskii leg., upperside. Fig. 2: id., underside.

Fig. 3: Quedara flavens spec. nov., holotype J. N. Vietnam, Ninh Binh Prov., Cuc Phuong National Park, 21.V.1998, M. J. HILL leg., upperside.

Fig. 4: id., underside.

Fig. 5: Quedara flavens spec. nov., paratype ♀. N. Vietnam, Bac Can Prov., Ba Be National Park, 5.VI.1997, A. Monastyrskii leg., upperside.

Fig. 6: id., underside.

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2	4	6
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Colour plate XVb

DEVYATKIN, A. L.: Hesperiidae of Vietnam 8. Three new species of *Celaenorrhinus* HÜBNER, 1819, with notes on the *C. maculosa* (C. & R. FELDER, [1867]) -oscula Evans, 1949 group (Lepidoptera, Hesperiidae). – Atalanta 31 (1/2): 205–211.

Fig. 1: Celaenorrhinus inexspectus spec. nov. holotype &, N. Vietnam, Vinh Phu Prov., Tam Dao 1000 m, 27.V.1995, leg. A. Monastyrskii, upperside.

Fig. 2: Id., underside.

Fig. 3: Celaenorrhinus maculosa (C. & R. Felder, [1867]), & East China, Prov. Chekiang, Mokanshari, 3.VII.1930. leg. H. HÖNE, upperside (ex coll. BMNH).

Fig. 4: Id., underside.

Fig. 5: Celaenorrhinus inexspectus spec. nov., holotype &, Central Vietnam, Quang Binh Province, Minh Hoa district, vic. of Yen Hop village, 25.IV.1999, leg. A. L. Devyatkin, upperside.

Fig. 6: Id., underside.

Fig. 7: Celaenorrhinus kuznetsovi spec. nov., holotype &, Central Vietnam, Quang Binh Province, Minh Hoa district, vic. of Yen Hop village, 17.IV.1999, leg. A. N. Kuznetsov, upperside.

Fig. 8: Id., underside.

Fig. 9: Celaenorrhinus oscula Evans, 1949, \eth , West China, Tien-Tsuen, Chasseurs Indigenes du P. Delen, 1903, upperside.

Fig. 10: Id., underside.

Colour plate XVa/b



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Hesperiidae) 193-197