

Hesperiidae of Vietnam, 11.¹
New taxa of the subfamily Hesperinae

(Lepidoptera, Hesperidae)

by

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Summary: A new genus, 4 new species and 1 new subspecies, mostly from North and Central Vietnam, are described and illustrated: *Thoressa similissima* spec. nov., very similar to *Th. submacula* (LEECH, 1890); *Halpe paupera* spec. nov., with a new subspecies *H. paupera walthewi* subsp. nov. (from Hong Kong); *Scobura eximia* spec. nov.; *Praescobura chryso-maculata* gen. et spec. nov. The last taxon is tentatively placed in the *Plastingia*-group but its precise systematic position is still unclear.

Along with new Pyrginae (Hesperiidae of Vietnam, 9, 10), new material collected after the completion and publication of the first annotated list of the Vietnamese Hesperidae (DEVYATKIN & MONASTYRSKII, 1999) has proved to contain several completely new taxa of the subfamily Hesperinae as well as additional specimens which threw light on previously unidentified taxa. The holotypes of the new taxa described below are deposited in the collection of the Department of Entomology, Moscow State University (MSU); a number of the paratypes is going to be deposited in the Natural History Museum, London (BMNH).

Thoressa similissima spec. nov.
(colour plate IV, figs. 1, 2)

Holotype ♂: North Vietnam, Thanh Hoa Province, Ben En National Park, 17.XI.1998, leg. FRONTIER expedition

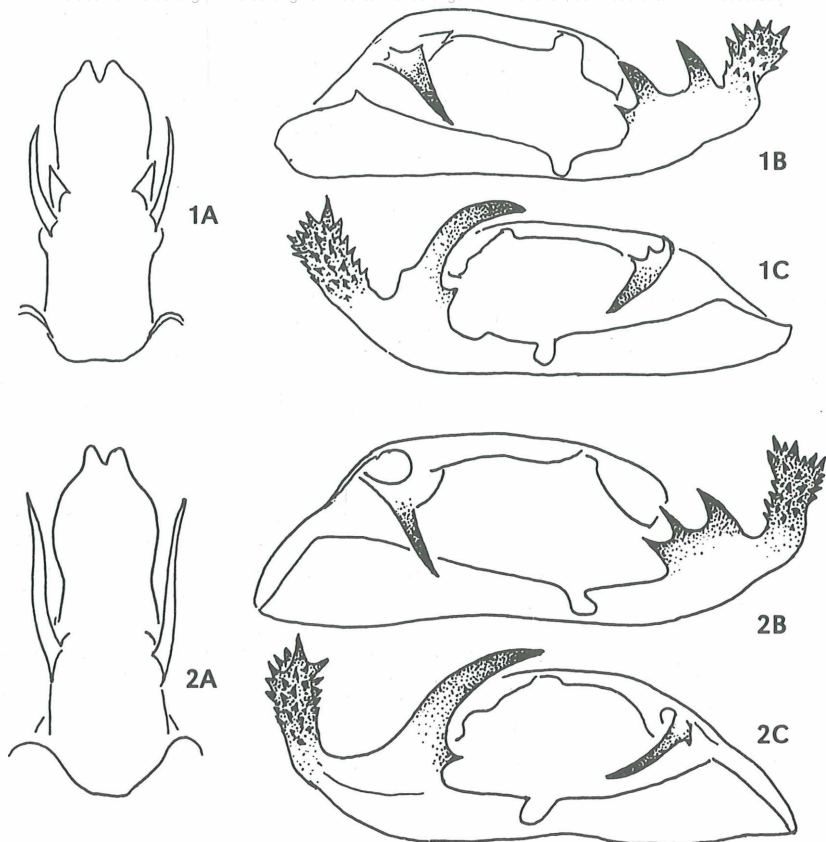
Paratypes (12 ♂♂): Central Vietnam, Nghe An Province, Pu Mat Nature Reserve, 23.VI.1998, 1 ♂; 1.VII.1998, 1 ♂; 17.VII.1998, 1 ♂; 7.IX.1998, 3 ♂♂ (leg. FRONTIER and FFI expeditions); Central Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 10.IV.2000, 1 ♂, leg. A. L. MONASTYRSKII; Central Vietnam, Ha Tinh Province, Huong Son Forest Complex, 20.V., 22.V., 27.V., 5.VI., 8.VI.2001, 5 ♂♂, leg. FRONTIER expedition.

Holotype MSU, paratypes MSU, BMNH.

Description

This may be presented best as a comparison with *Th. submacula* (LEECH, 1890) (col. pl. IV, figs. 3, 4), to which the new species is extremely similar but constantly differing in a number of external characters.

1 For (10) see DEVYATKIN, A. L. (2002): A new species of *Coladenia* Moore, [1881] (Lepidoptera, Hesperidae). – *Atalanta* 33 (1/2): 123–125.



Figs. 1, 2: *Thoressa* SWINHOE, male genitalia (A - tegumen and uncus, dorsal view; B - right clasp, inner view; C - left clasp, inner view). Fig. 1: *Thoressa similissima* spec. nov., male genitalia; Fig. 2: *Th. submacula* LEECH, male genitalia.

Upperside (col. pl. IV, fig. 1). Forewing in most specimens with 3 subapical spots in spaces 6 to 8, the latter being well-developed or dot-like (usually two subapical spots in *Th. submacula*); spots in spaces 2 and 3 short, almost not overlapping (longer and overlapping in *Th. submacula*); cell spots also short, equal in size or the upper one slightly produced towards termen (longer, and the lower one often produced towards the base of the wing in *Th. submacula*). Hindwing rather short, tornal part little produced compared to *Th. submacula*; white spots also shorter.

Underside (col. pl. IV, fig. 2). All markings, except white hyaline spots, dull and pale yellow (bright yellow in *Th. submacula*). Forewing costa narrowly yellow (broadly yellow in *Th. submacula*).

Length of forewing 16.5-18.0 mm (18.5-19.5 mm in *Th. submacula*).

Male genitalia (fig. 1).

The general structure is also similar to that of *Th. submacula* (fig. 2), but differs in the following features.

Tegumen usually gently angled in lateral view (usually straight in *Th. submacula*), with a pair of rather slender lateral horns and an additional pair of short dorsal horns (only one pair of more robust lateral horns in *Th. submacula*); gnathos rather long, distally upturned and cut straight (shorter, straight and tapered in *Th. submacula*). Cuiller of clasp with a rather short, usually evenly spined distal process (longer and conspicuously bifid in *Th. submacula*). All the elements, although in general the same as in *Th. submacula*, are arranged differently relative to each other.

Discussion

In general, the new species seems to be less variable than *Th. submacula* and can be distinguished from the latter by its small size, smaller cell and discal spots, paler and duller underside pattern; however, it cannot be identified with certainty without examination of the genitalia, where the most reliable character is the presence of an additional pair of short horns on the dorsal side of tegumen.

Halpe paupera spec. nov. (colour plate IV, figs. 5, 6)

Holotype ♂: Central Vietnam, Thanh Hoa Province, Xuan Mu district, loc. Xuan Lien, 300 m, 31.X.1998, leg. A. L. MONASTYRSKII.

Paratypes (1 ♂, 2 ♀♀): 1 ♀, the same label as the holotype; 1 ♂, Central Vietnam, Quang Binh Province, Minh Hoa district, loc. Yen Hop, 17.IV.1999, leg. A. L. DEVIATKIN; 1 ♀, Central Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 9.IV.2000, leg. BUI XUAN PHUONG.

All types MSU.

Description

Male. Antennae above dark brown, below club pale, shaft chequered. Frons, thorax and palpi below covered with yellowish hairs.

Upperside (col. pl. IV, fig. 5). Ground colour of both wings dark brown, with a faint yellowish tinge on disc. Forewing with usual *Halpe*-stigma; scarce yellowish scales in the costal area and along veins at the wing base; two small white subapical spots in spaces 6 and 7; spots in spaces 2 and 3 partly overlapping (in the holotype) or smaller and more separate (in the male paratype); upper cell spot well developed, elongate; the lower one much smaller. Hindwing unmarked.

Underside (col. pl. IV, fig. 6) brown, covered with scattered whitish scales, with submarginal and discal (on hindwing) bands of white spots.

Fringes obscurely chequered.

Length of forewing 17 mm.

Female. Similar to male but differs in the reduction of the lower cell spot which is visible as a small dot on both sides of forewing; spots in spaces 2 and 3 are either long and overlapping (Xuan Lien) or much reduced and widely separated (Vu Quang).

Length of forewing 16.5–18 mm.

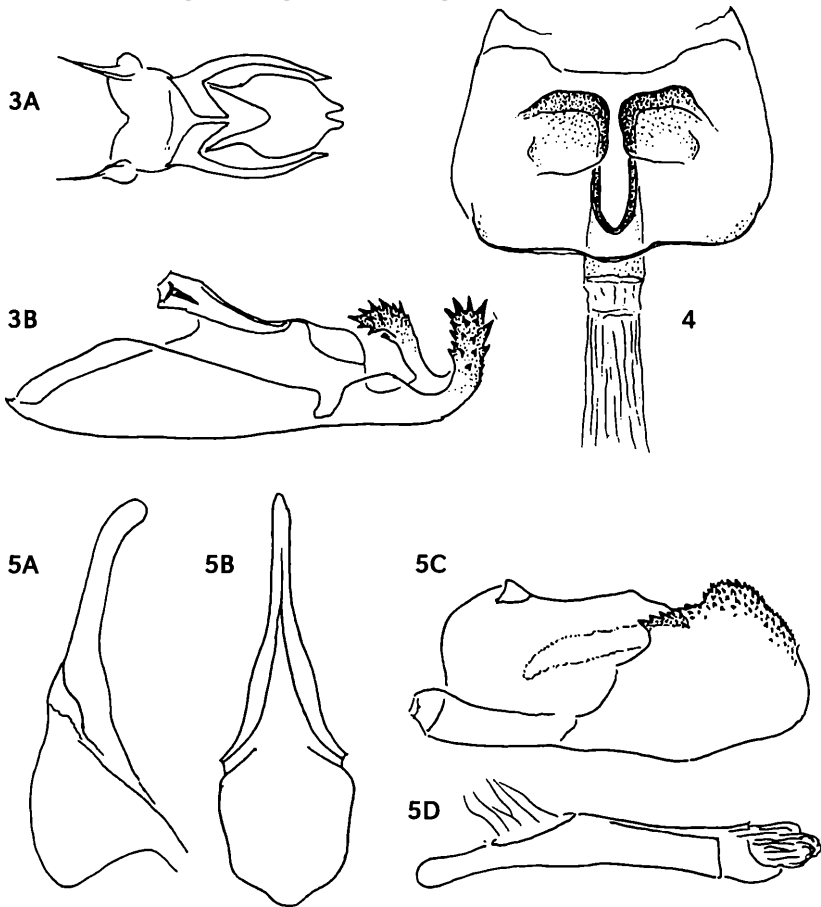


Fig. 3: *Halpe paupera* spec. nov., male genitalia (A – tegumen and uncus, ventral view; B – right clasp, inner view).

Fig. 4: *Halpe paupera* spec. nov., female genitalia, without papillae anales and bursa copulatrix (ventral view).

Fig. 5: *Scobura eximia* spec. nov., male genitalia (A – tegumen and uncus, lateral view; B – id., ventral view; C – right clasp, inner view; D – aedeagus, lateral view).

Male genitalia (fig. 3).

Uncus expanded, distally tapered and narrowly bifid at tip; lateral processes not reaching the tip of uncus, evenly curved, with their ends expanded and pointed ventrally. Clasp narrow, with a short simple, pointed costal lobe ("footstalk" by EVANS, 1949) at base; cuiller with 2 dorsal processes, the proximal one being long, curved back and inwards, expanded and spined at the

end; the distal process is of equal length or a little shorter, bent upwards, expanded and furnished with strong spines. Aedeagus short, expanded in the median part.

Female genitalia (fig. 4).

Papillae anales short, almost rectangular in shape; posterior apophyses long and thin, about 1.5 times longer than the papillae; post- and antevaginal plates conjoined in an entire wide sclerotized structure, the former being broadly excavate and the latter represented by a pair of sclerotized lobes; ostium elongate; ductus bursae with faint sclerotization near ostium.

Discussion

With respect to size and external features, the new species closely resembles *H. frontieri* DEYATKIN, 1997 (the latter lacking the lower cell spot on forewing), but the genitalia of both sexes are quite different. The shape of uncus and general build of clasp rather suggest relationship with *H. veluvana* FRUHSTORFER, 1911, quite dissimilar superficially. However, such a cross-over combination of characters appears to be quite a common situation in the genus *Halpe*.

***Halpe paupera walthewi* subsp. nov.**
(colour plate IV, figs. 7, 8)

Holotype ♀: Hong Kong, 16.X.1996, leg. GEORGE WALTHER.

Holotype MSU.

Description

The single female differs from those of the nominate subspecies in having the lower cell spot of forewing well developed and in the presence of two small but sharp (especially on the underside) spots in space 1b, directed to the middle of vein 1. No traces of such spots were found in both sexes of the nominate *H. paupera*. Length of forewing 16 mm.

Note

This rather striking difference in the spotting pattern, theoretically, may be also suggestive of an aberration as well as of a separate species; the genitalia of the single female show no significant differences from the typical *H. paupera*.

***Scobura eximia* spec. nov.**
(colour plate IV, figs. 9, 10)

Holotype ♂: North Vietnam, Lang Son Province, Huu Lien Nature Reserve, 260 m a.s.l., limestone forest, 1.VIII.2000, leg. FRONTIER (R.S.).

Holotype MSU.

Description

Antennae above dark brown, below broadly white before the club. Palpi above black, below 2nd segment yellow.

Upperside (col. pl. IV, fig. 9). Ground colour dark brown. Forewing with 3 small subapical spots in spaces 6 to 8 (that in the latter being the smallest), two tiny spots in spaces 4–5, a small spot (approximately equal to the subapical ones) in space 3, and two large contiguous spots in cell and space 2, the former constricted at the middle, the latter elongate; all spots hyaline white. Besides, there is a conspicuous patch of yellowish scales near the base of space 1b. Hindwing with two spots, one in spaces 4–5 at the end of cell, rather large and rounded, outwardly excavate, the other in space 3, tiny, placed below the larger one and slightly nearer to termen.

Underside (col. pl. IV, fig. 10). Forewing ground colour dark brown with conspicuous reddish scaling in the apical part, this scaling becoming very pale and yellowish towards the wing margin; spaces 1a and 1b pale whitish brown; a patch of rather bright yellow scaling along costa and upper part of cell, almost reaching the cell-spot. All markings the same as on the upperside; spots in spaces 3, 4 and 5 larger and sharply defined. Hindwing: ground colour yellow in the basal part and reddish brown in the rest of the wing, without sharp border between the colours; a series of obscure dark submarginal spots along termen and several dark spots between veins in the discal area. Along with the spots expressed on the upperside, there is an elongate white spot in space 2, a small white spot in cell and a small white spot mid space 7 (all spots black-ringed); also a black dot at base of space 7.

Fringes chequered from both sides, more conspicuously on forewing.

Length of forewing 19.5 mm.

Male genitalia (fig. 5).

Tegumen without lateral processes; uncus much longer than tegumen, distally tapered and curved downwards. Clasp about as long as tegumen+uncus, elongate, with a short costal process at base; cuiller as wide as valva, its distal end blunt and rounded, dorsal side slightly projecting and spined, with a large sharp tooth directed basad. Aedeagus as long as clasp, slightly curved, its distal end expanded. Saccus short and broad, distally tapered and slightly bifid.

Discussion

The new species has no close allies within the genus and seems to combine the characters of several species, recalling small *S. tyleri* (EVANS, 1914) in the general coloration and pattern of the underside, *S. cephaloides* (DE NICEVILLE, [1889]) in some respects of pattern and coloration of the forewing and *S. coniator* HERING, 1918 in size and the presence of two spots in spaces 4 and 5 of the forewing.

Praescobura gen. nov.

Diagnosis

Palpi: second segment erect (only one of the pair remained); third segment long, thin and pointed.

Antennae: longer than $\frac{1}{2}$ costa, slightly constricted before apiculus; apiculus obtuse, nudum 12 segments.

Wing venation (fig. 6). Forewing: cell long, about $\frac{2}{3}$ length of the wing, cut straight at the end;

vein 5 inconspicuously curved at origin, otherwise straight; vein 1 curved. Hindwing: cell about $\frac{1}{2}$ length of the wing, its lower end produced.

Secondary sexual characters (fig. 6): long brands along both sides of veins 1, 2 and cubitus. Wings unmarked brown, except for a short golden band on forewing.

Type species: *Praescobura chrysomaculata* spec. nov., described below.

Praescobura chrysomaculata spec. nov.

(colour plate IV, figs. 11, 12)

Holotype ♂: North Vietnam, Lao Cai Province, Hoang Lien Nature Reserve, 1400 m, 2.VI.1998, leg. A. L. MONASTYRSKII.

Holotype MSU.

Description

Male. Upperside (col. pl. IV, fig. 11). Unmarked dark chocolate brown, except a golden yellow hyaline band on forewing, not reaching costa and covering a small area in space 1b, large

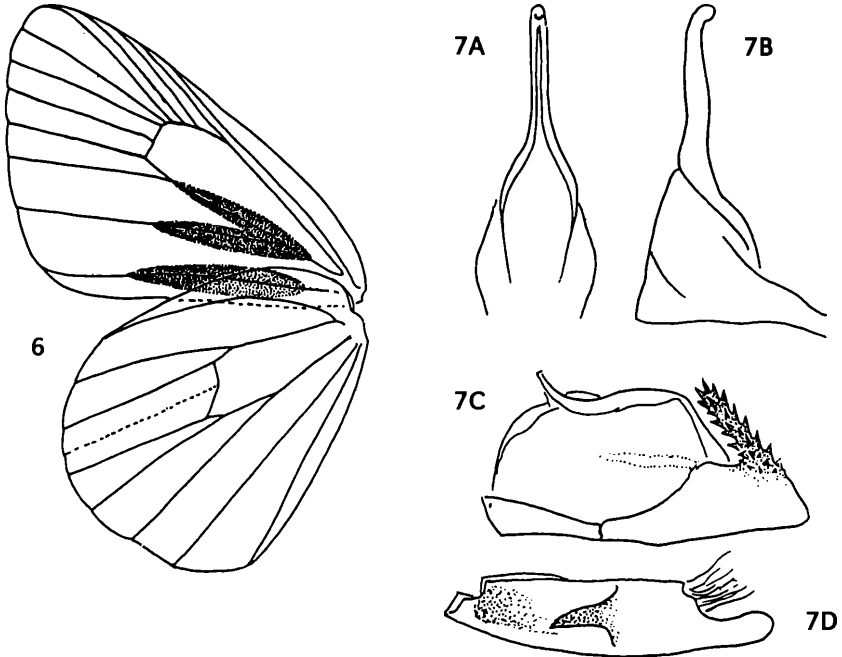


Fig. 6: *Praescobura chrysomaculata* gen. et. spec. nov., wing venation.

Fig. 7: *Praescobura chrysomaculata* gen. et spec. nov., male genitalia (A – tegumen and uncus, ventral view; B – id., lateral view; C – right clasp, inner view; D – aedeagus, lateral view).

areas in spaces 2–5 and bases of spaces 9 and 10. Underside (col. pl. IV, fig. 12). Paler brown, unmarked except the same forewing band, which is also paler and extended along costa in spaces 9 and 10, covering also the bases of spaces 7 and 8.

Length of forewing 17.5 mm.

Male genitalia (fig. 7).

Uncus longer than tegumen, simple, without processes or horns, slightly curved and slightly constricted before the tip which is bent down (all in lateral view); clasp short and compact, roughly parallel-sided; cuiller distally produced, with a long oblique process, directed basad and spined throughout. Aedeagus stout in the median part, abruptly thinner at distal and proximal ends; with a pair of distally directed flat and pointed lateral processes in the median part.

Discussion

Judging from most morphological criteria, the new genus stands most close to the *Plastingia*-group (sensu EVANS, 1949 and ELIOT, in CORBET & PENDLEBURY, 1992) which comprises a number of genera with very variable characters and which is therefore very difficult to be defined. However, this genus seems to have no close allies within this group, first of all due to the peculiar shape of its forewing cell and secondary sexual characters. The latter slightly recall those of some *Zographetus* and *Gangara*, which differ greatly in other morphological characters. Most similar patterns of the wing venation and general build of the genitalia seem to be found in the genus *Scobura*. On the other hand, the shape and coloration of wings bear some features of the *Ancistroides*-group, in which no such type of the genitalia is observed. Therefore, although the new genus combines some characters of several genera of the *Plastingia*-group, its precise place in the system cannot at present be defined with certainty.

Acknowledgements

I would like to express my deep gratitude to Dr. A. L. MONASTYRSKII, Mr. BUI XUAN PHUONG (Russia-Vietnam Tropical Centre, Hanoi) and the FRONTIER organization (London) for placing this valuable material at my disposal; special thanks are due to Mr. P. R. ACKERY and Mr. W. J. REYNOLDS (The Natural History Museum, London) for giving me the opportunity to study type specimens and for loan of comparative material.

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Explanation of colour plate IV (p. 231):

Fig. 1: *Thoressa similissima* spec. nov., holotype ♂, N. Vietnam, Thanh Hoa Prov., Ben En National Park, 17.XI.1998, leg. FRONTIER expedition, upperside.

Fig. 2: Id., underside.

Fig. 3: *Thoressa submacula* (LEECH, 1890), ♂, N. Vietnam, Ninh Binh Prov., Cuc Phuong National Park, 14.VI.1997, leg. A. L. MONASTYRSKII, upperside.

Fig. 4: Id., underside.

Fig. 5: *Halpe paupera* spec. nov., holotype ♂, C. Vietnam, Thanh Hoa Province, Xuan Mu distr., loc. Xuan Lien, 300 m, 31.X.1998, leg. A. L. MONASTYRSKII, upperside.

Fig. 6: Id., underside.

Fig. 7: *Halpe paupera walthewi* subspec. nov., holotype ♀, Hong Kong, 16.X.1996, leg. GEORGE WALTHER, upperside.

Fig. 8: Id., underside.

Fig. 9: *Scobura eximia* spec. nov., holotype ♂, N. Vietnam, Lang Son Prov., Huu Lien Nature Reserve, 1.VIII.2000, leg. FRONTIER (R.S.), upperside.

Fig. 10: Id., underside.

Fig. 11: *Praescobura chrysomaculata* gen. et spec. nov., holotype ♂, N. Vietnam, Lao Cai Prov., Hoang Lien Nature Reserve, 2.VI.1998, leg. A. L. MONASTYRSKII, upperside.

Fig. 12: Id., underside.

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Colour plate IV

DEVYATKIN, A. L.: Hesperidae of Vietnam, 11. New taxa of the subfamily Hesperinae (Lepidoptera, Hesperidae). – *Atalanta* **33** (1/2): 127–135.

Fig. 1: *Thoressa similissima* spec. nov., holotype ♂, N. Vietnam, Thanh Hoa Prov., Ben En National Park, 17.XI.1998, leg. FRONTIER expedition, upperside.

Fig. 2: Id., underside.

Fig. 3: *Thoressa submacula* (LEECH, 1890), ♂, N. Vietnam, Ninh Binh Prov., Cuc Phuong National Park, 14.VI.1997, leg. A. L. MONASTYRSKII, upperside.

Fig. 4: Id., underside.

Fig. 5: *Halpe paupera* spec. nov., holotype ♂, C. Vietnam, Thanh Hoa Province, Xuan Mu distr., loc. Xuan Lien, 300 m, 31.X.1998, leg. A. L. MONASTYRSKII, upperside.

Fig. 6: Id., underside.

Fig. 7: *Halpe paupera walthewi* subspec. nov., holotype ♀, Hong Kong, 16.X.1996, leg. GEORGE WALTHER, upperside.

Fig. 8: Id., underside.

Fig. 9: *Scobura eximia* spec. nov., holotype ♂, N. Vietnam, Lang Son Prov., Huu Lien Nature Reserve, 1.VIII.2000, leg. FRONTIER (R.S.), upperside.

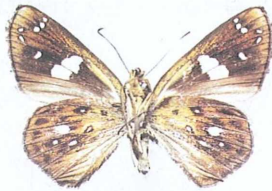
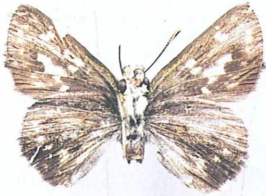
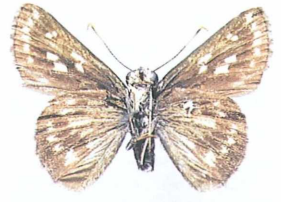
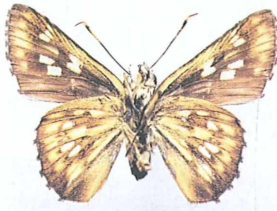
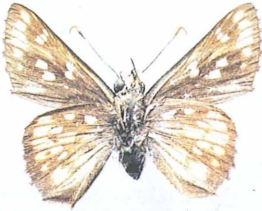
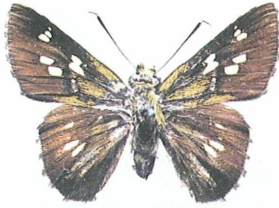
Fig. 10: Id., underside.

Fig. 11: *Praescobura chrysomaculata* gen. et spec. nov., holotype ♂, N. Vietnam, Lao Cai Prov., Hoang Lien Nature Reserve, 2.VI.1998, leg. A. L. MONASTYRSKII, upperside.

Fig. 12: Id., underside.

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Colour plate IV



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