New and little known Chinese butterflies in the collection of the Institute of Zoology, Academia Sinica, Beijing – 1

(Lepidoptera, Rhopalocera)

by

Hao Huang & Chun-Sheng Wu

Abstract: Six new species and one new subspecies of butterflies are described from China, viz. Satyrinae: *Ypthima yoshinobui* spec. nov. from Qinghai, *Ypthima beautei qinghaiensis* subspec. nov. from Qinghai, *Ypthima lihongxingi* spec. nov. from Hubei, *Loxerebia pieli* spec. nov. from Jiangxi; Lycaenidae: *Ahlbergia zhujianhuai* spec. nov. from Sichuan; Hesperiidae: *Celaenorrhinus yaojiani* spec. nov. from Guangxi, *Sovia fangi* spec. nov. from Yunnan. The ♂ specimen of *Yanoancistroides fujiananus* (comb. nov. = *Astictopterus fujiananus* Chou & Huang, 1994) is described for the first time, and the status of that species is discussed and transferred into the genus *Yanoancistroides* Huang, 1999 (= *Yania* Huang, 1997 preoccupied name). Six species and two subspecies are newly recorded for the Chinese fauna, viz. *Ypthima frontierii* from Guangxi, *Ypthima nareda* from SE. Tibet, *Ypthima parasakra parasakra* from SC. Tibet, *Callerebia hybrida* from SC. Tibet, *Heliophorus moorei* from SE. Tibet, *Heliophorus moorei coruscans* from SC. Tibet, *Celaenorrhinus inexspectus* from Guangxi, *Halpe hauxwelli* from Yunnan. The holotypes of the following species described by Prof. Lee are illustrated in colour for the first time and their taxonomic positions discussed: *Ypthima albipuncta, Lethe unistigma, Lethe confusa fuhaica, Neorina neosinica, Euthalia neoterica, Euthalia purchella* and *Neptis lucida*. The following little known species are reported and Prof. Lee's report (1982) on Tibetan butterflies is revised on some species based upon the examination of the basic specimens in that report: *Ypthima baileyi, Sinia lanty pomena, Albulina lucifuga, Polyommatus forresti, Maculinea arion inferna, Heliophorus androcles trilunulata, Sovia subflava, Sovia grahami grahami, Halpe gamma, Halpe dizangpusa*. The following synonyms are given: *Euthalia neoterica* Lee, 1985 syn. nov. = *Euthalia staudingeri yunnana* Oberthür, 1907; *Neptis lucida* Lee, 1962 syn. nov. = *Neptis namba namba* Tytler, 1915; *Polyommatus forresti zanganus* Huang, 1998 syn. nov. = *Polyommatus forresti* Balint, 1992.

Introduction

This is the first of a series of papers dealing with the little known butterfly collection preserved in the Institute of Zoology, Academia Sinica. In this paper, some new species and new subspecies are described from China, some species and subspecies are reported as new records for Chinese fauna, some very little known species are discussed based upon the examination of specimens. We have examined some holotypes of the species described by Lee Chuan-Long and discuss their taxonomic positions. We also revise some records of butterflies in Prof. Lee's report (1982) on Tibetan butterflies, based upon the examination of the basic specimens in that report.

All type specimens in this study are deposited in the entomological collection of the Institute of Zoology, Academia Sinica (IZAS), Beijing, China.

Nymphalidae

Satyrinae

Ypthima ***yoshinobui*** **spec. nov.** (figs. 3, 4, 7, 10; col. pl. X, fig. 3)

Diagnosis

This new species belongs to the *Ypthima megalomma*-group (sensu Shirozu & Shima, 1979; Shima, 1988) and is very close to *Ypthima beautei* Oberthür, 1884, but can be easily distinguished from the latter by the following combination of characters in males.

1) On the underside of the hindwing, the outer discal line is placed outside of the discocellular, not touching discocellular as in *beautei*, the submarginal line is more remote from termen and placed inside of the sub-tornal spot in space 2, so the two lines are much closer to each other than in *beautei*.
2) Male genitalia are different: dorsal processes of both left and right valvae are bifurcate at the tip, not serrate at the tip as in *beautei*.

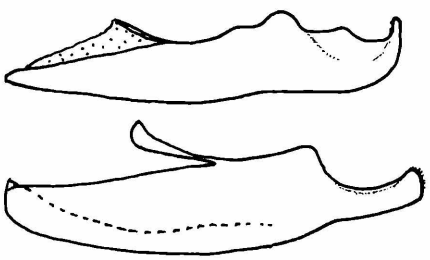
Remarks
In IZAS we found a specimen of *Y. beautei* (described below as *qinghaiensis* subspec. nov.), which was placed aside the holotype of *Y. yoshinobui* in the same box; both specimens were taken from the Ma-ke valley, E. Qinghai in June 1982. Consequently the new species is sympatric with *Y. beautei* in nature.

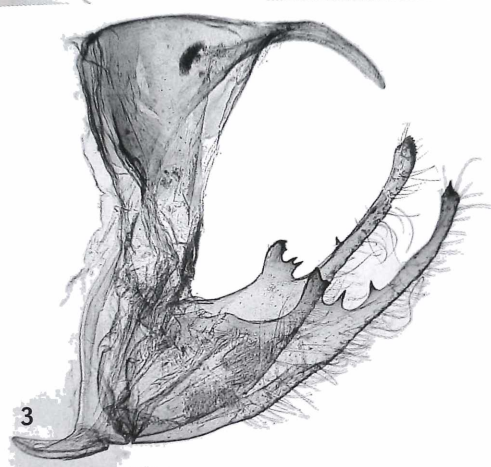
Description of the holotype
On the upperside of the hindwing the sub-tornal ocellus is visible in space 2, on the underside of the hindwing, only the sub-tornal ocelli in spaces 1c and 2 are visible but minute whilst the subapical ocellus is absent. There is no difference in eyes, frons, palpi, antennae, thorax, abdomen, legs, ciliae, male brand and ground colour of wings between *yoshinobui* and *beautei*. An examination of androconia shows that the typical population of *Y. beautei* from Sichuan has androconia a little shorter than in *Y. beautei qinghaiensis* (subspec. nov.) and *Y. yoshinobui*. There is no other reliable difference in male genitalia between *yoshinobui* and *beautei* except the tip of the dorsal processes of the valvae (the tip of the holotype's aedeagus of *yoshinobui* is broken thus a comparison of aedeagi between *beautei* and *yoshinobui* is impossible). With the help of Dr. UEMURA, in addition to the material in IZAS, we examined two more males of *beautei* from Sichuan in genitalia to determine the specific difference and individual variation of the male genitalia. The male genitalia of *beautei* are very variable in the dorsal process of the valva, the appearance and number of teeth on the dorsal margin of the valva behind the dorsal process and the extension of the apical serrate portion of the valva: the dorsal process can be rather straight or bent toward the tip of the valva, the teeth behind the dorsal process are very variable in number and position, each specimen seems to have its peculiar appearance and the left valva is always different from the right valva, the extension of the serrate apex of the valva can be broad or narrow. However in all the specimens of *beautei* examined, the tip of the dorsal process of the valva is always serrate, at least bearing four teeth, whereas that of *yoshinobui* is bifurcate.

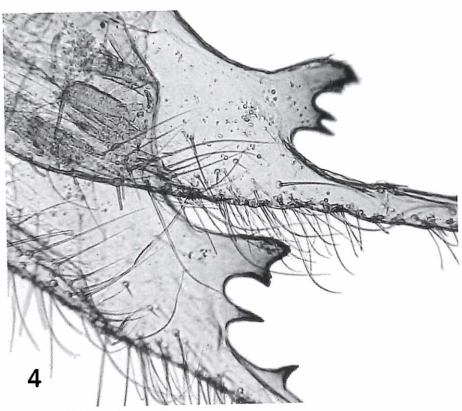
Within the *megalomma*-group, three other close species should be discussed here, viz. *Y. baileyi* SOUTH, 1913 from Batang, W. Sichuan, *Y. putamdui* SOUTH, 1913 from Nya Chuka, W. Sichuan and *Y. pseudodromon* FORSTER, 1948 from Likiang, NW. Yunnan. *Y. yoshinobui* can be easily distinguished from *putamdui* by the discal line on the underside of the hindwing not strongly projected outwards between veins 3 and 6, and by the dorsal process of the valva stick-shaped, not so broad and triangular in shape as in *putamdui* (1 ♂ from Deqin, N.W. Yunnan in UEMURA's collection examined). *Y. yoshinobui* can be easily distinguished from both *Y. baileyi* and *Y. pseudodromon* in external features by the discal line on the hindwing underside not waved and all transverse lines on the hindwing underside blackish, not reddish brown. The male genitalia of *Y. pseudodromon* have been illustrated by SHIROZU & SHIMA (1979: pl. 36, fig. 38) and are very similar to those of *Y. putamdui* in having dorsal processes of valvae robust and somewhat triangular in shape. The male genitalia of *Y. baileyi* are unknown in literature. However, we found one male from Xiang-cheng (very close to Batang, the type locality of *baileyi*), W. Sichuan in the collection of IZAS, which should be identified as *Y. baileyi* according to SOUTH's original description. The male genitalia of this specimen of *baileyi* (if our identification is correct) (figs. 18–20) shows close resemblance to those of *Y. megalomma* BUTLER, 1874 (fig. 7) in hav-

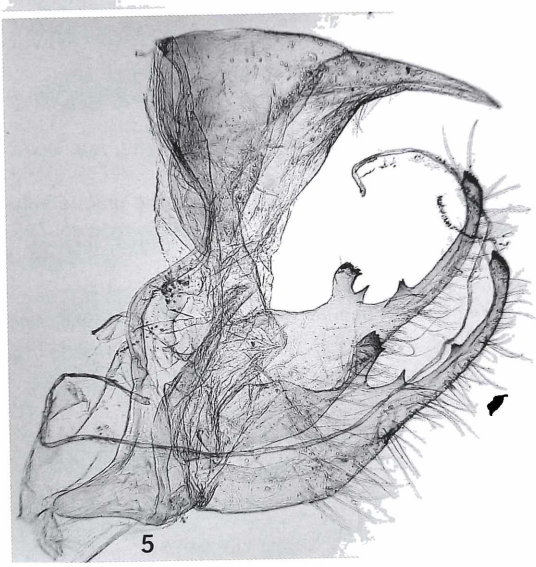
Fig. 1: Male genitalia of *Ypthima albipuncta* (holotype) consisting of genital capsule in lateral view.
Fig. 2: Left valva of *Ypthima albipuncta*: a – in dorsal view; b – in lateral view.
Fig. 3: Male genitalia of *Ypthima yoshinobui* (holotype) consisting of genital capsule in lateral view with aedeagus removed.
Fig. 4: Central portion of valvae of *Ypthima yoshinobui* (holotype) to show dorsal processes.
Fig. 5: Male genitalia of *Ypthima beautei qinghaiensis* (holotype) consisting of genital capsule in lateral view with aedeagus removed.
Fig. 6: Central portion of valvae of *Ypthima beautei qinghaiensis* (holotype) to show dorsal processes.

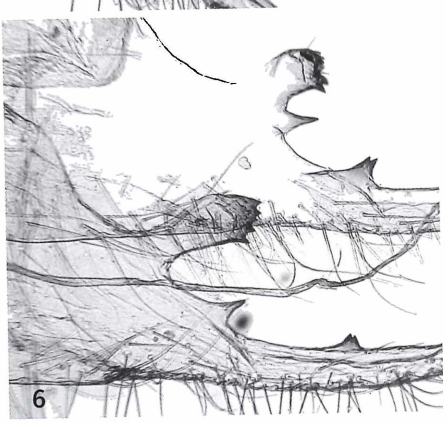

1


2


3


4


5


6

ing the dorsal process of the valva stick-shaped and serrate at the tip and the dorsal margin of the valva behind the dorsal process is smooth, without any teeth.

Type data
Holotype ♂: LF 22 mm, Make valley, E. Qinghai, China, June 1982, coll. Forest Service of Qinghai.

This new species is named in honor of Dr. YOSHINOBU UEMURA, who helped the first author constantly, especially in this study with the useful photos of specimens and male genitalia of *Ypthima beautei beautei, Ypthima pseudodromon* and *Ypthima putamdui*.

Ypthima beautei ***qinghaiensis*** **subspec. nov.** (figs. 5–7, 12; col. pl. X, fig. 2)

Diagnosis
This new subspecies from Qinghai can be easily distinguished from the nominotypical subspecies of *Y. beautei* (col. pl. X, fig. 1) from W. Sichuan by the following combination of characters in males.
1) The upperside of the hindwing is entirely unmarked except for a submarginal line, without the sub-tornal ocellus in space 2 of ssp. *beautei*.
2) On both sides of both wings, the submarginal lines are remarkably more remote from the termen than in ssp. *beautei*.
3) On the underside of the hindwing, the inner discal, outer discal and submarginal lines are very clearly marked and more crenulate than in ssp. *beautei*.

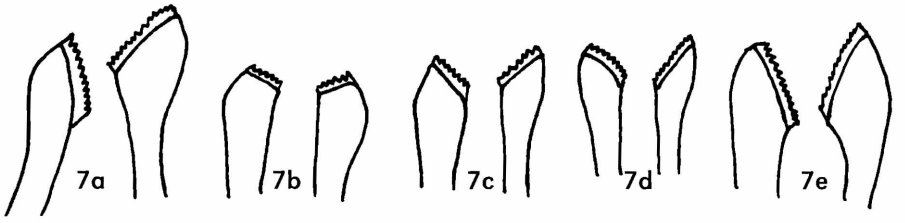
Remarks
There is no difference in eyes, frons, palpi, antennae, thorax, abdomen, legs, ciliae, forewing upperside male brand and ground colour of wings between ssp. *qinghaiensis* and ssp. *beautei*. The androconia of ssp. *qinghaiensis* is usually longer and broader than in ssp. *beautei* (fig. 11). There is no reliable difference in male genitalia between ssp. *qinghaiensis* and ssp. *beautei* (figs. 8, 9), only the serrate portion at the apex of the valva is remarkably narrower in the holotype of *qinghaiensis* than in specimens of *beautei* examined, but such a difference may not run out of individual variation because the serrate apex of the valva is often variable in a single species of *Ypthima*.

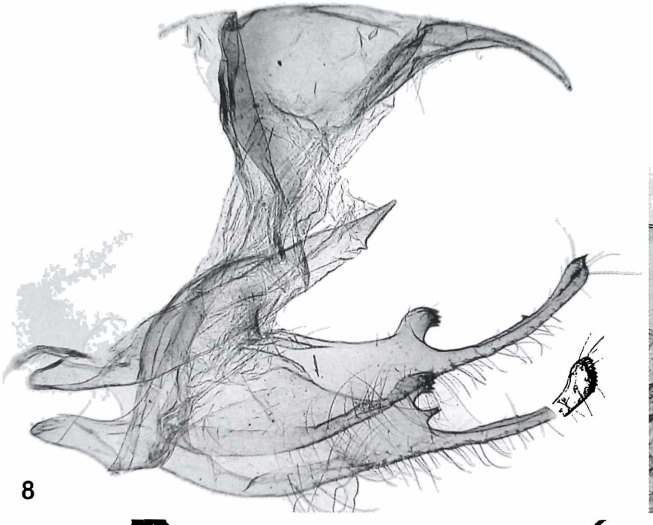
Type data
Holotype ♂: LF 22.5 mm, Make valley, E. Qinghai, China, June 1982, coll. Forest Service of Qinghai.
This new subspecies is named after the Qinghai province where it was found.

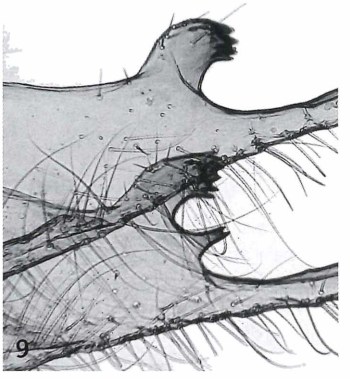
Ypthima baileyi SOUTH, 1913 (figs. 7, 14, 18–20; col. pl. X, figs. 4, 5)

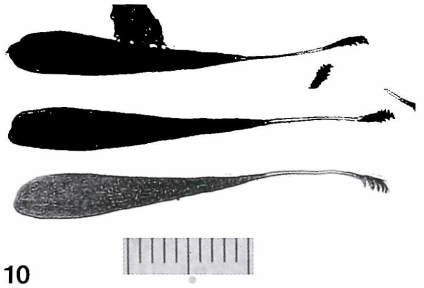
Specimen examined: 1 ♂, LF 20 mm, Xiangcheng, W. Sichuan, 2900 m, June 18th 1982, leg. WANG SHU-YONG.
This very little known species was originally described from Batang, W. Sichuan on the unique holotype. Since then it has never been reported. We found one male specimen in the collection of IZAS, which should be identified as this species according to SOUTH's original description.

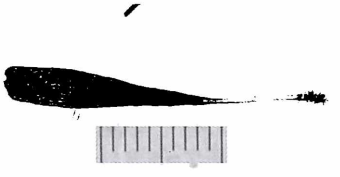
Fig. 7: Tip of male valvae in ventral view of a *Ypthima beautei beautei*, Sichuan; b – *Ypthima beautei qinghaiensis*, Qinghai; c – *Ypthima yoshinobui*, Qinghai; d *Ypthima baileyi*, Xiangcheng, Sichuan; e – *Ypthima megalloma*, Shaanxi.
Fig. 8: Male genitalia of *Ypthima beautei beautei* (Lu-ding, W. Sichuan) consisting of genital capsule in lateral view.
Fig. 9: Central portion of valvae of *Ypthima beautei beautei* (Lu-ding, W. Sichuan) to show dorsal processes.
Fig. 10: Androconia of *Ypthima yoshinobui* (holotype).
Fig. 11: Androconia of *Ypthima beautei beautei* (Lu-ding, Sichuan).
Fig. 12: Androconia of *Ypthima beautei qinghaiensis* (holotype).
Fig. 13: Androconia of *Ypthima lihongxingi* (holotype).
Fig. 14: Androconia of *Ypthima baileyi* (Xiang-cheng, Sichuan).

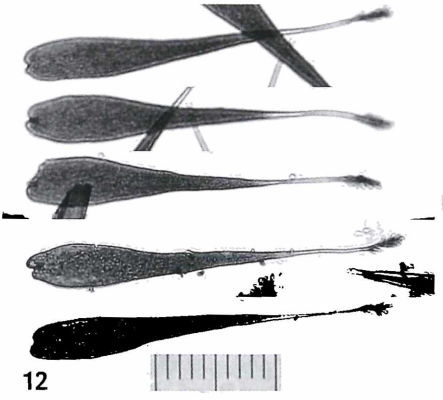



8

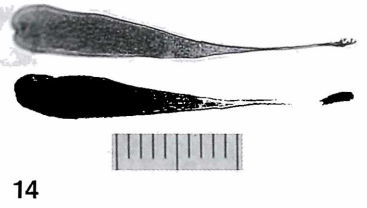

9


10


11


12


13


14

In external features, it is very similar to *Y. pseudodromon* FORSTER, 1948 from N.W. Yunnan, but differs a little in having the yellowish ring of the apical ocellus on the forewing narrower and both wings less rounded in shape. In male genitalia it is much closer to *Y. megalomma* than to *Y. pseudodromon* in having the dorsal process of the valva stick-shaped and serrate at the tip and the dorsal margin of the valva behind dorsal process smooth.

Ypthima frontierii UEMURA & MONASTYRSKII, 2000 (fig. 21; col. pl. X, fig. 7)

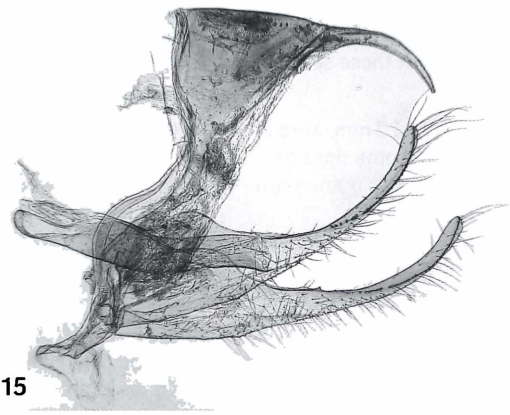
Specimen examined: 1 ♂ (Dry-season form), LF 21 mm, De-fu, Na-po, Guangxi province, 1440 m, April 4th 1998, leg. WU CHUN-SHENG.
This species was originally described from N. Vietnam. Here it is recorded for the first time for the Chinese fauna. Since this species has been thoroughly described, here we only illustrate the specimen and the male genitalia. The unique specimen from China shows no difference in wing markings, male brand, androconia and male genitalia from the original description. The striking feature of this species is the absence of the dorsal process on the costa of the valva, however the presence of the sacculus of valva and the obscure striation on the underside of the hindwing prove this species to be a member of the *Ypthima megalomma*-group.

Ypthima ***lihongxingi*** **spec. nov.** (figs. 13, 15–17; col. pl. X, fig. 6)

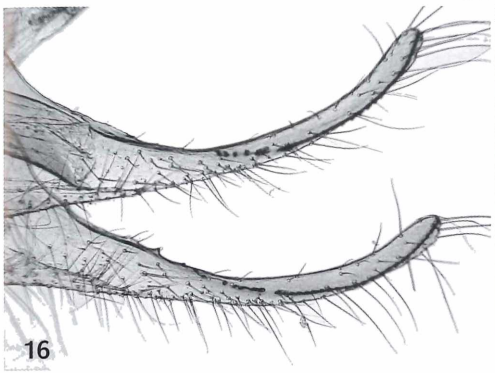
Diagnosis
This new species belongs to the *Ypthima megalomma*-group, because it has it's valva serrate apically, aedeagus in dorsal view membranous from apex to right side obliquely and a small triangular sclerite arising from ventral portion and flexed into vesica, underside of hindwing marked with three ocelli, sacculus of valva well developed and underside striation obscure.
It can be easily distinguished from all the known species of the *megalomma*-group by the following combination of characters in males.
1) Ocelli on The underside of the hindwing are fully developed, whereas in most members of the group except *Y. chinensis* LEECH, 1892 and *Y. frontierii* they are reduced to dots.
2) The entire outer half of the valva is densely serrate.
3) Valva has no dorsal process at costa, whereas in most members of the group except *Y. frontierii* it has a strong dorsal process at the costa.
It can be distinguished from all the members of the *motschulskyi*-group simply by the sacculus of the valva being well developed, not obsolete.

Description
Male. Upperside of forewing: ground colour gray-brown; subapical ocellus large, black, a little oblique, bipupilled with bluish and yellow-ringed; male brand visible to naked eyes, but not remarkable; submarginal fascia dark and extensive; marginal fascia indistinct; inner discal fascia absent; outer discal fascia dark, weakly developed, the postdiscal area surrounding subapical ocellus appearing remarkably paler than ground thus forming a loop; ciliae uniform gray-brown. Upperside of hindwing: ground colour grayish brown as on forewing; inner discal fascia absent but outer discal fascia weakly marked; submarginal fascia dark and extended to termen, broadened in spaces 3–5; postdiscal area between outer discal and submarginal fasciae appearing a little paler than the ground; a sub-tornal ocellus well marked in space 2, rather big, black, single pupilled with bluish and yellow-ringed; no trace of ocellus in space 1c; ciliae grayish brown as on forewing. Underside of forewing: ground colour pale grayish, densely and obscurely striated with dark brown; inner discal fascia dark and weakly marked; outer discal fascia dark and very extensively marked at lower half; submarginal fascia dark and extensively marked; marginal fascia indistinct; subapical ocellus as on upperside but with yellow rings much broader and clearer than on upperside; ciliae uniform gray-brown as on upperside. Underside of hindwing: ground colour pale grayish as on forewing underside, closely and obscurely striated with dark brown; inner and outer discal fasciae very weak, nearly absent; submarginal fascia well devel-

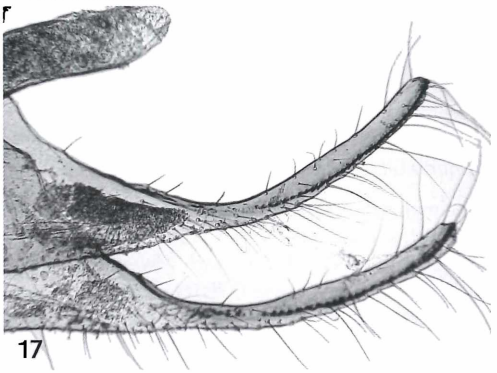
Fig. 15: Male genitalia of *Ypthima lihongxingi* (holotype) consisting of genital capsule in lateral view.
Fig. 16: Distal portion of valvae of *Ypthima lihongxingi* (holotype).
Fig. 17: Distal portion of valvae of *Ypthima lihongxingi* (paratype).



15



16



17

oped, extended to termen and broadened in spaces 3–5; postdiscal area between outer discal and submarginal fasciae less striated thus appearing a little paler than other areas; three ocelli present, a big one in space 6 near apex, single pupilled with bluish and yellow-ringed, a big one in space 2 near tornus, single pupilled with bluish and yellow-ringed, and a small one in space 1c at tornus, bipupilled with bluish and yellow-ringed; ciliae grayish brown.
Female. Unknown at present.
Androconia. Nearly 0.163 mm long, shorter than in most members of the *megalomma*-group, but longer than in *Y. frontierii*.
Male genitalia: lateral membraneous portion between tegumen and uncus reduced to a narrow slit; fenestrula reduced; appendix angularis a little curved inward; uncus in lateral view weakly curved downwards, nearly equal in length to tegumen, gradually tapering to apex; saccus very short; aedeagus in lateral view weakly curved upwards, in dorsal view membranous from apex to right side obliquely and a small triangular sclerite arising from ventral portion and flexed into vesica; valva in lateral view rather broad at base and strongly narrowed beyond middle, with entire outer half densely and punily serrate, and without dorsal process at costa; sacculus of valva well developed, not obsolete.

Remarks
This new species has no affinities within the group, with the entire outer half of the valva serrate and without a dorsal process at the costa of the valva.
According to SHIMA's analysis of the phylogenetic relationships of the genus *Ypthima*, nine species were included into the *megalomma*-group: *chinensis, iris, dromon, megalomma, beautei, pseudodromon, akbar, insolita* and *putamdui*. In addition, *baileyi, frontierii* and *yoshinobui* were subsequently

added into the *megalomma*-group. We have found and examined the specimens of most of these species in the collection of IZAS except *pseudodromon* and *putamdui*, and we will provide the detailed redescription of these species in subsequent papers.

Type data
Holotype ♂: LF 22 mm, Xing-dou-shan, Lichuan, Hubei, 800 m, July 25th 1989, leg. LI HONG-XING.
Paratype: 1 ♂, same data as holotype.
This new species is named after Mr. LI HONG-XING, who collected the type series of this new species.

Ypthima nareda (KOLLAR, 1844)
= *Ypthima newara* MOORE: LEE, 1982: 135, No. **23** (65), part. Misidentification.

Specimen examined: 1 ♀, Le-bu, Cuo-na, SE Tibet, 2500 m, August 8th 1974, leg. HUANG FU-SHENG.
This species was previously known only from the W. and C. Himalayas (Pakistan, NW. India, Nepal, Sikkim and Bhutan) and is new to the Chinese fauna. All the previous records of this species in China are misidentifications. The single female reported by LEE as *newara* has been dissected and shows the female genitalia of *nareda*. Another female reported by LEE (1982: 135) from Chayu, SE. Tibet most probably belongs to *Ypthima dengae* HUANG, 2001, but we failed to locate this female in IZAS. *Ypthima newara newara* is still unknown in China.

Ypthima albipuncta LEE, 1985 (figs. 1, 2; col. pl. X, figs. 8, 9)

Specimen examined: holotype ♂, LF 29 mm, Yi-liang, Yunnan, 1800 m, May 25th 1980, leg. YU DE-KUAN.
Currently placed as a bona species of *Ypthima*. This species was based upon the unique holotype from Yunnan and was compared with *Y. conjuncta* LEECH, 1891 in its original description. It is much closer to *Ypthima microphthalma* FORSTER, 1948 than to all other species within the *sakra*-group, but can be easily distinguished from *microphthalma* by the size larger, the yellow ring of the subapical ocellus on the upperside of the forewing being very obscure, not clear as in *microphthalma*, outer discal fasciae on underside of both wings restricted above vein 2, the usual ocelli on the underside of the hindwing remarkably bigger in size and full of silvery scales, an additional silvery patch well marked in space 4 on the hindwing underside, and apical area of ampulla and harpe expanding inwards in dorsal view.

A redescription of *albipuncta* is as follows:
Male. Upperside of forewing: ground colour brown; subapical ocellus moderate, black, upright, bipupilled and yellow-ringed, with the yellow ring very obscure and dusted; male brand conspicuous to the naked eye; submarginal and marginal fasciae indistinct; inner and outer discal fasciae absent; ciliae uniform gray-brown. Upperside of hindwing: ground colour as on forewing; inner and outer discal fasciae absent; submarginal fascia dark and obscure, only seen in spaces 2–5; marginal fascia indistinct; a minute tornal ocellus visible in space 1c, black, single pupilled with bluish and yellow-ringed; a big postdiscal ocellus in space 2, single pupilled and yellow-ringed; a rather big postdiscal ocellus in space 3, single pupilled and yellow-ringed, smaller than that in 2; ciliae grayish brown as on forewing. Underside of forewing: ground colour pale grayish, densely striated with dark brown; inner discal fascia dark and very obscure; outer discal fascia dark and rather extensive, curved outwards and connected to submarginal fascia at vein 2 to form a loop around subapical ocellus; submarginal fascia dark, obscure and rather extensive; marginal fascia indistinct; subapical ocellus as on upperside but with yellow rings neat and much broader than on upperside; ciliae uniform brownish gray. Underside of hindwing: ground colour pale grayish as on forewing underside, densely striated with dark brown; inner discal fasciae dark and obscure; outer discal fascia dark and extensive, restricted above vein 2, angled outwards in space 4 but not pointed; submarginal fascia absent; marginal fascia dark and broadened in spaces 4–6; the usual five ocelli of the *sakra*-group present in spaces 1c, 2, 3, 5 and 6, each ocellus full of silvery scales and narrowly yellow-ringed, the one in space 6 smaller than others, the one in space 1c bipupilled whilst the others single pupilled; an additional silvery patch in space 4 just between the ocelli in spaces 3 and 5; ciliae brownish gray.

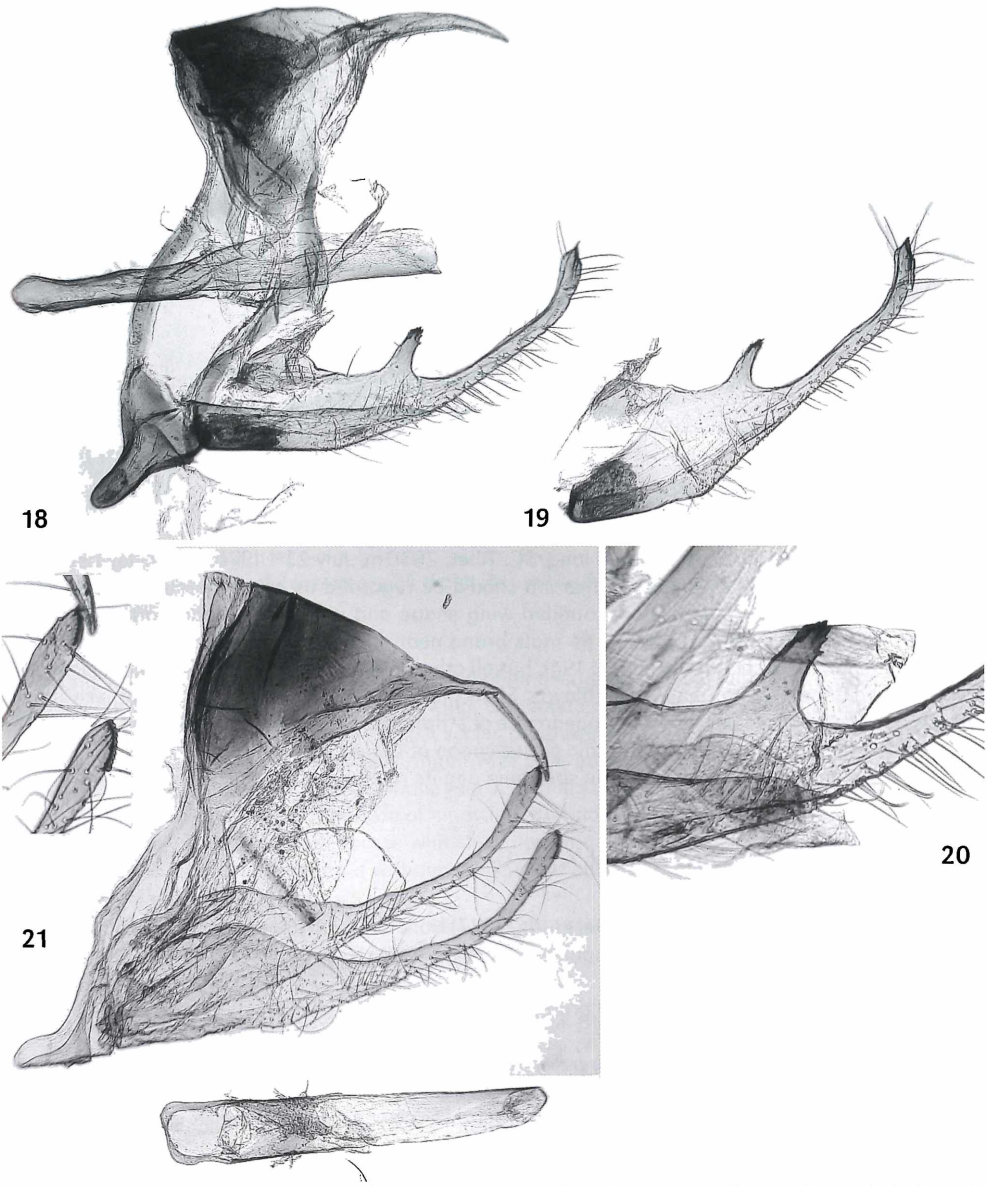


Fig. 18: Male genitalia of *Ypthima baileyi* (Xiang-cheng, Sichuan) consisting of genital capsule in lateral view with left valva removed.
Fig. 19: Left valva of *Ypthima baileyi* (Xiang-cheng, Sichuan).
Fig. 20: Central portion of right valva of *Ypthima baileyi* (Xiang-cheng, Sichuan) to show dorsal process.
Fig. 21: Male genitalia of *Ypthima frontierii* (Guangxi) consisting of genital capsule in lateral view with aedeagus removed (top right), of enlarged apex of valvae in lateral view (top left), and of aedeagus in ventral view (bottom).

Androconia not examined. Because of rarity, the holotype specimen in IZAS was not available on loan for detailed research.

Male genitalia. General appearance of tegumen, uncus, saccus, vinculum and aedeagus as those of other species of the *sakra*-group, the main difference from other species appearing in the valva. Uncus in lateral view downcurved near apex, a little shorter than tegumen; appendix angularis rather long; valva similar to that of *microphthalma* in lateral view, however in dorsal view with apical margin of ampulla and harpe expanding inwards, somewhat similar to that of *methorina* and *hannyngtoni*, but different in shape from the latter two.

Ypthima parasakra parasakra ELIOT, 1987
= *Ypthima methorina* OBERTHÜR: LEE, 1982: 135, No. **23** (66). Misidentification.

Specimens examined: 3 ♂♂, Zhang-mu, SC. Tibet, 2200 m, June 21st–24th 1975; 2 ♀♀, Ji-long, SC. Tibet, 2800 m, July 23rd 1975.
The nominotypical subspecies of *parasakra* is new to Chinese fauna.
Prof. LEE's report (1982) on the Tibetan fauna has a few mistakes, some of which are very apparent, however in this paper we only revise the specimens we have found in IZAS.

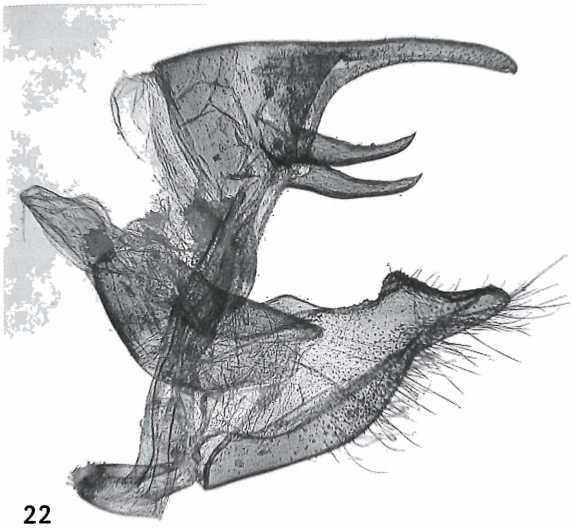
Callerebia hybrida (BUTLER, 1880) (fig. 22; col. pl. X, fig. 10)
= *Callerebia annada* MOORE: LEE, 1982: 135, No. **24** (68). Misidentification.

Specimen examined: 1 ♂, LF 30.5 mm, Ji-long, SC. Tibet, 2030 m, July 23rd 1975.
According to D'ABRERA (1992: 194), *C. hybrida* should be regarded as an independent species from *C. annada* (MOORE, 1857), with more rounded wing shape and indistinct striation on underside of hindwing. The specimen from Tibet has no male brand near dorsum on upperside of forewing which has been mentioned by D'ABRERA (1992: 194), but all other external features agree to the specimen illustrated by D'ABRERA from the W. Himalayas. From the experience in identifying the other Chinese species of *Callerebia*, we consider the appearance of striation on the hindwing underside as the most important diagnostic character for specific classification of *Callerebia*.
This species is new to Chinese fauna. The specimen and its male genitalia as illustrated here.

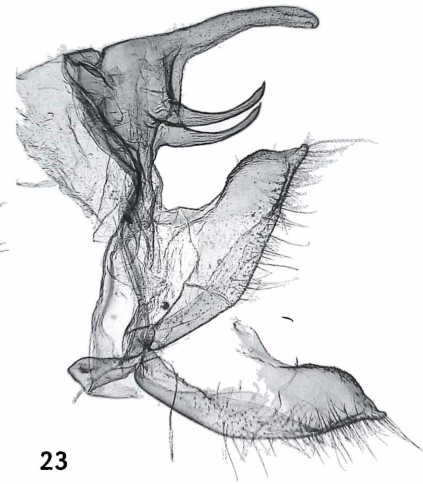
Loxerebia ***pieli*** **spec. nov.** (fig. 23, col. pl. X, fig. 11)

Diagnosis
This new species is close to *L. saxicola* (OBERTHÜR, 1877) from N. China (Inner Mongolia, Gansu, Hebei, Beijing) and Mongolia, but can be distinguished from the latter by the following combination of characters in males.
1) On the underside of the forewing, the ground colour inside of the discal line is pure brown, not reddish as in *saxicola*.
2) On the underside of the forewing, the pale grayish ring of subapical ocellus is fully developed and clearly defined, not obscure and ill defined as in *saxicola*.
3) The underside of the hindwing is brown and sparsely powdered with whitish scales, whereas in *saxicola* it is densely and obscurely striated with whitish.
4) On the underside of the hindwing, the discal and submarginal line are dark brown and apparent, not obsolete as in *saxicola*.
5) Male genitalia are different: the apical process of the valva is gradually protruded in width from valva, not abruptly protruded in width as in *saxicola*.
This new species can be distinguished from all other known species of *Loxerebia* simply by the absence of striation on the underside of the hindwing.

Description
Male. Wing-shape as in *L. saxicola*. Upperside of forewing: ground colour brown, male brand fully developed and striking to the naked eye as in *L. saxicola*; subapical ocellus bipupilled with bluish, with ring very obscure and narrow, only traceable in paler colour than in ground; no transverse lines or



22



23

Fig. 22: Male genitalia of *Callerebia hybrida* (Ji-long, SC. Tibet) consisting of genital capsule in lateral view with left valva removed.
Fig. 23: Male genitalia of *Loxerebia pieli* (holotype) consisting of genital capsule in lateral view with aedeagus removed.

markings; ciliae uniform dark brown. Upperside of hindwing: ground colour brown as on the forewing, entirely unmarked; ciliae brown as on forewing. Underside of forewing: ground colour uniform brown as on the upperside, powdered with whitish scales at apex and marginal area above vein 3; subapical ocellus as on the upperside but clearly ringed with pale brownish gray; discal line and submarginal line obscurely but apparently marked above vein 2, forming a loop around subapical ocellus; ciliae uniform brown as on upperside. Underside of hindwing: ground colour uniform brown as on forewing but more extensively powdered with sparse whitish scales; discal and submarginal lines dark brown, obscure but apparent; postdiscal area without spots; ciliae uniform brown as on forewing.
Female. Unknown at present.
Male genitalia: all structures generally as in *L. saxicola* except for the apex of the valva, which is more gradually protruded in *pieli* than in *saxicola*.

Type data
Holotype ♂: LF 26 mm, Ku-ling (Lu-shan, Jiujiang, Jiangxi province, China), September 13th 1934, leg. O. Piel. Paratypes: 8 ♂♂, same data as holotype.
This new species is named after the collector of type series.

Lethe unistigma Lee, 1985 (col. pl. X, figs. 12, 13)

Specimen examined: holotype ♂, LF 27 mm, Shi-zong (E. Yunnan), 1280 m, April 20th 1979, leg. Wang Yuan-Zhong.
The unique holotype had been dissected by Prof. Lee but the genitalia were lost.
After examining the external features, we suspect that *unistigma* is most probably a junior synonym of *Lethe latiaris perimele* Fruhstorfer, 1911 from S. Burma and Indo-China. It has a male brand on the upperside of the forewing present as well as *Lethe latiaris latiaris*, not absent as Lee described, and all markings on the underside of the hindwing are identical to those of *latiaris*. Another diagnostic feature of *unistigma* mentioned by Lee is that the hair tuft and brand on vein 3 of the hindwing upperside is more remote from the discocellular cell than in *latiaris*, however such a difference is not apparent and

constant. Because the holotype of *unistigma* has a smaller size and all ocelli on the hindwing underside somewhat smaller than in specimens of *Lethe latiaris latiaris* examined, we consider *unistigma* is probably a synonym of *Lethe latiaris perimele*. Because the male genital information is unknown, the formal revision needs a study of more material from the type locality of *unistigma* in future.
Judging from the external features, *Lethe konkakini* MONASTYRSKII & DEVYATKIN, 2000 from Vietnam should be a valid species, having nothing to do with *unistigma*, with forewing underside's discal line more oblique and hindwing underside's antediscal and discal lines remoter from each other. Another related taxon, *Lethe guansia* SUGIYAMA, 1999 from Guangxi province of China (we also found 1 ♂ in IZAS from Guangdong province), should be a good subspecies of *Lethe latiaris*, with the postdiscal area of the hindwing underside extensively reddish. The recently described *Lethe latiaris lishadii* HUANG, 2002 from Nujiang, NW. Yunnan is characterized by the discal line on the hindwing underside remoter from the antediscal line and closer to the tornal ocellus in space 1c as well as in *Lethe konkakini*, and the discocellular on the underside of the hindwing not apparently marked.

Lethe confusa fuhaica LEE, 1962 (col. pl. X, fig. 14)

Specimen examined: holotype ♀, LF 27 mm, Nan-nuo-shan, Meng-hai, S. Yunnan, 1400 m, March 3rd 1957, leg. PU FU-JI.
Currently placed as a junior synonym of *Lethe confusa confusa* AURIVILLIUS, 1898 (AOKI, YAMAGUCHI & UEMURA, 1982). According to TALBOT (1947), *Lethe confusa confusa* is widely distributed in the Himalayas, Assam, Burma, Thailand, Indo-China, Malaya, SE. Tibet and S. China including Hainan, with a few synonyms and seasonal forms.
As illustrated here, the unique holotype female is apparently a dry-season form of *Lethe confusa confusa*.

Neorina neosinica LEE, 1985 (col. pl. X, fig. 15)

Specimen examined: holotype ♀, LF 51 mm, Teng-chong, W. Yunnan, 1870 m, June 26th 1979.
Currently placed as a bona species of *Neorina*. Here the holotype is illustrated in colour. According to D'ABRERA (1983) (can he tell the future? cf. publication dates!) and MONASTYRSKII & DEVYATKIN (2000), this species is also known from Laos and Vietnam.

Nymphalinae

Euthalia neoterica LEE, 1985 (**syn. nov.** = *Euthalia staudingeri yunnana* OBERTHÜR, 1907)
(col. pl. X, fig. 16)

Specimens examined: holotype ♂, LF 38 mm, Bin-chuan, N. Yunnan, 2200 m, June 16th 1982, leg. DU ZHI-QIAN; paratype ♂, LF 36 mm, An-ning, N. Yunnan, 1800 m, June 4th 1980.
Both holotype and paratype had been dissected by Prof. LEE, but the male genitalia of the holotype was lost. The male genitalia of the paratype, which are kept in dry condition on a paper under the specimen, have been examined, they show no difference from those of *yunnana*. The photo of the male genitalia published in the original description should be taken from the holotype, it shows no difference from *yunnana* as well, with valva short and broad in shape and apex of valva broadly serrate. As illustrated here, the holotype of *neoterica* agrees with *yunnana* (photos of one syntype have been published in MORISHITA, 1992: 3–2) in having forewing upperside discal spots near costa in spaces 5 and 6 equal in length and hindwing upperside band margined with dull bluish coloring on outer side.
This taxon has been informally regarded as synonym of *yunnana* by a few modern students, but the formal revision is presented here.

Euthalia purchella (Lee, 1979) (col. pl. X, fig. 17)

Specimens examined: holotype ♀, LF 42 mm, Ti-yu, Cha-yu, SE. Tibet, 2070 m, July 26th 1973, leg. Huang Fu-Sheng; 1 ♂, Gongshan, Nujiang valley, NW. Yunnan.

Currently placed as a bona species of *Euthalia*. Apart from the unique holotype ♀, we found a single male taken from Nujiang valley, NW. Yunnan in the collection of IZAS, wrongly labeled as *Euthalia hebe*. This male specimen generally agrees with the topotypical males from Chayu, Tibet in external features and male genitalia, but has the forewing band somewhat less oblique. It has the forewing upperside's pale cell spot clearly marked as in topotypical males. Recently Yoshino (2002) described a new subspecies from Mekong valley, NW. Yunnan, which differs a little from *purchella* only in having the forewing upperside's pale cell spot absent in males.

Neptis lucida Lee, 1962 (**syn. nov.** = *Neptis namba namba* Tytler, 1915) (col. pl. X, fig. 18)

Specimen examined: holotype ♂, Xiao-nan-xi, He-kou, Yunnan, 200 m, June 10th 1956, leg. Huang Ke-Ren.

This species was based upon two males from S. Yunnan, the holotype male from He-kou and one paratype male from Xi-shuang-ban-na. The original figure in Lee's description (Lee, 1962: pl. iii: figs. 15, 16) was actually taken from the paratype male, which was not located in IZAS by us. However, We have found one male clearly labeled as holotype of *Neptis lucida* in the type collection of IZAS. The holotype is labeled in Chinese as "Yunnan-Hekou-Xiaonanxi-200 m, 1956-vi-10, Huang Ke-Ren" and in accordance with the type data in Lee's original description.

After an examination of the holotype, we conclude that *lucida* should be treated as a junior synonym of *Neptis namba namba* (TL: Naga Hills, Assam, India; also known from Sikkim, North Burma and N. Vietnam). In the light of Eliot's analysis of Eurasian *Neptis*, the reliable identification of subspecies of *Neptis namba* and *Neptis ananta* is mainly based upon the appearance of ciliae and the collecting data including locality and season. In the holotype of *lucida*, the ciliae are narrowly but clearly chequered with white as well as in *N. namba namba* (a series of specimens from SE. Tibet and Nujiang, NW. Yunnan have been examined). It is neither a senior synonym of *N. namba leechi* Eliot, 1969 (TL: Omei, Sichuan) as Murayama considered, nor a subspecies of *N. ananta* in NW. Yunnan as Eliot (1969) stated. In *N. namba leechi* (3 ♂♂ from Qingchengshan, Sichuan examined), the ciliae are more broadly and obscurely chequered than in the holotype of *lucida*, all orange bands on both sides of both wings are remarkably broader than in *lucida*. In the population of *N. ananta* from NW. Yunnan, according to Eliot's description (1969: 99), the ciliae are fuscous as well as in *Neptis ananta ananta*. It should be noted that He-kou is just on the border between Yunnan and Vietnam and its butterfly fauna is nearly indistinguishable from that of the extreme north of Vietnam, remarkably different from that of NW. Yunnan and W. Sichuan.

Lycaenidae

Sinia lanty pomena Huang, 1998
= *Scolitantides orion* Pallas: Lee, 1982: 149, No. **94** (175) part. Misidentification.

Specimen examined: 1 ♂, LF 15.5 mm, labeled as "Shi-quan-he, Ali, W. Tibet, 4280 m, July 31st 1976, leg. Huang Fu-Sheng"
This male cannot be distinguished from the type specimens of *Sinia lanty pomena* from SE. Tibet in external features and male genitalia. Its label is unbelievable and most probably wrong, because Ali is situated at the extreme west of Tibet and out of the distribution of the genus *Sinia* and the single specimen examined shows no difference from *pomena*.

Albulina lucifuga (FRUHSTORFER, 1915) (col. pl. XI, fig. 1)
= *Lycaeides christophi* STAUDINGER: LEE, 1982: 149, No. **93** (174). Misidentification.

Specimen examined: 1 ♀, LF 13.5 mm, Gu-jing, Cha-yu, SE Tibet, 3200 m, June 22nd 1973, leg. HUANG FU-SHENG.
This rare species was originally described as *Lycaena lucifera lucifuga* from Batang, the Sichuan-Xizang border. Subsequently it was transferred to the genus *Lycaeides* and *Plebejus* by later students. After an examination of the male genitalia the first author (HUANG, 2001: 169) regarded it as a species of *Albulina* in the light of BALINT & JOHNSON's work (1997). It has been also recorded from Ta-tsien-lu (Kang-ding).
The specimen from Chayu, SE. Tibet is illustrated here.

Polyommatus forresti BALINT, 1992
= *Polyommatus stoliczkana* FELDER: LEE, 1982: 150, No. **96** (181) part. Misidentification.
= *Polyommatus forresti zanganus* HUANG, 1998 **syn. nov.**

Specimens examined: 1 ♂, Bomi, SE. Tibet, June 11th 1973; 4 ♂♂, 2 ♀♀, Bomi, September 18th–20th 1973, leg. HUANG FU-SHENG. The type series of *zanganus* in the first author's collection was also examined.
The subspecies *zanganus* was originally described from Bomi and characterized by the upperside ground colour with a greenish shade whereas ssp. *forresti* has ground colour shiny blue. However the specimens collected from September of Bomi in IZAS are identical with ssp. *forresti*, thus the upperside ground colour is variable in seasons and *forresti* seems to have a long period of emergence or probably is double brooded. Because there is no difference in male genitalia between *forresti* and *zanganus*, we consider *zanganus* as either a junior synonym or an ecological form of *forresti*.

Maculinea arion inferna SIBATANI, SAIGUSA & HIROWATARI, 1994
= *Maculinea arionides* STAUDINGER: LEE, 1982: 150, No. **97** (182). Misidentification.

Specimens examined: 2 ♀♀, Jiang-da, E. Tibet, 3400 m, July 24th–29th 1976, leg. HUANG FU-SHENG.
The name *inferna* was proposed to replace *Lycaena arion tatsienluica* OBERTHÜR, 1910 (preoccupied name) from W. Sichuan. The two females previously reported by LEE as *arionides* from E. Tibet cannot be distinguished from the figures of *inferna* in literature. They have underside ground colour brownish and discal spots in spaces 2–5 not elongated.

Heliophorus moorei moorei (HEWITSON, 1865)
= *Ilerda androcles* DOUBLEDAY & HEWITSON: LEE, 1982: 151, No. **99** (188), part. Misidentification.

Specimen examined: 1 ♂, Le-bu, Cuo-na, S. Tibet, 2600 m, August 7th 1974, leg. HUANG FU-SHENG.
This is the first reliable record of this species for the Chinese fauna. All the previously records of *moorei* in China are misidentifications of *saphir* or *androcles*.
Its upperside ground colour is metallic blue with a deep purplish tint as in *Heliophorus gloria* HUANG, 1999, which is restricted to the Namjagbarwa area, SE. Tibet. However an examination of its male genitalia proves it to be the true *moorei*, its valva bears a crest at the costa. It should be noted that Cuo-na is situated very near the Tibet-Bhutan border, to the east of Sikkim, the type locality of *moorei*.

Heliophorus moorei coruscans (MOORE, 1882)
= *Ilerda androcles* DOUBLEDAY & HEWITSON: LEE, 1982: 151, No. **99** (188), part. Misidentification.

Specimen examined: 1 ♂, Ji-long, SC. Tibet, 2800 m, July 20th 1975.

We failed to locate most of the specimens mentioned by LEE as *androcles* from Zhang-mu and Ji-long, SC. Tibet, which had been probably lost, but only found one male taken from the Academia Sinica Expedition to Tibet during 1960-1976 in IZAS.
The examination of its male genitalia proves it to be *moorei*. It has the upperside ground colour less purplish than in ssp. *moorei*, thus should be identified as ssp. *coruscans*. The population from C. Nepal should be identified as ssp. *coruscans* too, with upperside ground colour less purplish. In geography Ji-long is situated near the Tibet-Nepal border and to the west of Sikkim.

Heliophorus androcles trilunulata HUANG, 1999
= *Ilerda androcles* DOUBLEDAY & HEWITSON: LEE, 1982: 151, No. **99** (188), part. Misidentification.

Specimens examined: 1 ♂, Dong-chong, Cha-yu, SE. Tibet, 1800 m, July 14th 1973, leg. HUANG FU-SHENG.
The examination of its male genitalia proves it to be *androcles*.

Ahlbergia ***zhujianhuai*** **spec. nov.** (figs. 24-26; col. pl. XI, figs. 2, 3)

Diagnosis
This new species belongs to the *pluto*-group (sensu JOHNSON, 1992), but can be easily distinguished from all the previously known species of this group by the following combination of characters.
1) The male scent brand on the upperside of the forewing is remarkably longer than all known species of the group.
2) On the underside of the hindwing, the outer margin of the basal disc is more clearly defined, not apparently merged into the basal disc as in all other species, without whitish scales near the costa which are well marked in *A. aleucopuncta* JOHNSON, 1992 and *A. distincta* HUANG, 2003.
3) The underside ground colour is more uniform red-brown than in *A. pluto* (LEECH, 1893) and *A. clarofacia* JOHNSON, 1992, much paler than in *A. distincta*, neither yellow brown as in *A. unicolora* JOHNSON, 1992 and *A. aleucopuncta* nor gray brown as in *A. caerulea* JOHNSON, 1992.
4) On the underside of the hindwing, the postdiscal marks are dark red-brown and more clearly marked than in *A. aleucopuncta* and *A. unicolora*, the submarginal area is not outlined with whitish from the anal margin to the costa as in *A. pictila* JOHNSON, 1992.
5) The female upperside ground colour is dark brown, not extensively clad with bluish scales as in *A. pluto* and *A. caerulea*.
6) In female genitalia, the ductus bursae is at least 1.5 times as long as that of all other species except *A. pictila* (female unknown) and *A. distincta* (female unknown) and strongly curved in lateral view.
7) In female genitalia, the distal edges of the lamella postvaginalis ventrum have slight convolutions, which are not found in *A. aleucopuncta, A. unicolora* and *A. caerulea*.
8) In male genitalia, the caudal extension of the valvae is stronger at the basal half than in most other species except *A. caerulea* (male unknown), and does not evenly taper as in *A. pictila*, the aedeagus is longer than in other species.

Description
Male. LF 16 mm. Upperside: ground colour brown, darker at outer ⅓ of wings, without any trace of bluish scales at bases; male scent brand located at the end of radius and base of vein 6 on forewing, grayer than ground colour, very long in shape; margins of both wings moderately crenate, with darker and longer ciliae at vein-ends and with paler and shorter ciliae between veins; both wings entirely unmarked, without any trace of marginal lines; anal lobe of hindwing moderately developed, suffused with warm brown. Underside: forewing ground colour suffused red-brown above vein 2, smooth gray in spaces 1a and 1b, with postdiscal line from costa to vein 2, nearly in a straight line but shifted-out in space 3, deeper red-brown in colour, not associated with whitish scales on outer side; submarginal and marginal areas entirely unmarked but a little deeper in ground colour; hindwing ground colour similar to forewing but much deeper, darker in basal disc and submarginal area than in postdiscal

area; basal disc with two very obscure brownish subbasal slashes, one in discocellular cell, another in costal area, and with a very faint brownish discocellular bar; discal line (margin of basal disc) contiguous and clearly defined, reddish brown in colour and remarkably darker than ground colour of basal disc and postdiscal area, distally suffused with a few white scales at anal area, but not associated with white scales above vein 2; postdiscal area with a series of somewhat crescent dark brown marks as a jagged arc across the wing, such marks continuous but not conjoined, most of which associated with a few whitish scales on inner side; marginal and submarginal areas deeper red-brown, separated from postdiscal marks by a narrow line in paler ground colour, very sparsely powdered with a few whitish scales near termen, without extensive whitish or bluish suffusion; ciliae longer and darker at vein-ends but shorter and paler between veins.
Female. LF 16.5 mm. Wing-shape similar to male, but forewing a little broader with termen shorter and dorsum longer, and hindwing termen more crenate and hindwing anal lobe better developed. Upperside: ground colour as in male, but subbasal area of both wings very sparsely powdered with a few bluish scales, otherwise as in male. Underside: generally all markings and coloring similar to those of male, but forewing postdiscal line clearly margined with whitish scales on outer side, hindwing discal line (margin of basal disc) clearly margined with whitish scales on outer side, and hindwing postdiscal marks not margined with whitish on inner side but more triangular in shape and pointed inwards, otherwise as in male.
Male genitalia. General structures as in other species of the *pluto*-group, but valvae a little longer with the basal half of the caudal extension a little broader and stronger in ventral view, aedeagus longer, cornuti irregular in shape and bearing obtuse teeth.
Female genitalia. Distal expansion of lamellae from plane of ductus bursae lateral margin exceeding maximal width of ductus bursae as in other species of the *pluto*-group, genital plate wider in ventral view than in *A. pluto cyanus* JOHNSON, 1992, distal edges of lamella postvaginalis ventrum with slight convolutions as in *A. pluto cyanus*, signum nearly twice as big as in *A. pluto cyanus*.

Type data
Holotype ♂: LF 16 mm, Mi-yi, Pan-zhi-hua, S. Sichuan, 2000 m, February 25th 1982, leg. ZHU JIAN-HUA.
Paratype: 1 ♀, LF 16.5 mm, Mi-yi, 2000 m, February 27th 1982, leg. ZHU JIAN-HUA.

This species is named after Mr. ZHU JIAN-HUA, who collected the type series of this interesting species.

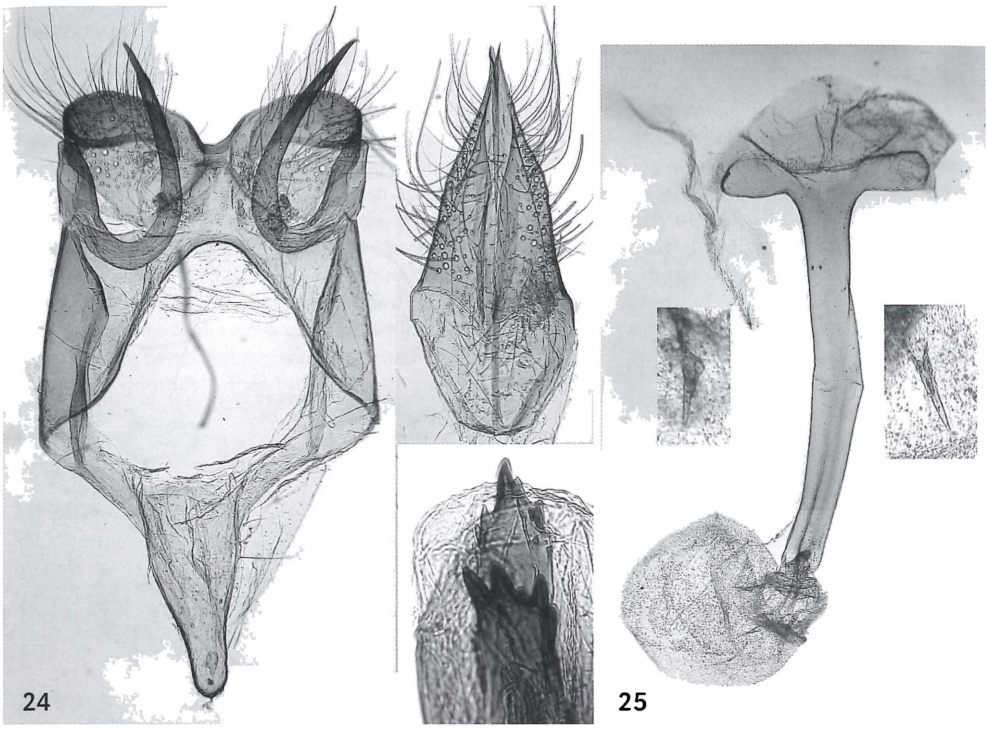
Hesperiidae

Celaenorrhinus inexspectus DEVYATKIN, 2000 (figs. 27, 28; col. pl. XI, fig. 5)

Specimen examined: 1 ♂, LF 18.5 mm, Da-yao-shan, Jin-xiu, Guangxi province, China, 450 m, June 30th 2000, leg. LI WEN-ZHU.
This species was originally described from N. Vietnam and is recorded here for the Chinese fauna for the first time.
The unique specimen from Guangxi agrees exactly with the holotype of *inexspectus* in all details of external features. In male genitalia it agrees with DEVYATKIN's description and figures in nearly all details except for the apex of the cuiller (such a difference may not run out of individual variation): uncus with branches somewhat convergent, gnathos enlarged and rounded at end, manica bifurcate, massive and smooth, with proximal side trilobate, aedeagus short and very stout, with distal end densely covered with microtrichia, and with a single cornutus.

Celaenorrhinus ***yaojiani*** **spec. nov.** (figs. 27, 29; col. pl. XI, fig. 4)

Diagnosis
This new species belongs to the *Celaenorrhinus maculosa-oscula* group (DEVYATKIN, 2000: 210) and is close to *C. kuznetsovi* DEVYATKIN, 2000 from C. Vietnam in male genitalia, but can be distinguished from the latter by the following combination of characters in males.



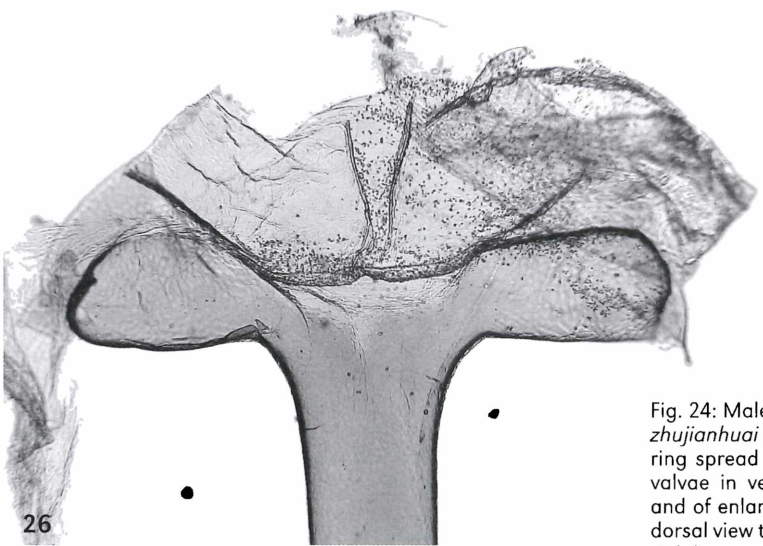
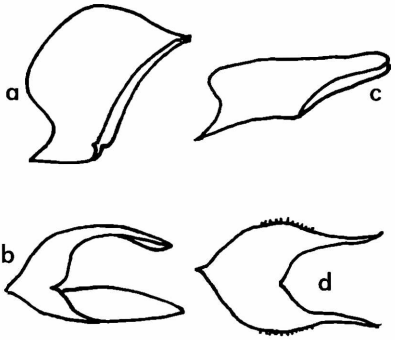


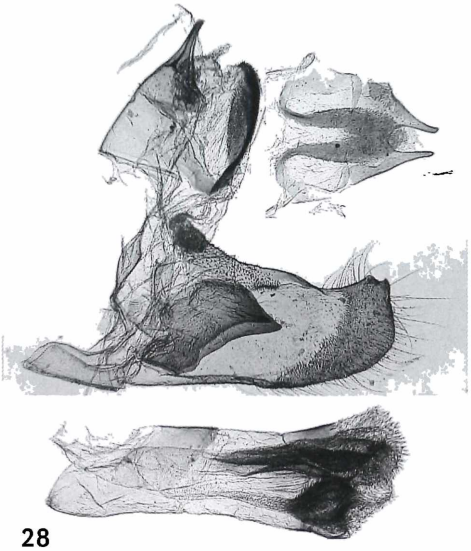
Fig. 24: Male genitalia of *Ahlbergia zhujianhuai* (holotype) consisting of ring spread and flattened (left), of valvae in ventral view (top right), and of enlarged tip of aedeagus in dorsal view to show cornuti (bottom right).

Fig. 25: Female genitalia of *Ahlbergia zhujianhuai* (paratype) consisting of genital plates (lamella antevaginalis and lamella postvaginalis), ductus bursae and corpus bursae flattened (center), and of enlarged signa (left and right).

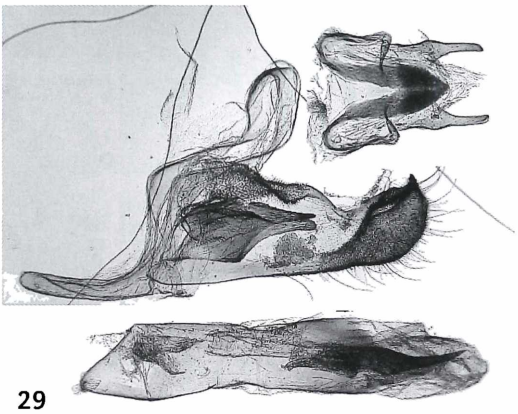
Fig. 26: Genital plates (lamella antevaginalis and lamella postvaginalis) of *Ahlbergia zhujianhuai* (paratype).

Fig. 27: Manica of *Celaenorrhinus* species: a – lateral view of *C. inexspectus* ssp.; b – ventral view of *C. inexspectus* ssp.; c lateral view of *C. yaojiani*; d – ventral view of *C. yaojiani*.





28



29

Fig. 28: Male genitalia of *Celaenorrhinus inexspectus* (Guangxi) consisting of genital capsule in lateral view with aedeagus and left valva removed (top left), of uncus and tegumen in ventral view (top right), and of aedeagus in lateral view (bottom).
Fig. 29: Male genitalia of *Celaenorrhinus yaojiani* (holotype) consisting of ring, manica and right valva in lateral view (center), of uncus and tegumen in ventral view (top right), and of aedeagus in lateral view (bottom).

1) On the upperside of the forewing, there is no trace of a basal yellow striping, which is strongly developed in *kuznetsovi*.
2) The forewing discal spot in space 2 is much closer to the cell spot than in *kuznetsovi*, the cell spot and spot in 2 are directed to dorsum before tornus whereas in *kuznetsovi* they are directed to termen above tornus.
3) On the underside of both wings, especially on the forewing the basal yellow striping is much less developed than in *kuznetsovi*.
4) In male genitalia, gnathos is remarkably broader in ventral view than in *kuznetsovi*, cuiller has apex single pointed, not double projected as in *kuznetsovi*, manica seems to be broader in lateral view with bifurcated portion thinner in lateral view than in *kuznetsovi*, aedeagus has no ventro-distal projection.
This new species can be easily distinguished from *C. oscula* EVANS, 1949 by upperside basal yellow striping obsolete, forewing discal spot in space 2 much closer to cell spot and in male genitalia the apical process of cuiller remarkably shorter.
This new species can be easily distinguished from *C. maculosa* (FELDER & FELDER, [1867]), *C. maculosa taiwanus* MATSUMURA, 1919, *C. inexspectus* DEVYATKIN, 2000, *C. incestus* DEVYATKIN, 2000 and *C. major* HSU, 1990 by the different male genital structures, especially in the shape of manica and apex of cuiller.

Description
Antennae: shaft dark brown on both sides; club dark brown on both sides but broadly yellowish-ringed at base, curved after the thickest part of apiculus; nudum blackish and 13 in number. Palpi pale yellowish, with 2nd segment nearly erected. Upperside: forewing ground colour dark brown, without any trace of basal yellow striping; all whitish spots similar to those of *C. maculosa*, but discocellular spot more rectangular in shape; hindwing ground colour dark brown, with basal yellow striping weakly marked, nearly obsolete, all yellowish spots similar to those of *C. inexspectus*. Underside: forewing with all whitish spots as on upperside, basal yellow striping weakly developed as in *C. incestus*; hindwing with all yellow spots similar to those of *C. kuznetsovi*, but with basal yellow striping less developed. Ciliae partly destroyed in unique holotype, appeared to be uniform dark brown-gray on both sides of forewing, somewhat chequered on both sides of hindwing.
Male genitalia: tegumen broad, with rounded shoulders as in *C. kuznetsovi* and *C. oscula*; uncus bifurcate, with two branches widely opened and parallel in dorsal or ventral view as in *C. kuznetsovi* and *C. oscula*; gnathos rather broad in ventral view as well as in *C. inexspectus*; clasp similar to that of *C. kuznetsovi* but with apex of cuiller single projected; manica bifurcate, serrate at dorsal margins of branches, similar to that of *C. kuznetsovi* in shape but more massive with two branches more slender; aedeagus rather long, with a very long cornutus.

Type data
Holotype ♂: LF 19.5 mm, Bei-dou, Na-po, S. Guangxi province, China, 550 m, June 22nd 2000, leg. YAO JIAN.

This species is named after Mr. YAO JIAN, IZAS, who collected the unique holotype of this new species.

Sovia subflava (LEECH, 1894) (fig. 30; col. pl. XI, figs. 8, 9)

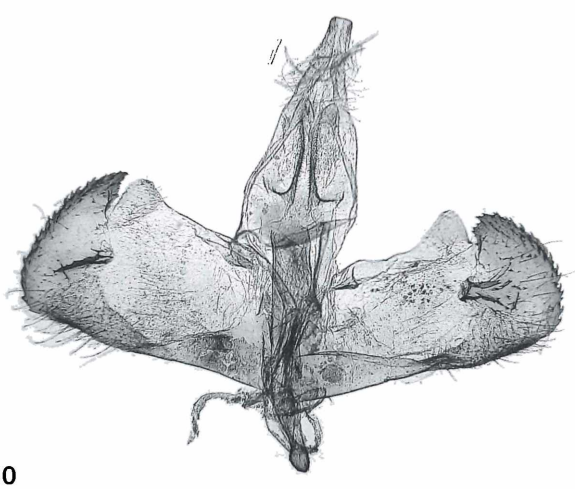
Specimen examined: 1 ♂, LF: 13 mm, Pan-tian-ge, Weixi, NW. Yunnan, 2920 m, July 21st 1981, leg. FANG SU-BAI.
This species was previously known only from Wa-ssu-kow (Wasigou), W. Sichuan and is here recorded for the first time from NW. Yunnan. This single male from Yunnan does not differ from the typical population of Sichuan in external features. In male genitalia it also agrees with EVANS' figure in general.
Palpi porrect, pale yellowish gray in colour. Antennae: club arcuate about its thickest part, abruptly marked from shaft in width, black above and yellow below; shaft black above and below; nudum reddish (broken in specimen examined). (Ciliae destroyed in specimen examined.) Wing markings and male genitalia as illustrated.

Sovia grahami grahami EVANS, 1926
= *Sovia lucasii* MABILLE: LEE, 1982: 154, No. **118** (211). Misidentification.

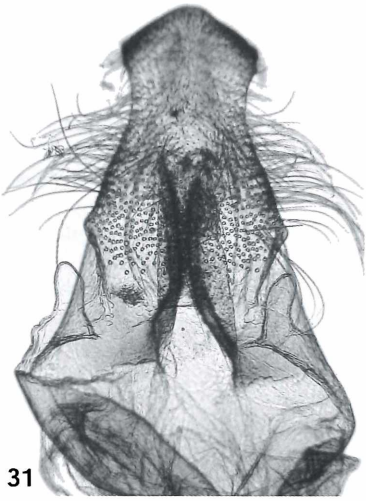
Specimen examined: 1 ♂, LF 16 mm, Le-bu, Cuo-na, S. Tibet, 2600 m, August 7th 1974, leg. HUANG FU-SHENG.
The specimen and its male genitalia have been illustrated in the first author's report on butterflies from Nujiang valley, NW. Yunnan (see p. 19 of this vol.).

*Sovia **fangi*** **spec. nov.** (figs. 32, 33; col. pl. XI, figs. 6, 7)

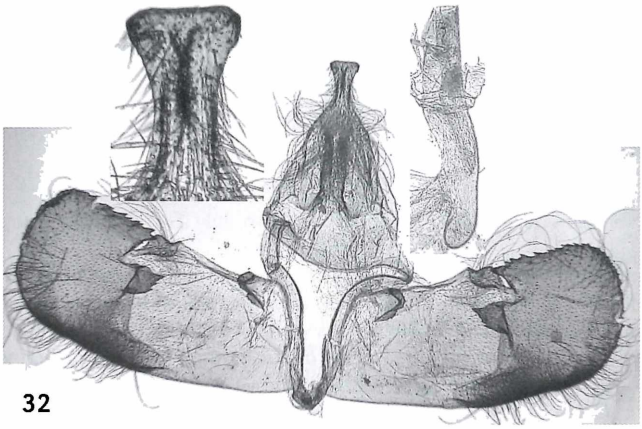
Diagnosis
This new species closely resembles *Sovia grahami miliaohuae* HUANG, 2003 (fig. 31) from Gaoligongshan Mts., NW. Yunnan in external features, but can be distinguished from the latter as well as from *Sovia grahami grahami* by the following combination of characters in males.
1) The forewing discal spots in space 2 and 3 are more widely separated than in *Sovia grahami*.



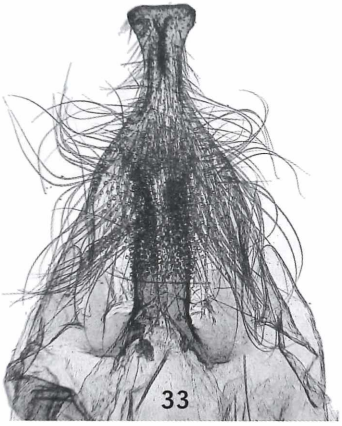
30



31



32

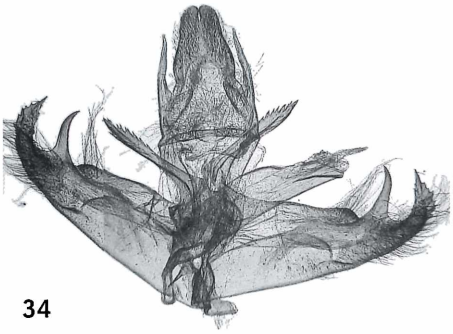


33

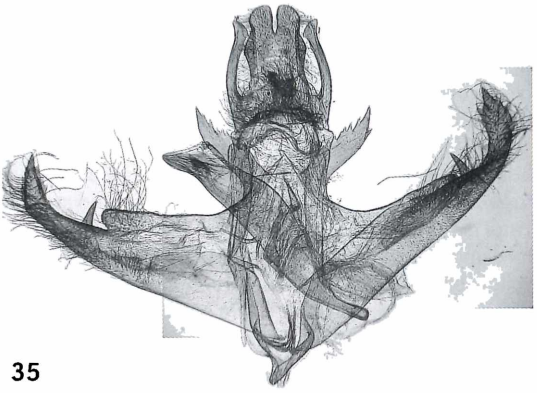
Fig. 30: Male genitalia of *Sovia subflava* (Wei-xi, Yunnan) consisting of genital capsule spread with tegumen and uncus in ventral view and both clasps in inner lateral view.
Fig. 31: Tegumen and uncus in ventral view of *Sovia grahami miliaohuae* (Yao-jia-ping, Gao-li-gong-shan, Yunnan).
Fig. 32: Male genitalia of *Sovia fangi* (holotype) consisting of genital capsule spread with tegumen and uncus in ventral view and both clasps in inner lateral view (bottom), of aedeagus in lateral view (top right), and of enlarged tip of uncus in ventral view (top left).
Fig. 33: Tegumen and uncus in ventral view of *Sovia fangi* (holotype).

2) Male genitalia are different: uncus is much narrower in dorsal view, less than half the width of uncus of *Sovia grahami*, and is flat at tip, not pointed as in *Sovia grahami*; central process on inner side of cuiller is much wider and shorter than in *Sovia grahami*.

Description
Eyes smooth and same-sized as in *Sovia grahami miliaohuae*. Frons as in *Sovia grahami miliaohuae*. (Palpi missing from the holotype male.) Antennae: club black above and yellowish gray below, arcuate beyond its thickest part; shaft black above and chequered narrowly and obscurely with whitish below; nudum mostly reddish and tipped with blackish, not all dark brown as in *miliaohuae*, 12 in number. Thorax and abdomen clad with dark yellowish and blackish hairs above and paler grayish hairs below

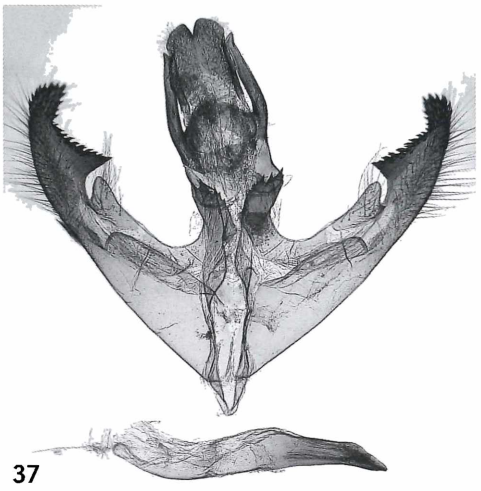


34



35

36



37

Fig. 34: Male genitalia of *Halpe hauxwelli* (Yunnan) consisting of genital capsule spread with tegumen and uncus in ventral view and both clasps in inner lateral view.
Fig. 35: Male genitalia of *Halpe gamma* (Sichuan) consisting of genital capsule spread with tegumen and uncus in ventral view and both clasps in inner lateral view.
Fig. 36: Male genitalia of *Halpe dizangpusa* (Hainan) consisting of genital capsule spread with tegumen and uncus in ventral view and both clasps in inner lateral view.
Fig. 37: Male genitalia of *Halpe dizangpusa* (Guangxi) consisting of genital capsule spread with tegumen and uncus in ventral view, both clasps in inner lateral view (top), and of aedeagus in lateral view (bottom).

as in *miliaohuae*. All legs nearly as in *miliaohuae*, only a little shorter in hind femora and hind tarsi. LF: 16.5 mm. Ciliae uniform dark brown on both sides of both wings. The erect hairs on anal area of hindwing upperside well developed as in *miliaohuae*. Wing markings and male genitalia as illustrated.

Type data
Holotype ♂: LF 16.5 mm, Pan-tian-ge, Weixi, N.W. Yunnan, 2920 m, July 18th 1981, leg. Fang Su-Bai.

This new species is named after Mr. Fang Su-Bai, the collector of unique holotype.

Halpe gamma Evans, 1937 (fig. 35; col. pl. XI, fig. 13)
= *Halpe homolea nephele*: Koiwaya, 1989: 30, pl. 22, figs. 131, 132, below right. Misidentification.

Specimens examined: 2 ♂♂, LF 17.5 mm. Qing-cheng-shan, Guan-xian, Sichuan, 700–1600 m, July 17th 1963, leg. Zhang Xue-Zhong.

This species was originally described from Taiwan and also recorded from Fujian and Sichuan. We found 2 ♂♂ of this rare species in IZAS. It is closely allied to *Halpe hauxwelli* EVANS, 1937, but can be distinguished from the latter by the forewing discal spots in spaces 2 and 3 less overlapping, forewing cell spots less conjoined, costal and subapical areas of forewing and entire hindwing on underside powdered with more yellowish scales, discal spots on underside of hindwing much more developed in spaces 5 and 6 and clearly defined on inner side, not inwardly undefined and merged into the subbasal suffusion as in *hauxwelli*, uncus more deeply excavated at tip, gnathos expanding at ends, not tapering as in *hauxwelli*, footstalk broader and shorter, and dorsal branch of cuiller much shorter.
Palpi nearly erect, yellow in colour. Antennae: club plain blackish brown above, not whitish ringed before apiculus, yellow below, bent beyond its thickest part; shaft blackish brown above, chequered with yellow below; nudum reddish, 15 in number. Thorax and abdomen clad with pale yellowish hairs below. All legs brown-yellow. Ciliae mostly whitish and darkened at vein-ends on both sides of forewing, uniform whitish on both sides of hindwing. Wing markings and male genitalia as illustrated.

Halpe hauxwelli EVANS, 1937 (fig. 34; col. pl. XI, fig. 14)

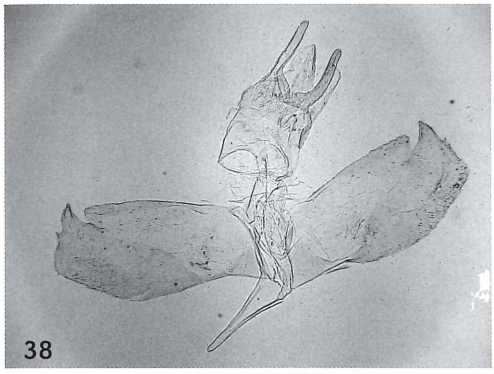
Specimen examined: 1 ♂, LF: 15.5 mm, Xiao-meng-yang, Xi-shuang-ban-na, S. Yunnan, 850 m, July 5th 1957, leg. WANG SHU-YONG.
This species was originally described from Thoungyin valley, Assam, also known from Burma and Thailand. Here it is recorded for the first time for the Chinese fauna.
Antennae missing from the unique specimen. Palpi nearly erect, pale yellowish, more whitish than in *Halpe gamma*. Ciliae mostly whitish on upperside of both wings, appearing somewhat darkened at vein-ends on forewing upperside, grayer on underside and appearing darkened at vein-ends on forewing underside. All hairs on underside of thorax and abdomen pale yellowish gray, more whitish than in *Halpe gamma*. All legs brown-yellow. Wing markings and male genitalia as illustrated.

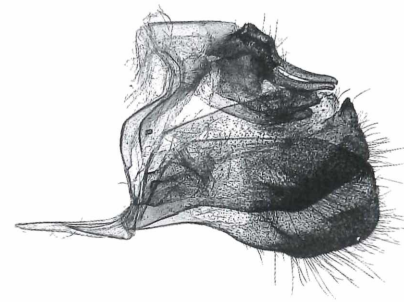
Halpe dizangpusa HUANG, 2002 (figs. 36, 37; col. pl. XI, figs. 10–12)

Specimens examined: 1 ♂, LF: 17 mm, Jian-feng-ling, Hainan Island, July 10th 1983, leg. GU MAO-BIN; 1 ♂, LF: 15 mm, Jian-feng-ling, Hainan Island, July 10th 1983, leg. GU MAO-BIN; 1 ♂, LF: 16.5 mm, Guangxi, no detailed collecting data; 1 ♂, LF: 16 mm, Long-qi-shan, Jiangle, Fujian, May 15th 1991, leg. LIU HONG; 1 ♂, LF: 16.5 mm, Yu-jia-ping, Long-qi-shan, Jiangle, Fujian, 800 m, May 16th 1991, leg. LI HONG-XING; 1 ♂, LF: 14.5 mm, Wu-zhi-shan, Hainan Island, August 21st 1964, leg. LEE CHUAN-LONG.
This species was originally described from Anhui province. The examination of specimens in IZAS indicates that the species is widely distributed in nearly entire SE. China including Hainan Island. There is no constant difference in male genitalia between these specimens examined and there is no constant geographical variation found. The individual variation is as follows: length of forewing varies from 14.5 to 17 mm; on upperside of forewing, the discal spots in spaces 2 and 3 can be a little overlapping or not overlapping at all, variable in size; apical spots on upperside of forewing can be two or three in number; ciliae on both sides of both wings can be chequered with whitish and blackish or nearly all white and only appearing darkened narrowly at vein-ends; discal and postdiscal pale markings on underside of hindwing can be extensive or very narrow; nudum 14 or 15 in number. Here we illustrate some extreme forms of this species to show the individual variation.

Yanoancistroides fujiananus **comb. nov.** (figs. 39–42; col. pl. XI, figs. 15, 17)
(= *Astictopterus fujiananus* CHOU & HUANG, 1994. TL: Wuyishan, Fujian)

Specimen examined: 1 ♂, Guadun, Wuyishan, Cong-an, Fujian, 840–1210 m, June 21st 1960, leg. ZHANG YI-RAN.
In the collection of IZAS, we found one male specimen of this rare species taken from the type locality, the Wuyi Mts. of Fujian. A careful examination of external features and male genitalia proves this





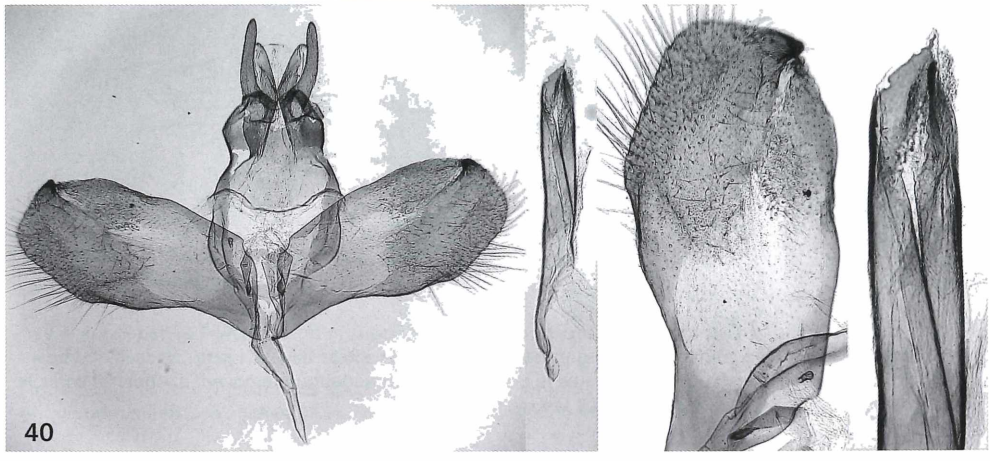


Fig. 38: Male genitalia of *Yanoancistroides sinica* (holotype) consisting of genital capsule spread with tegumen and uncus in dorsal view and both clasps in outer lateral view.
Fig. 39: Male genitalia of *Yanoancistroides fujiananus* (Wu-yi-shan, Fujian) consisting of genital capsule in lateral view with aedeagus removed.
Fig. 40: Male genitalia of *Yanoancistroides fujiananus* (Wu-yi-shan, Fujian) consisting of genital capsule spread with tegumen and uncus in dorsal view and both clasps in outer lateral view (left), of aedeagus in lateral view (left center), of enlarged right valva in lateral view (right center), and of enlarged tip of aedeagus in lateral view (right).

species to be a member of *Yanoancistroides* HUANG, 1999 (= *Yania* HUANG, 1997, preoccupied name), not *Astictopterus*.
Generally the original description of the genus *Yanoancistroides* is applicable to *Y. fujiananus* in all details. A description of male of *fujiananus* is as follows (compared with *sinica*).

Description of male
Male. Eyes smooth and blackish brown when dried as in *sinica*. Frons slightly more than twice as wide as eye, densely clad with fuliginous scales as in *sinica*, with two transverse hair-tufts, the anterior one mostly blackish and the posterior one mostly yellowish.
Labial palpus. 2nd segment erect, 3rd segment in continuation with 2nd segment; 2nd segment densely clad with fuliginous brown and yellow scales, mixed with a few fuliginous long scales on both outer lateral and under sides; 3rd segment completely clad with fuliginous scales. (This is the first description of palpus for this genus because the palpi of holotype of *Y. sinica* are entirely missing.)
Antennae. Nearly 10 mm long, slightly longer than half the length of forewing; club weakly and gradually marked, segments becoming broader on apical ⅓ of antennae with the thickest portion only twice

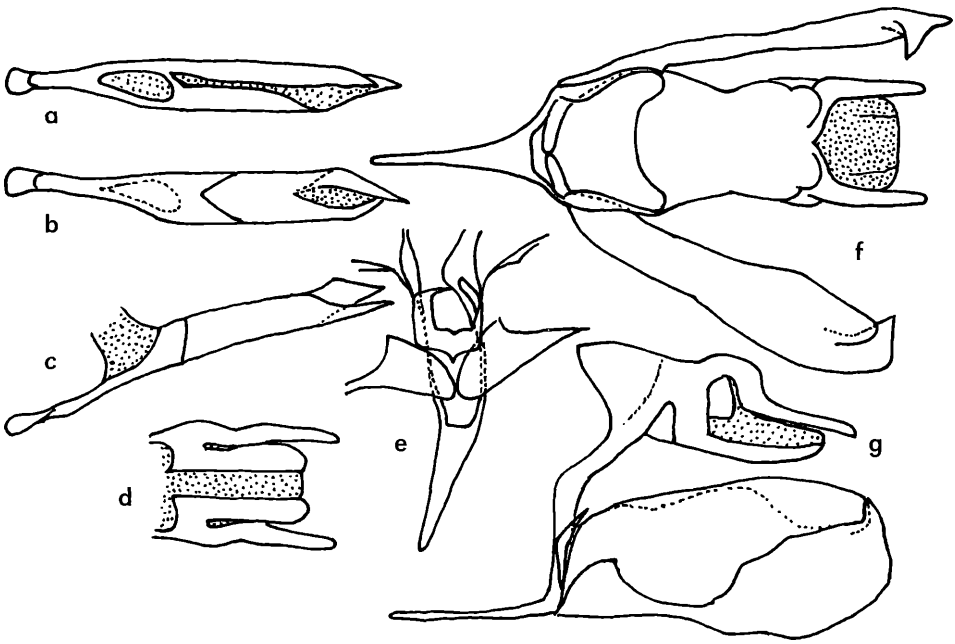


Fig. 41: Male genitalia of *Yanoancistroides fujiananus*: a – aedeagus in dorsal view; b – aedeagus in ventral view; c – aedeagus in lateral view; d – gnathos and uncus in ventral view; e – justa, saccus and bases of valvae in posterior view; f – genital capsule in dorsal view with aedeagus removed; g – genital capsule in lateral view with left valva and aedeagus removed.

as thick as shaft; club fuliginous brown above but yellow below; shaft fuliginous brown above as in club, more with yellow scales irregularly below; number of nudum segments in the apiculus unknown as the apiculus is broken at tip, the remaining nudum blackish and 9 in number and club not constricted before apiculus.

Thorax. Mostly clad with fuliginous brown scales above and more with yellow hairs below as well as in *sinica*.

Abdomen. As in *sinica*, thin and weak, slightly longer than dorsum of hindwing, densely clad with dark brown scales above, but with longer yellow and brown scales beneath mixed with scattered yellow hairs.

Legs. (The following description is applicable to both *fujiananus* and *sinica*, which are only different from each other in the length and thickness of legs – fig. 42.) Densely covered with dark brown scales above, yellowish scales beneath; fore and mid femora not apparently clad with hairs, hind femora densely clad with long yellowish hairs beneath; tibial epiphysis reddish, wicker-leaf-shaped and somewhat distorted, nearly ⅓ times as wide as fore tibiae, originating from the basal ⅔ of fore tibiae and surrounded with long yellow and black scales; all tibiae without spines or hair-brushes, only hind tibiae more clad with long yellow hairs; mid tibiae with terminal pair of spurs which are densely clad with brown scales and blunt at tip, the inner one (just on the inside of tibiae) slightly longer than the outer; hind tibiae with two pairs of spurs, the upper pair somewhat shorter than the lower; all tarsi clad with three rows of reddish spines below; claws as in the genus *Astictopterus*. A comparison of length and thickness of legs between *fujiananus* and *sinica* is as follows: all tarsi remarkably thicker and longer in *fujiananus* than in *sincia*; hind femora and hind tibiae remarkably longer in *fujiananus* than in *sinica*; fore femora, fore tibiae, mid femora and mid tibiae only slightly longer in *fujiananus* than in *sinica*.

Fig. 42: Legs of *Yanoancistroides* species: foreleg of *fujiananus* (left 1st), foreleg of *sinica* (left 2nd), midleg of *fujiananus* (left 3rd), midleg of *sinica* (left 4th), hindleg of *fujiananus* (left 5th),hindleg of *sinica* (left 6th).

Wing markings. Ciliae of both wings on both sides brown, a little paler than ground colour of upperside of wings and also paler than in *sinica* (col. pl. XI, figs. 16, 18). Upperside: both wings unmarked, uniform dark brown in colour, a little paler than in *sinica*; without secondary sexual characters; veins not marked in colour. Underside: forewing ground colour brown, paler than in *sinica*, powdered with yellow scales just outside of discocellular and also in postdiscal area above vein 3, veins 6, 7, 8 and 9 marked with yellow scales at basal half (whereas in *sinica* only the apical area and costal area sparsely powdered with yellow scales); hindwing ground colour paler brown than in *sinica*, extensively powdered with yellow scales, more densely in spaces 1c–5 and on discocellular, marked with three fuliginous antediscal spots in cell and space 7 (two at end of discocellular cell and one in space 7), and with fuliginous discal spots in spaces 2–6 (very large in spaces 4 and 5) (whereas hindwing of *sinica* almost unmarked).

Wing shape and wing venation. LF 19.5 mm. Forewing as in *sinica*: dorsum quite longer than termen; vein 2 arising before the origin of vein 11 and remarkably closer to wing base than to vein 3 at its origin; vein 5 slightly closer to vein 4 than to vein 6 at its origin; vein 11 originating midway between veins 10 and 12. Hindwing as in *sinica*, costa apparently longer than dorsum and termen, discocellular cell slightly shorter than half the length of hindwing; vein 7 arising beyond the origin of vein 2 and before the origin of vein 3; vein 5 well defined, not oblique and very slightly closer to vein 4 than to vein 6 at origin.

Male genitalia. Uncus as in *sinica* (fig. 38), remarkably longer than tegumen, deeply bifid in dorsal view, its two arms running parallel with each other. Gnathos as in *sinica*, significantly longer than tegumen, nearly as long as uncus arms. Saccus as in *sinica*, long, thin and sharply pointed at tip in both dorsal and lateral view. Clasp very simple in structures as in *sinica*, nearly oval in shape at

outer ⅔, narrower at inner ⅓, with distal margin smooth, not bearing small tooth as in *sinica*; cuiller and harpe contacted completely, not widely separated at apex as in *sinica*. Juxta similar to that of *sinica*, but more robust. Aedeagus simple in structures as in *sinica*, nearly as long as clasp, without cornutus, its suprazonal portion nearly as long as subzonal portion.

Remarks

It should be noted that there are some editorial mistakes in the original publication of *Yania sinica* (HUANG, 1997). The manuscript was submitted in paper form and inputted into computer by the editor, thus some mistakes appeared. A corrigenda is as follows: 1) alter "termin" to "termen" throughout the paper; 2) delete "Vein 5 slightly closer to wing base than to vein 3 at its origin." in the second reciprocal line on page 148; 3) alter "*Astictopterus*" to "*Ancistroides*" in the sixth line on page 151; 4) alter "Thus" to "For example" in the 15th reciprocal line on page 151; 5) alter "*Astictopterus* group" to "*Astictopterus* subgroup" in the 13th reciprocal line on page 152. There is also a mistake in the published figure of the wing-venation (HUANG, 1997: 150, fig. 5): the published figure was a rough one in which the details of origins of veins 4, 5 and 6 are not shown, when revising his manuscript for publication, the first author re-submitted a new figure in which the details of veins 4, 5 and 6 are shown, but the editor did not notice such a change and used the old one for publication. Here the first author provides a photo to show the origins of veins 4, 5 and 6 on the forewing of the holotype of *sinica*.

The examination of the labial palpus of *Yanoancistroides fujiananus* confirms the first author's opinion on the phylogeny of the *Ancistroides* group: *Yanoancistroides* is much closer to the genera *Iambrix* and *Idmon* than to other genera in the group. Besides the resemblance in male genital structures, *Yanoancistroides* also shares the erected 2nd segment and the thin and long 3rd segment of the palpus with the genera *Iambrix* and *Idmon*.

Acknowledgements

We wish to express our hearty thanks to the staff of the entomological collection of IZAS for their generous help they offered us during the preparation of this work.

Our thanks are also due to Dr. YOSHINOBU UEMURA, the Toyosato Museum of Entomology, Japan, for the loan of material in this work.

Finally the first author has to mention that the present work could not be realised without the help of Mr. YUAN FENG, Beijing Natural History Museum, who accompanied the first author during his visit in Beijing.

References

AOKI, T. & Y. UEMURA (1984): Studies on the genus *Ypthima* in Thailand. – Tokurana (6/7): 71–103.

BALINT, Z. (1992): New taxa of the *Polyommatus* section (sensu ELIOT, 1973) from Central Asia. Studies on Central Palaearctic Lycaenids ii. – Linneana Belgica **13**: 423–445.

BALINT, Z. & K. JOHNSON (1997): Reformation of the *Polyommatus* section with a taxonomic and biogeographic overview. – Neue ent. Nachr. **40**: 4–68.

BRIDGES, C. A. (1988): Catalogue of Lycaenidae and Riodinidae.

BRIDGES, C. A. (1988): Catalogue of Hesperiidae.

CANTLIE, K. & T. NORMAN (1959): Notes on the butterfly genus *Ypthima*. – J. Bomb. Nat Hist. Soc. **56** (1): 66–71.

CHIBA, H., HSU, Y.-F. & T. SHIROZU (1992): Hesperiidae. In: HEPPNER, J. B. & H. INOUE: Lepidoptera of Taiwan, vol. 1, part 2. Checklist: 130–132. – Gainesville.

CHOU, I. et al. (1994): Monographia Rhopalocerorum Sinensium. – Henan Science and Technology.

D'ABRERA, B. (1982–1986): Butterflies of the Oriental Region. **1–3**. – Hill house, Melbourne.

D'ABRERA, B. (1990–1993): Butterflies of the Holarctic Region. **1–3**. – Hill house, Melbourne.

De Jong, R. & C. G. Treadaway (1993): A new *Celaenorrhinus* species (Lepidoptera: Hesperiidae) from a remarkable locality in the Philippines. - Zool. Meded. Leiden **67**: 345-349.

De Lesse, H. (1956): Revision du genre *Lethe* (s. l.). - Annls Soc. ent. Fr. **125**: 75-95.

Devyatkin, A. L. (1996): New Hesperiidae from North Vietnam, with the description of a new genus. - Atalanta **27** (3/4): 595-604.

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 ent. Nachr. **41**: 289-294.

Devyatkin, A. L. (2000): Hesperiidae of Vietnam, 7. A contribution to the Hesperiidae fauna of the southern Vietnam. - Atalanta **31** (1/2): 198-204.

Devyatkin, A. L. (2000): 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. - Atalanta **31** (1/2): 205-211.

Devyatkin, A. L. (2002): Hesperiidae of Vietnam, 11. New taxa of the subfamily Hesperiinae. Atalanta **33** (1/2): 127-135, ill.

Devyatkin, A. L. (2002): Hesperiidae of Vietnam, 12. A further contribution to the Hesperiidae fauna of North and Central Vietnam. - Atalanta **33** (1/2): 137-155, ill.

Devyatkin, A. L. & A. L. Monastyrskii (1999): Hesperiidae of Vietnam 5 An annotated list of the Hesperiidae of North and Central Vietnam. - Atalanta **29** (1/4): 151-184.

Eliot, J. N. (1967): The *Sakra* Moore, 1857, section of satyrid genus *Ypthima* Hübner. - Entom. **100**: 49-61, pl. 2.

Eliot, J. N. (1969): An analysis of the Eurasian and Australian Neptini. - Bull. Br. Mus. Nat. Hist. (Ent.) suppl **15**: 1-155.

Eliot, J. N. (1987): On some butterflies from Nepal, Bhutan and Thailand. - Tyo to Ga **38** (1): 21-29.

Eliot, J. N. (1992): In: Corbet, A. S. & Pendlebury, H. M.: The butterflies of the Malay Peninsula 4th edition. - Kuala Lumpur.

Elwes, H. J. & J. Edwards (1893): A revision of the genus *Ypthima*, with especial reference to the characters afforded by the male genitalia. - Trans. ent. Soc. Lond. **1893**: 1-54, pls. 1-3.

Evans, W. H. (1915): A list of butterflies caught by Capt. F. M. Bailey in S.E. Tibet during 1913. J. Bomb. Nat. Hist. Soc. **23**: 532-546.

Evans, W. H. (1949): A catalogue of the Hesperiidae from Europe, Asia and Australia in the British Museum (N.H.). - British Museum.

Forster, W. [1948]: Beiträge zur Kenntnis der ostasiatischen *Ypthima*-Arten. - Mitt. Münch. Ent. Ges. **34** (2)(1944): 472-492, pls. 30-33.

Goltz, D. H. F. (1938): Die Callerebien der Ausbeute Höne. - Ent. Rund. **55**: 666-671.

Goltz, D. H. F. (1939): Die Callerebien der Ausbeute Höne. - Ent. Rund. **56**: 41-45, 102-109, 163-166.

Hill, M. J. & A. L. Monastyrskii (1999): Butterfly fauna of protected areas in North and central Vietnam; collections 1994-1997. - Atalanta **29** (1/4): 185-208.

Hsu, Y.-F. (1990): The genus *Celaenorrhinus* Hübner in Taiwan: a revisional work. - Bull. Institute Zoology, Academia Sinica. **29** (3): 141-152.

Huang, H. (1997): *Yania* gen. nov. and *Yania sinica* sp. nov. from Sichuan, China. - J. Res. Lep. **34**: 147-153.

Huang, H. (1998): New Lycaenidae butterflies from the Tsangpo basin, S.E. Tibet. - Lambillionea **xcviii** (4): 499-508.

Huang, H. (1999): Replacement of a new homonym. - Lambillionea **xcix** (4): 516.

Huang, H. (1999): Some new butterflies from China-1. - Lambillionea **xcix** (4): 642-676.

Huang, H. (2001): Report of H. Huang's 2000 Expedition to SE Tibet for Rhopalocera. Neue ent. Nachr. **51**: 65-151, ill.

Huang, H. (2002): Some New Butterflies from China - 2. - Atalanta **33** (1/2): 109-122, ill.

Huang, H. & W.-P. Liu (2000): A new species of the genus *Ypthima* Hübner 1818 from China. Lambillionea **C** (3): 454-457.

Ikeda, K., Nishimura, M. & H. Inagaki (2001): Butterflies of Cuc Phuong National Park in Northern Vietnam (5). - Butterflies **30**: 58-66, ill.

INOUE, S. & A. KAWAZOE (1964–1970): Hesperiid butterflies from South Vietnam. Tyo to Ga **15** (2) (1964): 34–50; **15** (4)(1965): 84–105; **16** (3/4)(1966): 84–99; **17** (1/2)(1967): 1–17; **21** (1/2) (1970): 1–14, ill.

JOHNSON, K. (1992): The Palaearctic "elfin" butterflies (Lycaenidae, Theclinae). – Neue ent. Nachr. **29**: 3–141.

JOHNSON, K. (2000): A new elfin butterfly (Lycaenidae: Eumaeini) from Northern China with comments on the nomenclature of Palaearctic elfins. – The Taxonomic Report Vol. **2** (1): 1–4, ill.

KOIWAYA, S. (1989): Study of Chinese butterflies. **1**.

LEE, C.-L. (1962): Some new species of Rhopalocera in China 2. – Acta Ent. Sin. **11** (2): 139–148. pls. 1–6.

LEE, C.-L. (1979): Some new species of Rhopalocera in China 5. – Acta Zootaxonomica Sin. **4** (1): 35–38, pl. 1.

LEE, C.-L. (1982): Rhopalocera. – In HUANG, F.-S. (ed.): Insects of Xizang. Vol. **2**: 127–155.

LEE, C.-L. (1985): Some new species of Rhopalocera in China 6. – Entomotaxonomia **7** (3): 191–195.

LEECH, J. H. (1892–1894): Butterflies from China, Japan and Corea. – London.

MELL, R. (1923): Noch unbeschriebene Lepidopteren aus Südchina. ii. – D. Ent. Z. **1923** (2): 153–160.

MELL, R. (1938): Beiträge zur Fauna Sinica, 18. Noch unbeschriebene chinesische Lepidopteren (5). – D. Ent. Z. Iris **52**: 135–153.

MELL, R. (1942): Die Amathusiidae und Satyriden Süd- (und Südost-) Chinas. – Arch. Naturgesch. (N.F.) **11**: 221–290, pls. 1–3.

MONASTYRSKII, A. L. & A. L. DEVYATKIN (2000): New taxa and new records of butterflies from Vietnam. – Atalanta **31** (3/4): 471–492.

MONASTYRSKII, A. L. & A. L. DEVYATKIN (2003): Butterflies of Vietnam (systematic list). – Moscow.

PINRATANA, B. A. (1985): Butterflies in Thailand. Vol. **5**. Hesperiidae. Brothers of St. Gabriel in Thailand.

RILEY, N. D. (1929): Revisional notes on the genus *Heliophorus* with descriptions of new forms. J. Bomb. Nat. Hist. Soc. **33** (2): 384–402.

ROSE, H. S. & N. SHARMA (1998): Two new species of the genus *Ypthima* HÜBNER from the west and N-West Himalaya, India. – Geobios new Reports **17**: 105–112.

SEITZ, A. et al. (1909): Macrolepidoptera of the world. Vol. **1**. The Palaearctic Butterflies. – Stuttgart.

SEITZ, A. (1927): Macrolepidoptera of the world. Vol. **9**. The Indo-Australian Butterflies. – Stuttgart.

SEITZ, A. (1929–1932): Macrolepidoptera of the world. Suppl. to Vol. **1**. The Palaearctic Butterflies. Stuttgart.

SHIMA, H. (1988): Phylogenetic relationships of the genus *Ypthima* HÜBNER. – Spec. Bull. Lep. Soc. Jap. (6): 69–81.

SHIROZU, T. (1960): Butterflies of Formosa in colour. – Osaka.

SHIROZU, T. & H. SHIMA (1977): New species and subspecies of the genus *Ypthima* HÜBNER from south-east Asia. – Kontyu, Tokyo **45**: 501–509.

SHIROZU, T. & H. SHIMA (1979): On the natural groups and their phylogenetic relationships of the genus *Ypthima* HÜBNER mainly from Asia. – Sieboldia **4**: 231–295, pls. 18–71.

SOUTH, R. (1913): A list of butterflies collected by Captain F. M. BAILEY in western China, south-eastern Tibet, and the Mishimi hills, 1911. – J. Bomb. Nat. Hist. Soc. **22**: 345–365, 598–615.

SUGIYAMA, H. (1992): New butterflies from West-China, including Hainan. – Pallarge **1**.

SUGIYAMA, H. (1993–1999): New butterflies from western China 1–6. – Pallarge **2**–**7**.

SWINHOE, C. (1912–13): Lepidoptera Indica. Vol. **10**. – London, L.Reeve & Co.

TALBOT, G. (1947): The fauna of British India, including Ceylon and Burma. Vol. **2**. Taylor & Francis. London.

UEMURA, Y. & S. KOIWAYA (2000): New or little known butterflies of the genus *Ypthima* HÜBNER from China, with some synonymic notes. Part. 1. – Futao **34**: 2–10, plate 1.

UEMURA, Y. & S. KOIWAYA (2000): Taxonomy on the species of *multistriata* and *mostschulskyi* of the genus *Ypthima* HÜBNER in China and its neighbouring areas. – Bulletin of the Hoshizaki Green Foundation **4**: 49–62.

UEMURA, Y. & S. KOIWAYA (2001): New or little known butterflies of the genus *Ypthima* HÜBNER from China, with some synonymic notes. Part. 2. – Futao **36**: 2–10, plate 1.

UEMURA, Y. & A. L. MONASTYRSKII (2000): Description of two new species of the genus *Ypthima* HÜBNER from North and Central Vietnam. – Trans. Lepid. Soc. Japan **51** (2): 150–156.

WATKINS, H. T. G. (1925): New Callerebias. – Ann. Mag. Nat. Hist. (9)**16**: 233–237.

WATKINS, H. T. G. (1927): New Himalo-Chinese butterflies. – Ann. Mag. Nat. Hist. (20)**9**: 99–102.

WATKINS, H. T. G. (1928): New Satyrid Butterflies. – Ann. Mag. Nat. Hist. (10)**5**: 615–618.

WU, X.-F. (1988): Butterflies of the Ling Nan Oasis. – Scientific Periodical, Beijing [in Chinese].

YOKOCHI, T. (1997): Ten new subspecific names to the genus *Euthalia* HÜBNER, 1819. – Futao **26**: 11–14, Plate 2: figs. 1, 2.

YOKOCHI, T. (2000): A check list of the tribe Euthalini from Kachin, North Myanmar. Notes on Eurasian Insects **3**: 31–44.

addresses of the authors

HAO HUANG
Qingdao Vocational and Technical College
266555, Qingdao
P. R. CHINA
email: cmdhhxx@hotmail.com

CHUN-SHENG WU
Institute of Zoology
Academia Sinica
Beijing
P. R. CHINA
email: wucs@panda.iz.ac.cn

Colour plate X

HUANG; H. & CH.-SH. WU: New and little known Chinese butterflies in the collection of the Institute of Zoology, Academia Sinica, Beijing 1 (Lepidoptera, Rhopalocera). Neue Entomologische Nachrichten **55**: 115–143.

Fig. 1: *Ypthima beautei beautei* ♂ (Lu-ding, W. Sichuan) upperside (left half) and underside (right half).
Fig. 2: *Ypthima beautei qinghaiensis* Holotype ♂ (Ma-ke valley, Qinghai) upperside (left half) and underside (right half).
Fig. 3: *Ypthima yoshinobui* Holotype ♂ (Ma-ke valley, Qinghai) upperside (left half) and underside (right half).
Fig. 4: *Ypthima baileyi* ♂ (Xiang-cheng, W. Sichuan) upperside.
Fig. 5: *Ypthima baileyi* ♂ (Xiang-cheng, W. Sichuan) underside.
Fig. 6: *Ypthima lihongxingi* Holotype ♂ (Li-chuan, Hubei) upperside (left half) and underside (right half).
Fig. 7: *Ypthima frontierii* ♂ (Na-po, Guangxi) upperside (left half) and underside (right half).
Fig. 8: *Ypthima albipuncta* Holotype ♂ (Yi-liang, Yunnan) upperside.
Fig. 9: *Ypthima albipuncta* Holotype ♂ (Yi-liang, Yunnan) underside.
Fig. 10: *Callerebia hybrida* ♂ (Ji-long, SC. Tibet) upperside (left half) and underside (right half).
Fig. 11: *Loxerebia pieli* Holotype ♂ (Ku-ling, Jiangxi) upperside (left half) and underside (right half).
Fig. 12: *Lethe unistigma* Holotype ♂ (Shi-zong, E. Yunnan) upperside.
Fig. 13: *Lethe unistigma* Holotype ♂ (Shi-zong, E. Yunnan) underside.
Fig. 14: *Lethe confusa fuhaica* Holotype ♀ (Meng-hai, S. Yunnan) upperside (left half) and underside (right half).
Fig. 15: *Neorina neosinica* Holotype ♀ (Teng-chong, W. Yunnan) upperside (left half) and underside (right half).
Fig. 16: *Euthalia neoterica* Holotype ♂ (Bin-chuan, N. Yunnan) upperside (left half) and underside (right half).
Fig. 17: *Euthalia purchella* Holotype ♀ (Cha-yu, SE Tibet) upperside (left half) and underside (right half).
Fig. 18: *Neptis lucida* Holotype ♂ (He-kou, S. Yunnan) upperside (left half) and underside (right half).

1	2	3
4	5	6
7	8	9
10	11	18
12	13	14
15	16	17

Colour plate XI

HUANG; H. & CH.-SH. WU: New and little known Chinese butterflies in the collection of the Institute of Zoology, Academia Sinica, Beijing – 1 (Lepidoptera, Rhopalocera). Neue Entomologische Nachrichten **55**: 115–143.

Fig. 1: *Albulina lucifuga* ♀ (Cha-yu, SE. Tibet) upperside (left half) and underside (right half).
Fig. 2: *Ahlbergia zhujianhuai* Holotype ♂ (Mi-yi, S. Sichuan) upperside (left half) and underside (right half).
Fig. 3: *Ahlbergia zhujianhuai* Paratype ♀ (Mi-yi, S. Sichuan) upperside (left half) and underside (right half).
Fig. 4: *Celaenorrhinus yaojiani* Holotype ♂ (Na-po, Guangxi) upperside (left half) and underside (right half).
Fig. 5: *Celaenorrhinus inexspectus* ♂ (Jin-xiu, Guangxi) upperside (left half) and underside (right half).
Fig. 6: *Sovia fangi* Holotype ♂ (Wei-xi, NW Yunnan) upperside.
Fig. 7: *Sovia fangi* Holotype ♂ (Wei-xi, NW Yunnan) underside.
Fig. 8: *Sovia subflava* ♂ (Wei-xi, NW Yunnan) upperside.
Fig. 9: *Sovia subflava* ♂ (Wei-xi, NW Yunnan) underside.
Fig. 10: *Halpe dizangpusa* ♂ (Jiang-le, Fujian) upperside (left half) and underside (right half).
Fig. 11: *Halpe dizangpusa* ♂ (Guangxi) upperside (left half) and underside (right half).
Fig. 12: *Halpe dizangpusa* ♂ (Jian-feng-ling, Hainan) upperside (left half) and underside (right half).
Fig. 13: *Halpe gamma* ♂ (Qing-cheng-shan, Sichuan) upperside (left half) and underside (right half).
Fig. 14: *Halpe hauxwelli* ♂ (Xi-shuang-ban-na, S. Yunnan) upperside (left half) and underside (right half).
Fig. 15: *Yanoancistroides fujiananus* ♂ (Wu-yi-shan, Fujian) upperside (left half) and underside (right half).
Fig. 16: *Yanoancistroides sinica* Holotype ♂ (Qing-cheng-shan, Sichuan) upperside (left half) and underside (right half).
Fig. 17: Left eye and palpi of *Yanoancistroides fujiananus* (Fujian) in lateral view.
Fig. 18: Forewing discocellular and base of veins 4, 5 and 6 of *Yanoancistroides sinica* (holotype).
37. Legs of Yanoancistroides species: foreleg of fujiananus (left 1st), foreleg of sinica (left 2nd), midleg of fujiananus (left 3rd), midleg of sinica (left 4th), hindleg of fujiananus (left 5th),hindleg of sinica (left 6th).

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18