

**Some new nymphalids
from the valleys of Nujiang and Dulongjiang, China¹**

(Lepidoptera, Nymphalidae)

by

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received 31.VIII.2002

Abstract: This is the first of a series of papers dealing with the butterfly material obtained during my 2002 expedition to Nujiang and Dulongjiang, Yunnan. Two new species of the genus *Euthalia*, two new species and four new subspecies of the tribe Neptini are described and compared with their most allied taxa. All the new species have their male genitalia illustrated together with their most allied species. All type specimens are preserved in Qingdao Education College and my private collection.

Introduction

When I crossed the border of Tibet and Yunnan at Nujiang valley at the end of the summer in 2000, I was astonished about the diversity of butterflies in that region. It was already early September, many butterflies had passed their flight time. However, I still have caught five new species and eight new subspecies on the way from Chawalong to Nidadan within just 4 days. As I was exhausted due to the extremely hard walking from Chayu to Chawalong over one week, I was not able to investigate deeply on the route from Chawalong to Nidadan. After I came back to Qingdao, I have always dreamed about going back to that valley. Finally in 2002 I got a chance for an expedition from May to August and I chose the Nujiang Valley without any hesitation.

When I went to Chengdu for business in 1992, a friend of mine, MA JIAN-XIONG, who studies the folk customs in Yunnan, had told me about the Dulongjiang valley, an unfamiliar area occupied by the national minority at the northwest part of Yunnan. He had talked about the natural environment and conventions there. Since then I longed for that region and paid much attention to any information or materials on natural history or travel related with Dulongjiang. The Dulongjiang River, being the upper water and the most eastern tributary of the Irrawaddy (Ayarwady), parallels and lies to the west of the Nujiang River, separated by the Gaoligongshan Mountains. There is almost no entomological report about this region in the past. The only one document as far as I know is a list of insects put forward by YANG DAO-SHENG and QIAO GUANG-BAO in the book "The Nujiang Nature Reserve" edited by the Yunnan Provincial Forestry Department in 1998. This list includes 128 species of butterflies that were collected at the Nujiang and Dulongjiang area. But this list is too coarse without any collecting time, or exact collecting site, or the place where the specimens are kept. Moreover, there are many obvious mistakes in Latin names and no new species or new subspecies described. So I will basically ignore this document in my future papers but just discuss the valuable parts of it at

1 Report of H. HUANG's 2002 expedition to N.W. Yunnan for Lepidoptera. Part 1.

the end. I will date the collecting localities and give a detailed map of the expedition routes in the future.

It is a very successful investigation this time. It brings a lot of new species and subspecies and also enriches the defective report on some new species and subspecies of last time (my 2000 expedition) – some with female only get male this time, some with just one butterfly get several specimens this time. But it is very pity that the former quiet path made through the cliff along Nuijiang became dangerous because the government builds a road from Chawalong to Nidadan. Due to the explosions along the river and the indifferent attitude of the workers to the safety of passersby, several accidents have occurred, even fatal ones. Thus, I could not investigate the part from Chawalong to Nidadan again in July as it was my plan. But I believe more investigations will surely result in some new discoveries, especially in the Dulongjiang area, where I had met lycaenids of the genus *Chrysozephyrus* for four times but couldn't catch them.

Both the expeditions along Nuijiang and Dulongjiang were full of hardness. The lack of food, heavy load, slippery wet path, landslide, endless rains, snakes and various bloody insects brought me back to the hard travel along the Tsangpo Gorge of 1995 and 1996. I'm thankful to my beloved, LI MING-YI, to her understanding on such a hobby of mine, to her endurance and missing while I disappeared in the forests of Yunnan. She has given me much encouragement and spiritual dependence, after all, because such a travel is not so easy for me any more as it was six years ago. I'm also grateful to those who have helped me on my way. HE WEN and QIAN WEI-GUO have accompanied me through Dulongjiang valley from north to south. SI XIAO-DONG, LI XING-HE and LI XING-GUO have been so hospitable to me in the valley of Dulongjiang. CHU WU-HAI and CHU YONG-FU have taken care of me in Nidadan and given me a feeling like home. Those Nu and Lisu national people that I didn't know the name have let me live with them. This series of papers is dedicated to them.

This paper describes some obvious new species and subspecies of Nymphalidae first, followed by a second paper about Satyridae. Then I will give a thorough report on the butterflies of Nuijiang and Dulongjiang.

Euthalia (Limbusa) heweni spec. nov.
(colour plate XIII, figs. 1, 3, 5, 7)

Diagnosis

This new species from the Dulongjiang Valley belongs to the *Euthalia duda* STAUDINGER, 1886-group and closely resembles *Euthalia staudingeri yunnana* OBERTHÜR, 1907 in external features, but can be easily distinguished from the latter as well as all the other members of the group in male genital structures. The entire *Euthalia duda*-group is so confused in classification that further revision based upon the examination of types is urgently needed. Fortunately such a revision is being prepared by TAKASHI YOKOCHI (pers. comm.) and some of the following statements are mainly based upon his knowledge on types of this group. The formal revision of some difficult taxa in the group will be given in YOKOCHI's work and I only list them in their right names for the convenience of describing the new species here.

For this group the useful diagnostic characters in external features are: 1) forewing-shape, 2) hindwing-shape, 3) relative length of forewing discal spots in spaces 5 and 6, 4) breadth

and colour of forewing discal spots, 5) breadth of hindwing discal band, 6) outer margin of hindwing upperside band and the colouring just outside it; and in male genitalia: 1) breadth of uncus in lateral view, 2) length of valva, 3) breadth of valva, 4) breadth and appearance of apex of valva (tip of valva).

To distinguish the new species, I list all the known members of the group and state their main characters as follows:

1) *Euthalia staudingeri* LEECH, 1891

Male. Forewing apex pointed. Upperside ground color dark greenish. Upperside band yellowish. Forewing discal spot in space 5 nearly as long as spot in space 6. Hindwing upperside band margined with dull greenish blue colouring. Male genitalia. Uncus broad. Valva very broad and short. Apex of valva broad and heavily spined, not twisted.

ssp. *staudingeri* – Type locality: Sichuan (Moupin).

Male. Both wings' bands narrower than in ssp. *yunnana*. I don't know the female of this taxon.

Distribution: Sichuan only (sympatric with *E. alpherakyi*, *E. aristides* and *E. thibetana thibetana*).

ssp. *yunnana* OBERTHÜR, 1907 (= *Euthalia neoterica* LEE, 1985 Type locality: Binchuan, N. Yunnan) – Type locality: N.W. Yunnan (Tsekou).

Male. Both wings' bands broader than in the other two subspecies. Female. Both wings' bands much broader than in ssp. *nujiangensis*.

Distribution: N.W. Yunnan (Tsekou in the Mekong Valley, Zhongdian, sympatric with *E. sakota*), N. Yunnan (Bingchuan, Dali, Kunming, sympatric with *E. sakota*).

ssp. *nujiangensis* HUANG, 2001 **comb. nov.** – Type locality: S.E. Tibet (Genong in the Nujiang Valley) (col. pl. XIII, figs. 2, 4, 6, 8).

Based upon a single female captured in my 2000 expedition at the Yunnan-Tibet border in Nujiang valley. The discovery of the male this time proves it a subspecies of *Euthalia staudingeri*, not *Euthalia alpherakyi* as given in my original description. Both sexes and the male genitalia are illustrated here. The male has all bands as broad as in ssp. *staudingeri*, slightly narrower than in ssp. *yunnana*, and the hindwing upperside band margined by an apparently narrower bluish colouring than in both ssp. *staudingeri* and *yunnana*. The female, astonishingly, has all bands much narrower than in ssp. *yunnana*, recalling the female of *Euthalia kameii* in breadth of bands. Male genitalia (fig. 2) agree with those of the other two subspecies in all details.

Distribution: Nujiang Valley (Genong, Nidadan) only, Yunnan-Tibet border (sympatric with *Euthalia sakota*).

2) *Euthalia heweni* spec. nov. – Type locality: N.W. Yunnan (Dulong valley).

Male. Forewing apex pointed as in *Euthalia staudingeri*. Upperside ground colour as dark as in *Euthalia staudingeri*. Upperside bands pale yellow. Forewing discal spot in space 5 conspicuously longer than spot in space 6. Hindwing upperside band rather smooth at outer margin, not dentate in spaces 2–4, narrowly margined by a dull greenish blue colouring on its outer side. Female. Larger than the male. Both wings conspicuously broader than in the male. Forewing with termen more concave and apex more pointed than in the male. Hindwing more

pointed and produced at vein 3 than in the male. Hindwing upperside band more extensively margined by a dull greenish blue colouring on its outer side than in the male. Both wings' bands broader than in the male. Otherwise as the male. Male genitalia (fig. 1). Uncus as broad as in *Euthalia staudingeri*. Valva as long as in *Euthalia chayuensis* and *Euthalia sakota*, longer than in *Euthalia staudingeri* but shorter than in all the other species of the group. Valva as broad as in *Euthalia sakota*, *E. aristides*, *E. thibetana* and *E. duda*, broader than in *E. chayuensis* but narrower than in *E. yasuyukii*, *E. staudingeri* and *E. alpherakyi*. Apex of valva heavily spined, not twisted, and conspicuously broader than in *E. sakota*, *E. chayuensis*, *E. thibetana*, *E. aristides* and *E. duda*.

Distribution: N.W. Yunnan (Dulong valley only).

3) *Euthalia sakota* FRUHSTORFER, 1928 – Type locality: N.W. Yunnan (Tsekou) (col. pl. XIV, figs. 1, 3, 6, 8).

Male. Forewing apex less pointed than in *Euthalia staudingeri*. Upperside ground colour dark and more metallic greenish than in the other species of the group. Upperside bands mostly pure white. Forewing discal spot in space 5 slightly or conspicuously longer than spot in space 6. Hindwing upperside band rather smooth at the outer margin, not dentate in spaces 2–4, broadly margined by a shining blue colouring on its outer side. Female. Larger than the male. Otherwise as the male. Male genitalia (fig. 4). Uncus narrower than in *Euthalia staudingeri*. Valva as long as in *E. heweni* and *E. chayuensis*, longer than in *E. staudingeri* but shorter than in all the other species of the group. Valva as broad as in *E. aristides*, *E. thibetana*, *E. heweni* and *E. duda*, broader than in *E. chayuensis* but narrower than in *E. yasuyukii*, *E. staudingeri* and *E. alpherakyi*. Apex of valva not strongly twisted, narrow and very weakly spined.

This taxon, which was originally described as a subspecies of *Euthalia duda*, should be treated as an independent species. It differs from the true *E. duda* from the Himalayas in smaller size, upperside ground colour being apparently brighter and more greenish, and the male valva being apparently shorter.

Distribution: N.W. Yunnan (Tsekou in Mekong valley, Zhongdian, Nujiang valley), N. Yunnan (Binchuan, Dali, Kunming).

4) *Euthalia chayuensis* HUANG, 2001. **stat. nov.** – Type locality: S.E. Tibet (Chayu only) (col. pl. XIV, figs. 2, 4, 5, 7).

Male. Upperside bands mostly pure white. Forewing discal spot in space 5 conspicuously longer than spot in space 6. Hindwing upperside band more or less dentate in spaces 2–4 at outer margin and broadly margined by a shining bluish colouring on its outer side. Female. Larger than the male. Male genitalia (fig. 3). Uncus narrow. Valva as long as in *E. heweni* and *E. sakota*, apparently narrower than in all the other species of the group. Apex of valva not strongly twisted, narrow and very weakly spined.

This species was wrongly described as a subspecies of *Euthalia alpherakyi* in my original description, and should be treated as an independent species. In external features it agrees with *E. sakota* almost in all details except that the hindwing band is always somewhat dentate, not smooth at the outer margin in both sexes. In male genitalia, it differs from *E. sakota* in having the valva constantly narrower, though the dissected paratype males of *E. chayuensis* are bigger in size than those of *E. sakota* (8 males from N.W. Yunnan and N. Yunnan dissected).

Distribution: S.E. Tibet (Chayu only).

5) *Euthalia duda* STAUDINGER, 1886 (= *Euthalia tsangpoi* HUANG, 1999 – Type locality: Metok, Tibet) – Type locality: N. India (Darjeeling).

Male. Upperside ground colour very dark. Upperside bands pure white. Forewing discal spot in space 5 slightly or conspicuously longer than spot in space 6. Hindwing upperside band rather smooth at the outer margin in spaces 2–4, broadly margined by a shining bluish colouring on its outer side. I don't know the female. Male genitalia (fig. 5). Uncus broader than in *E. sakota* and *E. chayensis* but narrower than in *E. heweni* and *E. staudingeri*. Valva as long as in *E. aristides*, shorter than in *E. yasuyukii* and *E. alpherakyi* but longer than in *E. sakota*, *E. heweni*, *E. chayensis* and *E. staudingeri*. Valva as broad as in *E. sakota*, *E. aristides*, *E. thibetana* and *E. heweni*, broader than in *E. chayensis* but narrower than in *E. yasuyukii*, *E. staudingeri* and *E. alpherakyi*. Apex of valva not strongly twisted, narrow and very weakly spined.

Euthalia tsangpoi described from Metok, Tibet, cannot be separated from *E. duda* soundly and should be treated as a junior synonym of *E. duda*.

Distribution: N. India, Nepal, Sikkim, S.E. Tibet (Metok only).

6) *Euthalia alpherakyi* OBERTHÜR, 1907

Male. Upperside bands yellow. Forewing discal spot in space 5 conspicuously longer than spot in space 6. Hindwing upperside band always dentate at the outer margin. Male genitalia (fig. 7). Valva shorter than in *E. yasuyukii* but longer than in all the other species of the group. Apex of valva weakly spined and not strongly twisted.

ssp. *alpherakyi* (= *Euthalia insulae continentalis* KOIWAYA, 1996 – Type locality: Wuyishan of Fujian) – Type locality: Sichuan (Tianquan) (col. pl. XV, figs. 1, 3).

Male. Wings broader than in ssp. *yunnanica* with dorsum longer. Upperside ground colour paler than in ssp. *yunnanica*. Forewing apex less pointed than in ssp. *yunnanica*. Hindwing upperside band margined by paler ground colour on its outer side. Female. Larger than the male. Wings broader and forewing termen more concave than in the male. Both wings' bands somewhat broader than in the male.

Euthalia insulae continentalis from Fujian and Zhejiang, East China, cannot be separated soundly from the nominotypical *alpherakyi* of Sichuan in both external features and male genitalia, according to KOIWAYA's illustrations.

Distribution: Sichuan, Hunan, Fujian.

ssp. *yunnanica* KOIWAYA, 1996 – Type locality: N.W. Yunnan (Zhongdian).

Male. Upperside ground colour darker. Forewing apex more pointed. Hindwing upperside band narrowly margined by a dull greenish blue colouring. I don't know the female. According to KOIWAYA's illustration, the male genitalia do not differ from those of ssp. *alpherakyi*.

Distribution: N.W. Yunnan (Zhongdian only, sympatric with *Euthalia sakota* and *E. staudingeri yunnana*).

7) *Euthalia aristides* OBERTHÜR, 1907 – Type locality: Sichuan (Tianquan) (col. pl. XV, figs. 2, 4).

Male. Upperside ground colour more brownish than in *E. alpherakyi*. Apex of forewing pointed. Upperside bands yellow. Forewing discal spot in space 5 slightly longer than spot in space 6. Hindwing upperside band always dentate at the outer margin, followed by paler ground colour. Female. Larger than the male. Wings a little broader than in the male. Both wings' bands somewhat broader than in the male. Otherwise as the male. Male genitalia (fig. 6).

Valva slightly shorter than in *E. alpherakyi* but apparently longer than in *E. sakota*, *E. heweni*, *E. chayuensis* and *E. staudingeri*. Valva as broad as in *E. duda*, *E. sakota*, *E. heweni* and *E. thibetana*, slightly narrower than in *E. alpherakyi* but broader than in *E. chayuensis*. Apex of valva narrow, weakly spined and not strongly twisted.

Distribution: W. Sichuan (sympatric with *E. alpherakyi alpherakyi* and *E. thibetana thibetana*), E. Sichuan (sympatric with *E. kameii*).

8) *Euthalia kameii* KOIWAYA, 1996 – Type locality: S. Shaanxi (Zhouzhi).

Male. Wings broader, forewing apex less pointed and hindwing termen more convex than in *E. aristides*. Upperside bands yellow. Forewing discal spot in space 5 as long as spot in space 6. Hindwing upperside band always dentate at the outer margin and followed by paler ground colour. Female. Larger than the male. All bands pure white and much narrower than in the male. Otherwise as the male. Male genitalia are identical with those of *E. aristides*, according to KOIWAYA's illustration.

Distribution: S. Shaanxi, E. Sichuan (sympatric with *E. aristides*), S.E. Yunnan.

9) *Euthalia thibetana* (POWELL, 1885)

Male. Forewing apex less pointed than in *E. staudingeri* and *E. aristides*. Forewing discal spot in space 5 conspicuously longer than spot in space 6. Hindwing band more or less dentate at the outer margin. Male genitalia (fig. 8). Apex of valva weakly spined and strongly twisted.

ssp. *thibetana* (= *Euthalia undosa* FRUHSTORFER, 1906 – type locality: Sichuan) – Type locality: Sichuan (Moupin).

Male. Upperside ground colour rich coppery green. Upperside bands more yellowish than in the other subspecies.

According to YOKOCHI's opinion (pers. comm.) based upon examination of types, *Euthalia thibetana* should be a senior synonym of *Euthalia undosa*, not a senior synonym of *Euthalia staudingeri* as most authors had regarded before.

Distribution: Sichuan (sympatric with *Euthalia aristides*, *E. alpherakyi alpherakyi*, *E. staudingeri staudingeri*).

ssp. *melli* YOKOCHI, 1997 (= *Euthalia undosa meridionalis* MELL, 1935) – Type locality: Guangdong (Tsayuanshan).

Male. Larger than ssp. *thibetana*. Upperside ground colour more brownish. Upperside bands paler yellowish. Upperside all bands more clearly defined.

According to YOKOCHI's lectotype designation and illustration of male genitalia, *melli* is apparently allied to *E. thibetana thibetana* in male genitalia, not conspecific with *E. yasuyukii*.

Distribution: Guangdong (sympatric with *Euthalia yasuyukii*).

ssp. *rickettsi* HALL, 1930 – Type locality: Fujian.

Male. Upperside bands pure white. Otherwise as in ssp. *melli*.

It is very possible that both *melli* and *rickettsi* belong to a single subspecies and represent different colour forms. KOIWAYA (1996) illustrated a yellow form of *rickettsi* from Fujian.

Distribution: Fujian (sympatric with *Euthalia yasuyukii* and *Euthalia alpherakyi alpherakyi*), Zhejiang.

10) *Euthalia yasuyukii* YOSHINO, 1998 Type locality: Guangxi (Longsheng) (col. pl. XV, figs. 5, 7).

Male. Generally larger than all the preceding species in this list. Wings very broad in shape: forewing apex less pointed and hindwing termen more convex. Forewing discal spot in space 5 conspicuously longer than spot in space 6. Hindwing band smooth or dentate at the outer margin. Female much larger than the male. Otherwise as the male. Male genitalia (fig. 9). Valva much bigger and longer than in all the species of the group. Apex of valva very broad, heavily spined and strongly twisted.

It is very possible that MELL's syntype series of *Euthalia undosa meridionalis* from Guangdong contained both *Euthalia thibetana melli* and *Euthalia yasuyukii*. However, according to YOKOCHI's lectotype designation of *meridionalis*, *melli* should be regarded as a race of *E. thibetana* whereas *E. yasuyukii* is a valid species.

Distribution: Guangxi (sympatric with *Euthalia thibetana melli*), Guangdong, Zhejiang, Fujian (sympatric with *Euthalia thibetana rickettsi* and *Euthalia alpherakyi alpherakyi*), Anhui.

Besides the nominotypical *yasuyukii* from the mainland of China, there is another unnamed subspecies of *E. yasuyukii* known from Hainan Island.

11) *Euthalia "alpherakyi" monbeigi* OBERTHÜR, 1907 – Type locality: N.W. Yunnan (Tsekou only).

The syntype was figured in OBERTHÜR (1912) and reproduced in KOIWAYA (1996: 245–1364). According to YOKOCHI's opinion based upon examination of syntypes (pers. comm.), this taxon is a good species of very much larger size. Male genitalia unknown. Male. Upperside bands white. Forewing discal spot in space 5 conspicuously longer than spot in space 6. Hindwing upperside band dentate at the outer margin and followed by a broad shining blue colouring.

Distribution: N.W. Yunnan (Tsekou only, sympatric with *E. sakota* and *E. staudingeri yunnana*).

12) *Euthalia "duda" amplifascia* TYTLER, 1940 – Type locality: N.E. Burma.

According to YOKOCHI's illustration (2000: 38, figs. 47, 48) of a specimen taken from Kachin, N. Burma, this taxon has a very much broader forewing pure white band than all the other members of the group, recalling those of *Euthalia dura* (MOORE, 1857). So far I believe it is independent from *Euthalia duda*. Male genitalia unknown.

Distribution: N.E. Burma only.

13) *Euthalia insulae* HALL, 1930 – Type locality: Taiwan.

Both sexes. Forewing termen straighter than in the other species of the group. Upperside bands whitish or yellowish. Forewing discal spot in space 5 conspicuously longer than spot in space 6. Hindwing band dentate or smooth at the outer margin. Male genitalia. According to SHIROZU (1960) and MORISHITA (1992), valva slightly shorter than in *Euthalia alpherakyi*, with apex narrow, weakly spined and not strongly twisted.

Distribution: Taiwan only.

14) *Euthalia formosana* FRUHSTORFER, 1908 – Type locality: Taiwan.

Both sexes. Wings very broad. Both wings' bands strongly curved inwards and remote from termen. Forewing discal spot in space 5 conspicuously longer than spot in space 6. According to SHIROZU (1960) and MORISHITA (1992), male genitalia almost not differing from those of *E. insulae*, with apex of valva less spined than in *E. insulae*.

Distribution: Taiwan only (sympatric with *Euthalia insulae*).

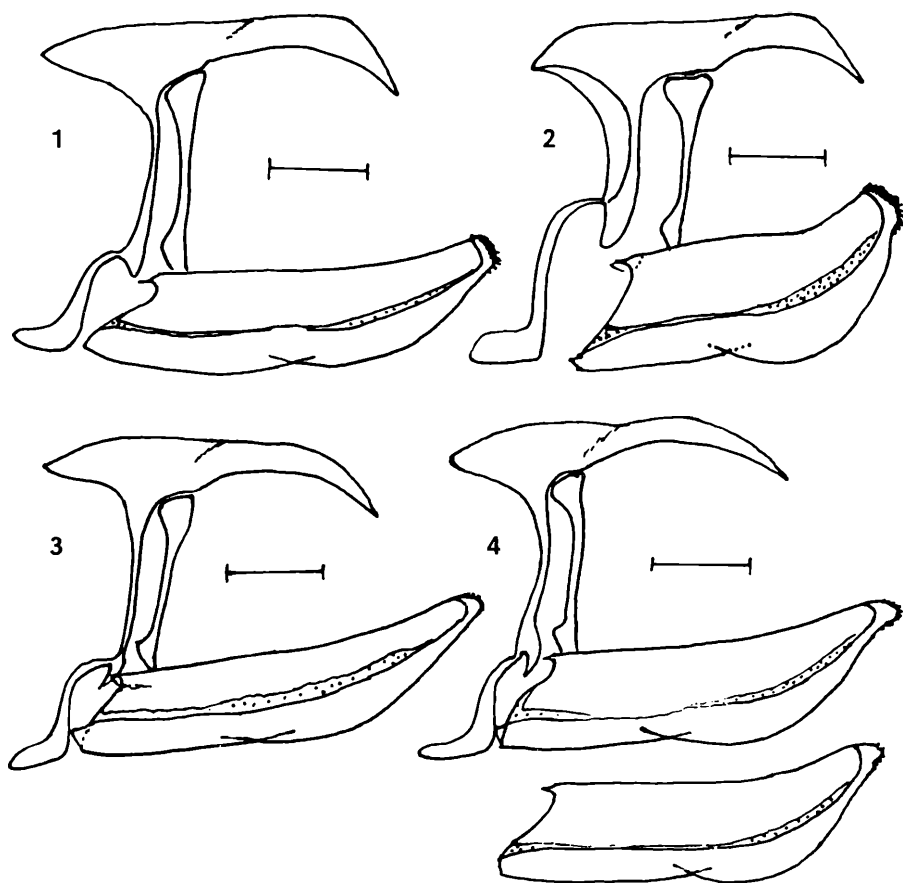


Fig. 1: Male genitalia (consisting of ring and valva) of *Euthalia heweni* (holotype specimen illustrated).

Fig. 2: Male genitalia of *Euthalia staudingeri nujiangensis* (specimen illustrated).

Fig. 3: Male genitalia of *Euthalia chayensis* (paratype specimen illustrated).

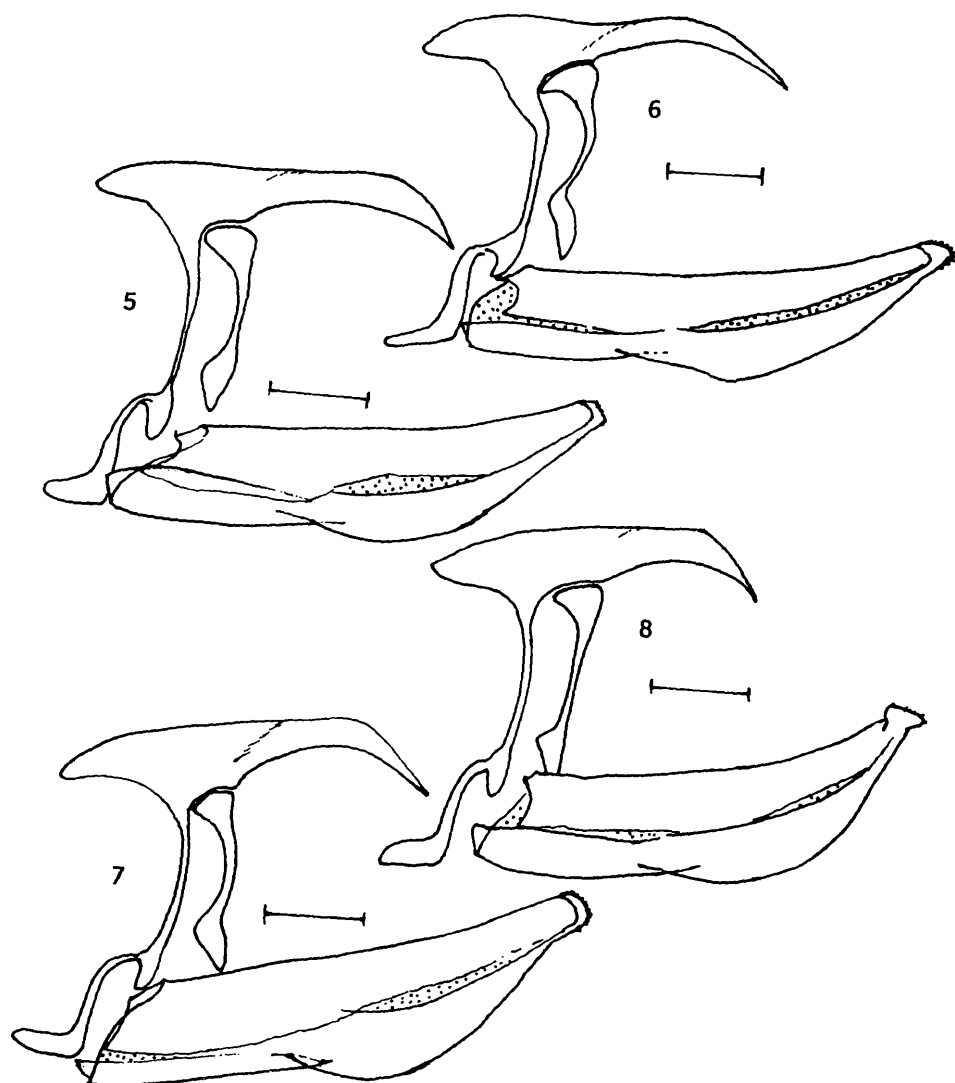
Fig. 4: Male genitalia of *Euthalia sakota* (first valva—specimen illustrated, second valva—taken from another male, not illustrated).

Fig. 5: Male genitalia of *Euthalia duda* (holotype of *Euthalia tsangpoi* from Metok, Tibet, not illustrated).

Fig. 6: Male genitalia of *Euthalia aristides* (specimen illustrated).

Fig. 7: Male genitalia of *Euthalia alpherakyi alpherakyi* (specimen illustrated).

Fig. 8: Male genitalia of *Euthalia thibetana thibetana* (specimen from Sichuan, not illustrated).



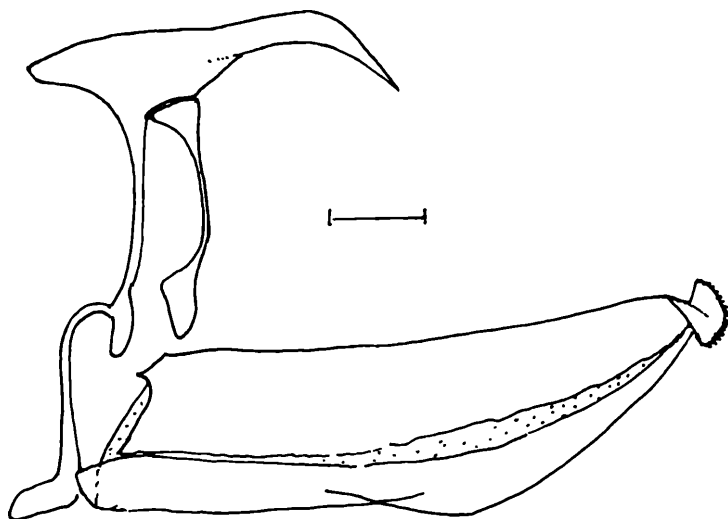


Fig. 9: Male genitalia of *Euthalia yasuyukii* (specimen illustrated).

Remarks

In external features, *Euthalia heweni* is closest to *E. staudingeri* except for the forewing discal spots in spaces 5 and 6. It is also somewhat similar to *Euthalia alpherakyi yunnanica* in the appearance of the forewing discal spots, but differs in having the hindwing band smooth at the outer margin, not dentate. In male genitalia, a comparison of length and breadth of valva among most species of the group is as follows:

Length: *yasuyukii* >> *alpherakyi* > *aristides* = *kameii* = *duda* > *thibetana* > *sakota* = *heweni* = *chayuensis* > *staudingeri*.

Breadth: *yasuyukii* >> *staudingeri* >> *alpherakyi* > *sakota* = *duda* = *aristides* = *thibetana* = *heweni* = *kameii* > *chayuensis*.

Euthalia heweni is allopatric with all the other species of the group. I have not encountered any other members of the group in its habitat.

Type data

Holotype ♂: Length of forewing: 37 mm. Ban, Dulongjiang valley, N.W. Yunnan, July 12th 2002.

Paratype: 1 ♀. length of forewing: 41.5 mm. On path between Bapo and Kongdang, Dulongjiang, July 7th 2002.

Etymology

This new species is dedicated to Mr. HE WEN, my good friend in the Dulongjiang valley, who had accompanied me to explore the valley up to the remote Mabiluo and Ban.

Euthalia (Limbusa) mingyiae spec. nov.
(colour plate XV, figs. 6, 8)

Diagnosis

This new species is mostly allied to *Euthalia kardama* (MOORE, 1859) from W. & C. China (with a subspecies, *miao* SUGIYAMA, 1996 from Guangxi), but can be easily distinguished from the latter by the following combination of characters in the male:

- 1) Forewing apex is more rounded and less pointed, and forewing termen is more concave at vein 4.
- 2) Upperside ground colour is darker and deeper green.
- 3) Forewing discal spots in spaces 4–6 are not in a smooth line with spots in spaces 2–3, but apparently shifted-in, directed to dorsum well before tornus.
- 4) Hindwing discal band becomes wider from costa to dorsum, whereas in *E. kardama* it becomes wider from dorsum to costa.
- 5) Male genitalia (fig. 10) are different (3 males of *Euthalia kardama kardama* (fig. 11) from Sichuan dissected): uncus is shorter and smaller, although the dissected specimens are of the same size; valva is remarkably shorter and not concave at dorsal margin near the tip of valva.

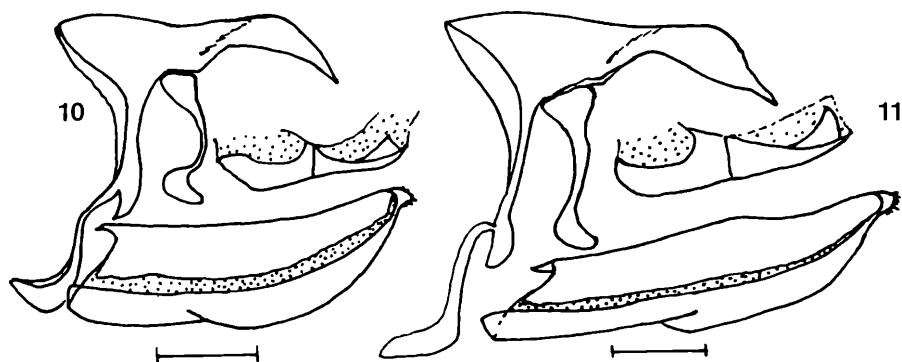


Fig. 10: Male genitalia of *Euthalia mingyiae* (holotype specimen illustrated).

Fig. 11: Male genitalia of *Euthalia kardama* (specimen from Sichuan, not illustrated).

Remarks

Besides *E. kardama*, *E. mingyiae* is also somewhat similar to *E. linpingensis* MELL, 1935 from Guangdong and *E. lengba* TYTLER, 1940 from Manipur, India, both of which have been illustrated by YOKOCHI recently (1997, 1999). However, *E. mingyiae* can be easily distinguished from both of them by different wing-shape, wing-markings and male genitalia (holotype of *E. linpingensis* has been dissected and male genitalia illustrated by YOKOCHI, 1999).

In its habitat, *E. mingyiae* flies together with *E. staudingeri nuijiangensis* and *E. sakota*. It likes to perch on the shrubs or lower branches of the trees' roadside and often flies rapidly along the path.

Type data

Holotype ♂: Length of forewing: 40 mm. Nidadan, Nujiang valley, N.W. Yunnan, July 18th 2002.
Paratype: 1 ♂. Nidadan, July 17th 2002.

Etymology

This new species is dedicated to my beloved, LI MING-YI.

Neptis qianweiguoi spec. nov.

(colour plate XVI, figs. 4, 8; colour plate XVII, figs. 4, 8)

Diagnosis

This new species from the valleys of Nujiang and Dulongjiang is similar to *Neptis themis theodora* OBERTHÜR, 1906 (col. pl. XVI, figs. 1, 2, 5, 6) in external features, but can be distinguished from the latter in specific level by the following combination of characters in the male (11 males of *Neptis qianweiguoi*, 13 males of *Neptis themis muri* ELIOT, 1969 from Beijing, 4 males of *N. themis themis* LEECH, 1890 from Sichuan and 6 males of *Neptis themis theodora* from N.W. Yunnan examined and dissected):

- 1) On hindwing underside, the postdiscal whitish band is apparently more remote from termen of hindwing than in *Neptis themis*.
- 2) On hindwing underside, there is an indication of paler smudge in space 7 just above and in continuation of the discal band, which is entirely absent in *Neptis themis*.
- 3) Male genitalia (figs. 17, 18) are constantly different: base of apical hook is roundly curved at posterior angle of ampulla, not straightly angled as in *Neptis themis* (figs. 13–15); dorsal process of ampulla is conspicuously thicker and apparently nearer to the tip of the clasp than in *Neptis themis*.

This new species is also somewhat similar to *Neptis nemorum* OBERTHÜR, 1906 (col. pl. XVI, figs. 3, 7) (one male from Nujiang Valley examined and dissected), but can be distinguished from the latter by the following combination of characters in the male:

- 1) On the hindwing underside, the postdiscal whitish band is apparently broader and situated nearer to the termen of the hindwing than in *Neptis nemorum*.
- 2) On hindwing underside, the submarginal brownish fascia is well marked as in *Neptis themis theodora*, whereas in *Neptis nemorum* the area between postdiscal band and termen is unmarked yellow.
- 3) Male genitalia are constantly different: base of apical hook is roundly curved at posterior angle of ampulla, not sharply angled as in *Neptis nemorum* (fig. 19), apical hook is apparently longer than in *Neptis nemorum*, dorsal process of ampulla is conspicuously thicker than in *Neptis nemorum*.

This new species can be easily distinguished from *Neptis kanekoi* ΚΟΙΩΛΑ, 1996 (which should be treated as an independent species from *Neptis themis*, not conspecific with *theodora* as I had wrongly regarded) from S.E. Tibet by the following combination of characters in the male (2 males of *N. kanekoi* from S.E. Tibet dissected):

- 1) All bands and markings on the upperside are yellow, not white as in *N. kanekoi*.

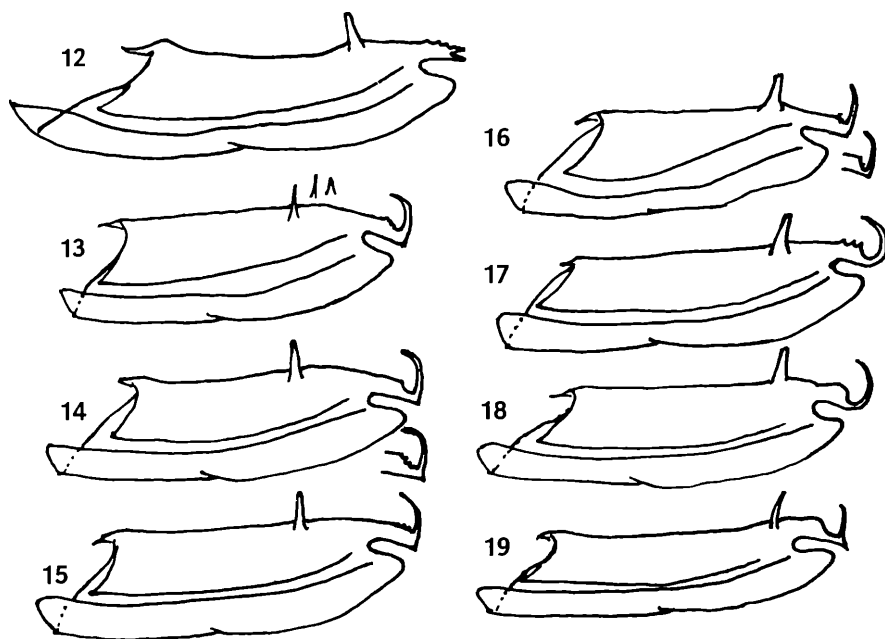


Fig. 12: Male clasp of *Neptis lixinghei* (holotype specimen illustrated).
 Fig. 13: Male clasp of *Neptis themis themis* (specimen from Sichuan, not illustrated).
 Fig. 14: Male clasp of *Neptis themis theodora* (specimen illustrated).
 Fig. 15: Male clasp of *Neptis themis theodora* f. *sylvarum* (specimen illustrated).
 Fig. 16: Male clasp of *Neptis kanekoi* (specimen from Yigong, S.E.Tibet, not illustrated).
 Fig. 17: Male clasp of *Neptis qianweiguoi* (holotype specimen illustrated).
 Fig. 18: Male clasp of *Neptis qianweiguoi* (paratype specimen, not illustrated).
 Fig. 19: Male clasp of *Neptis nemorum nemorum* (specimen illustrated).

- 2) The hindwing underside has an indication of paler smudge in space 7 just above and in continuation of the discal band, which is entirely absent in *Neptis kanekoi*.
- 3) On hindwing underside, the postdiscal whitish band is apparently more remote from the termen of the hindwing than in *Neptis kanekoi*.
- 4) Male genitalia are much different: clasp is constantly broader than in *Neptis kanekoi* (fig. 16), base of apical hook is roundly curved at posterior angle of ampulla, not straightly angled as in *Neptis kanekoi*.

This new species is also very similar to *Neptis "nemorum" phesimensis* TYTLER, 1915 from the Naga Hills, India, but can be distinguished from the latter by the following combination of characters in external features in the male (specimen of *phesimensis* is not available, but good photos can be found in D'ABRERA, 1985: 315):

1) On hindwing underside, the postdiscal whitish band is slightly more remote from the termen of the hindwing than in *phesimensis*.

2) On hindwing underside, the mother of pearl subbasal streak in space 6 is divided into two (as in *N. nemorum*), not entire as in *phesimensis*.

I don't know the male genitalia of *phesimensis*, however I am not sure that it is a subspecies of *N. nemorum* but strongly suspect it an independent species with different subbasal streaks on the hindwing underside, which is very important in the specific classification of *Neptis*.

Remarks

It should be noted that *Neptis qianweiguoi* is sympatric with *N. themis theodora*, *N. themis theodora* f. *sylvarum* OBERTHÜR, 1906, *N. nemorum*, *N. yunnana* OBERTHÜR, 1906 and many other *Neptis* species in the Nujiang valley.

The taxon *sylvarum* (col. pl. XVI, figs. 2, 6), which was originally described as a variety of *Neptis nemorum* and then raised to full specific rank by its describer, OBERTHÜR (1916), had been merged into *Neptis themis theodora* by J.N. ELIOT (1969). ELIOT published a painting of the male clasp of *sylvarum* in his useful analysis, which agrees well with that of my specimens of *sylvarum* in main characters but differs very much from that of *N. qianweiguoi*. According to ELIOT, *sylvarum* is an infrasubspecific form of *Neptis themis theodora*, and I follow his opinion at the moment. However, *sylvarum* is possibly an independent species from *N. themis*, because *sylvarum* has the hindwing underside subbasal streak in space 6 entire, not divided into two as in *N. themis*, on the hindwing underside the double yellow discal fasciae between discal and postdiscal bands are more clearly marked than in *N. themis*, and in male genitalia the tip of the ampulla is even in width, not constricted at the base of the apical hook as in *N. themis*. *N. qianweiguoi* should be regard as a member of the *Neptis themis*-group (sensu ELIOT, 1969).

Type data

Holotype ♂: Length of forewing: 33 mm. Qiqi, Nujiang Valley, Yunnan, June 19th 2002.

Paratypes: 13 ♂♂, Qiqi and Gazu, Nujiang Valley, Yunnan, June 17th–21st 2002. 1 ♂, Longyuan, Dulongjiang Valley, Yunnan, July 9th 2002.

Etymology

This new species is dedicated to my good friend, QIAN WEI-GUO, Kunming.

Neptis lixinghei spec. nov.

(colour plate XVII, figs. 3, 7)

Diagnosis

This new species from the Dulongjiang Valley is closely allied to *Neptis menpae* HUANG, 1998 from S.E. Tibet and *Neptis nycteus* DE NICEVILLE, 1890 from Sikkim and Bhutan, but can be easily distinguished from either of them by the following combination of characters in the male:

1) On the upperside all pale bands and markings are yellowish, not pure white as in *N. menpae* and *N. nycteus*.

2) On the hindwing underside, the postdiscal pale band is more remote from the termen of the hindwing than in both *N. menpae* and *N. nycteus*.

- 3) On the hindwing underside, the mother of pearl subbasal streak in space 6 is longer, nearly touching the discal band.
- 4) On the hindwing upperside the postdiscal band is much darker and brownish as in *N. menpae*, not concolorous with discal band as in *N. nycteus*.
- 5) Male genitalia (fig. 12) are different: ampulla is bifid at the tip and serrate at the dorsal margin near the tip, whereas in *N. menpae* it is not bifid at the tip but constricted at the tip and serrate at the dorsal margin, whereas in *N. nycteus* it is serrate at the tip but smooth at the dorsal margin.

This new species is a little similar to the *Neptis thisbe* group (sensu ELIOT, 1969, containing *Neptis thisbe thisbe* MENETRIES, 1859 from Siberia, N.E. China and N. China, *Neptis thisbe obscurior* OBERTHÜR, 1906 from Sichuan, *Neptis thisbe dilutior* OBERTHÜR, 1906 from Mekong Valley of Yunnan, *Neptis yunnana* OBERTHÜR, 1906 from N.W. Yunnan and *Neptis tshetverikovi* KURENTZOV, 1936 from Siberia, N.E. China and Korea) in external features, but can be easily distinguished from all the members of the group by the following combination of characters in the male:

- 1) Hindwing upperside has no ochreous patches on termen between tornus and mid-space 3, which are well marked in the entire *N. thisbe* group.
- 2) On forewing underside, the subapical pale spot in space 5 is conspicuously larger than in the entire *N. thisbe* group.
- 3) Male genitalia are different (3 males of *N. thisbe thisbe* from Beijing, 3 males of *N. yunnana* from Nujiang valley dissected): clasp is longer and more elongate in shape, dorsal process of ampulla is apparently thinner and never pointed backwards, tip of ampulla is bifid.

In external features, this new species is also very similar to *Neptis "nemorum" phesimensis* TYTLER, 1915 from the Naga Hills, India, but can be distinguished from the latter by the following combination of characters in the male:

- 1) Forewing lower postdiscal spot in space 3 is more conjoined with cell streak than in *phesimensis*.
- 2) On hindwing underside, the postdiscal pale band is more remote from the termen of the hindwing.
- 3) On hindwing underside, the mother of pearl subbasal streak in space 6 is divided into two, not entire as in *phesimensis*.

Remarks

This new species is sympatric with *Neptis themis theodora* and *Neptis qianweiguoi* spec. nov.

Type data

Holotype ♂: Length of forewing: 30.5 mm. Longyuan, Dulongjiang Valley, Yunnan, July 11th 2002.

Etymology

This new species is dedicated to my good friend, LI XING-HE, a teacher serving at Xianghong School of Ban, the Dulongjiang Valley.

Neptis mahendra dulongensis subspec. nov.
(colour plate XVIII, figs. 3, 7)

Diagnosis

Hitherto four valid subspecies of *Neptis mahendra* MOORE, 1872 have been described as follows: ssp. *mahendra* from N.W. Himalayas, ssp. *extensa* LEECH, 1892 from Sichuan (3 males examined), ssp. *ursula* ELIOT, 1969 from the Mekong Valley and the Nujiang Valley (4 males examined), N.W. Yunnan, ssp. *xizangensis* WANG & WANG, 1994 from S.E. Tibet (4 males examined).

For the subspecific classification of this species, the useful diagnostic characters in external features are: 1) width of upperside whitish markings, 2) direction of forewing lower postdiscal band, 3) appearance of streak beyond cell of forewing, 4) underside ground colour, 5) appearance of hindwing underside marginal fascia.

To distinguish the new subspecies from the Dulongjiang Valley, I list all the subspecies and state their main characters in male as follows:

1) ssp. *mahendra* – Upperside white bands broader, forewing lower postdiscal band directed to the apex, streak beyond cell of forewing short and blunt, hindwing underside marginal fascia is obsolescent.

2) ssp. *extensa* – Upperside white bands narrower, forewing lower postdiscal band directed to the termen just below the apex, streak beyond cell of forewing longer and more pointed, hindwing underside marginal fascia is whitish throughout.

3) ssp. *ursula* (col. pl. XVIII, figs. 4, 8) – Upperside white bands broader than in ssp. *extensa*, forewing lower postdiscal band directed to the termen just below the apex, streak beyond cell of forewing longer and more pointed, hindwing underside marginal fascia is blotted out in spaces 3 and 4 by scales of ground colour.

4) ssp. *xizangensis* – Upperside white bands broader than in ssp. *extensa*, forewing lower postdiscal band directed to the termen just below the apex, streak beyond cell of forewing shorter, underside ground colour is more reddish than in ssp. *ursula* and ssp. *dulongensis*, hindwing underside marginal fascia is whitish throughout.

5) ssp. *dulongensis* – Upperside white bands broader than in ssp. *extensa*, forewing lower postdiscal band directed to the apex as in ssp. *mahendra*, streak beyond cell of forewing shorter and blunt, underside ground colour much darker and less reddish than in all the other subspecies, hindwing underside marginal fascia is whitish throughout.

Type data

Holotype ♂: Length of forewing: 30 mm. Mabiluo, Dulongjiang Valley, Yunnan, July 14th 2002.

Paratypes: 2 ♂♂. Length of forewing: 30–32 mm, Longyuan, Dulongjiang, July 2002.

Etymology

This subspecific name is derived from the type locality of the new subspecies, the Dulongjiang Valley.

Neptis antilope wuhaii subsp. nov.
(colour plate XVIII, figs. 1, 2, 5, 6)

Diagnosis

Hitherto three subspecies of *Neptis antilope* LEECH, 1892 have been described as follows: ssp. *antilope* from Hubei and Sichuan, ssp. *simingensis* MURAYAMA, 1990 from Zhejiang, east China, ssp. *antilopsis* MURAYAMA, 1990 from Shaanxi. The new subspecies from the Nujiang Valley can be distinguished from all the known subspecies by the following combination of characters:

- 1) On the hindwing underside, as in sspp. *simingensis* and *antilopsis*, the discal whitish band is not broadly outlined by dark scales on its inner side as in ssp. *antilope*.
- 2) On the hindwing underside, the reddish brown discal fascia between the whitish discal and postdiscal bands is very clearly defined, not almost obsolescent as in ssp. *antilopsis*, and is conspicuously narrower than in either ssp. *simingensis* or ssp. *antilope*.
- 3) On the hindwing underside, the whitish postdiscal band is ill-defined as in ssp. *antilopsis*, and is much narrower than that of ssp. *antilope* and ssp. *simingensis*.
- 4) On the hindwing underside, as in ssp. *antilopsis*, there is no trace of submarginal brownish fascia that is more or less marked in ssp. *antilope* and ssp. *simingensis*.
- 5) On the forewing underside, the area between subapical spots and lower postdiscal band is broadly dark brown or blackish as in ssp. *antilope* and ssp. *simingensis*, not broadly in yellowish ground colour as in ssp. *antilopsis*.

Remarks

Concerning the individual variation among the type series of the new subspecies, size varies from 28 mm to 32 mm (forewing length), subapical spots on forewing underside are well defined or ill-defined at the outer margin, forewing upperside cell streak is rather variable in width, hindwing underside discal band entering space 7 or restricted below vein 7. Concerning sexual dimorphism, the female has broader forewings and its apex is more rounded than in the male.

In the Nujiang valley, this species has a rather long flight period from the end of May to the end of July, reaching its peak of emergence in early June.

Type data

Holotype ♂: Length of forewing: 28 mm. On path from Nidadan to Bingzhongluo, Nujiang valley, Yunnan, June 1st 2002.

Paratypes: 7 ♂♂, 2 ♀♀. Length of forewing: 28–32 mm, Nidadan and Gongshan, Nujiang valley, Yunnan, May–July 2002.

Etymology

This new subspecies is named in honor of Mr. CHU WU-HAI, my friend in Nidadan.

Neptis cydippe yongfui **subspec. nov.**
(colour plate XVII, figs. 1, 5)

Diagnosis

This new subspecies from the Nujiang valley is very similar to the nominotypical subspecies of *Neptis cydippe* LEECH, 1890 from C. & W. China (type locality: Changyang of Hubei, also known from Sichuan and Shaanxi) in distribution and external features, but can be easily distinguished from the latter as well as from ssp. *kirbariensis* TYTLER, 1915 from Naga Hills, Assam of India, by the following combination of characters in the male:

- 1) On forewing upperside, the subcostal spots are obsolescent, not clearly marked as in ssp. *cydippe*.
- 2) On forewing upperside, the lower postdiscal spots in space 3 is conspicuously nearer to the cell streak than in the other two subspecies.
- 3) On hindwing underside, the dark scales outlining the outer margin of the discal band are much more reduced than in ssp. *cydippe*, similarly the dark patches outside of the postdiscal band are obsolescent, not as obvious as in ssp. *cydippe*.

Type data

Holotype ♂: Length of forewing: 35 mm, Gazu, Nujiang valley, Yunnan, July 27th 2002.

Paratypes: 5 ♂♂. Nidadan and Gazu, Nujiang valley, Yunnan, June 1st to June 18th 2002.

Etymology

This new subspecies is named in honor of Mr. CHU YONG-FU, my friend in Nidadan.

Pantoporia bieti lixingguoi **subspec. nov.**
(colour plate XVII, figs. 2, 6)

Diagnosis

This new subspecies from the Nujiang valley is very similar to the nominotypical subspecies of *Pantoporia bieti* (OBERTHÜR, 1894) from Sichuan in distribution and external features, but can be distinguished from the latter as well as from ssp. *paona* (TYTLER, 1915) from Naga Hills, Assam, by the following combination of characters in the male:

- 1) On hindwing underside, the discal band is not margined by dark scales on its inner side as in the other subspecies.
- 2) On hindwing underside, the blackish line outlining the outer margin of the discal band is fully developed, much broader than in the other subspecies, while the brownish line outside of the discal band is much more reduced and thinner than in ssp. *bieti*.
- 3) On hindwing underside, the brownish submarginal fascia is obsolescent, not more or less clearly marked as in the other subspecies.

Type data

Holotype ♂: Length of forewing: 26 mm. On path between Naqialuo and Nidadan, Nujiang valley, Yunnan, May 29th 2002.

Paratype: 1 ♂, same data as holotype.

Etymology

This new subspecies is named in honor of my friend, Captain LI XING-GUO, who served at the frontier station of the Dulongjiang valley during 2001 and 2002.

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Explanation of colour plate XIII (p. 431):

- Fig. 1: *Euthalia heweni* holotype male upperside.
- Fig. 2: *Euthalia staudingeri nujiangensis* male upperside (Nidadan, Nujiang, Yunnan).
- Fig. 3: *Euthalia heweni* holotype male underside.
- Fig. 4: *Euthalia staudingeri nujiangensis* male underside (Nidadan, Nujiang, Yunnan).
- Fig. 5: *Euthalia heweni* paratype female upperside.
- Fig. 6: *Euthalia staudingeri nujiangensis* holotype female upperside.
- Fig. 7: *Euthalia heweni* paratype female underside.
- Fig. 8: *Euthalia staudingeri nujiangensis* holotype female underside.

Explanation of colour plate XIV (p. 433):

- Fig. 1: *Euthalia sakota* male upperside (Qiqi, Nujiang, Yunnan).
 Fig. 2: *Euthalia chayuensis* paratype male upperside.
 Fig. 3: *Euthalia sakota* male underside (Qiqi, Nujiang, Yunnan).
 Fig. 4: *Euthalia chayuensis* paratype male underside.
 Fig. 5: *Euthalia chayuensis* holotype female upperside.
 Fig. 6: *Euthalia sakota* female upperside (Nidadan, Nujiang, Yunnan).
 Fig. 7: *Euthalia chayuensis* holotype female underside.
 Fig. 8: *Euthalia sakota* female underside (Nidadan, Nujiang, Yunnan).

Explanation of colour plate XV (p. 435):

- Fig. 1: *Euthalia alpherakyi alpherakyi* male upperside (Hunan).
 Fig. 2: *Euthalia aristides* male upperside (Sichuan).
 Fig. 3: *Euthalia alpherakyi alpherakyi* male underside (Hunan).
 Fig. 4: *Euthalia aristides* male underside (Sichuan).
 Fig. 5: *Euthalia yasuyukii* male upperside (Anhui).
 Fig. 6: *Euthalia mingyiae* holotype male upperside.
 Fig. 7: *Euthalia yasuyukii* male underside (Anhui).
 Fig. 8: *Euthalia mingyiae* holotype male underside.

1	3
2	4
5	7
6	8

Explanation of colour plate XVI (p. 437):

- Fig. 1: *Neptis themis theodora* male upperside (Qiqi, Nujiang, Yunnan).
 Fig. 2: *Neptis themis theodora* f. *sylvarum* male upperside (Qiqi, Nujiang, Yunnan).
 Fig. 3: *Neptis nemorum nemorum* male upperside (Gazu, Nujiang, Yunnan).
 Fig. 4: *Neptis qianweiguoi* holotype male upperside.
 Fig. 5: *Neptis themis theodora* male underside (Qiqi, Nujiang, Yunnan).
 Fig. 6: *Neptis themis theodora* f. *sylvarum* male underside (Qiqi, Nujiang, Yunnan).
 Fig. 7: *Neptis nemorum nemorum* male underside (Gazu, Nujiang, Yunnan).
 Fig. 8: *Neptis qianweiguoi* holotype male underside.

Explanation of colour plate XVII (p. 439):

- Fig. 1: *Neptis cydippe yongfui* holotype male upperside.
 Fig. 2: *Pantoporia bieti lixingguoi* holotype male upperside.
 Fig. 3: *Neptis lixinghei* holotype male upperside.
 Fig. 4: *Neptis qianweiguoi* paratype male upperside (Longyuan, Dulongjiang, Yunnan).
 Fig. 5: *Neptis cydippe yongfui* holotype male underside.
 Fig. 6: *Pantoporia bieti lixingguoi* holotype male underside.
 Fig. 7: *Neptis lixinghei* holotype male underside.
 Fig. 8: *Neptis qianweiguoi* paratype male underside (Longyuan, Dulongjiang, Yunnan).

Explanation of colour plate XVIII (p. 441):

- Fig. 1: *Neptis antilope wuhaii* holotype male upperside.
 Fig. 2: *Neptis antilope wuhaii* paratype male upperside (Nidadan, Nujiang, Yunnan).
 Fig. 3: *Neptis mahendra dulongensis* holotype male upperside.
 Fig. 4: *Neptis mahendra ursula* male upperside (Lisadi, Nujiang, Yunnan).
 Fig. 5: *Neptis antilope wuhaii* holotype male underside.
 Fig. 6: *Neptis antilope wuhaii* paratype male underside (Nidadan, Nujiang, Yunnan).
 Fig. 7: *Neptis mahendra dulongensis* holotype male underside.
 Fig. 8: *Neptis mahendra ursula* male underside (Lisadi, Nujiang, Yunnan).

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Colour plate XIII

HUANG, H.: Some new nymphalids from the valleys of Nujiang and Dulongjiang, China (Lepidoptera, Nymphalidae). – *Atalanta* **33** (3/4): 339–360.

Fig. 1: *Euthalia heweni* holotype male upperside.

Fig. 2: *Euthalia staudingeri nujiangensis* male upperside (Nidadan, Nujiang, Yunnan).

Fig. 3: *Euthalia heweni* holotype male underside.

Fig. 4: *Euthalia staudingeri nujiangensis* male underside (Nidadan, Nujiang, Yunnan).

Fig. 5: *Euthalia heweni* paratype female upperside.

Fig. 6: *Euthalia staudingeri nujiangensis* holotype female upperside.

Fig. 7: *Euthalia heweni* paratype female underside.

Fig. 8: *Euthalia staudingeri nujiangensis* holotype female underside.

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Colour plate XIII



Colour plate XIV

HUANG, H.: Some new nymphalids from the valleys of Nujiang and Dulongjiang, China (Lepidoptera, Nymphalidae). – *Atalanta* **33** (3/4): 339–360.

Fig. 1: *Euthalia sakota* male upperside (Qiqi, Nujiang, Yunnan).

Fig. 2: *Euthalia chayuensis* paratype male upperside.

Fig. 3: *Euthalia sakota* male underside (Qiqi, Nujiang, Yunnan).

Fig. 4: *Euthalia chayuensis* paratype male underside.

Fig. 5: *Euthalia chayuensis* holotype female upperside.

Fig. 6: *Euthalia sakota* female upperside (Nidadan, Nujiang, Yunnan).

Fig. 7: *Euthalia chayuensis* holotype female underside.

Fig. 8: *Euthalia sakota* female underside (Nidadan, Nujiang, Yunnan).

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Colour plate XIV



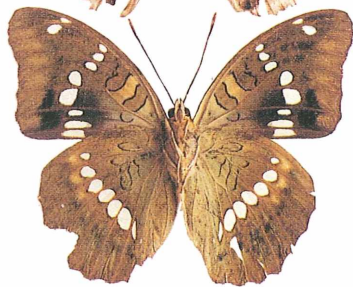
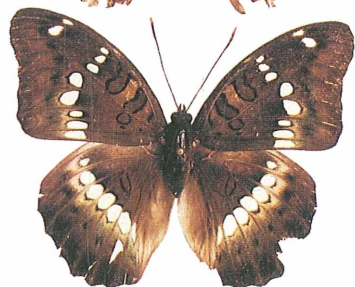
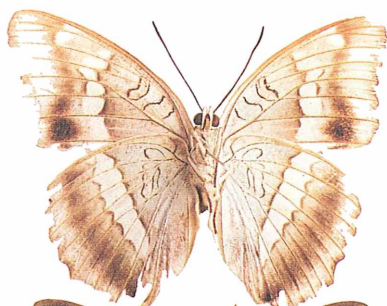
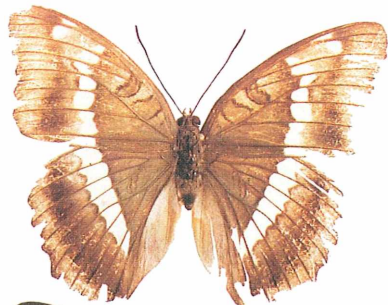
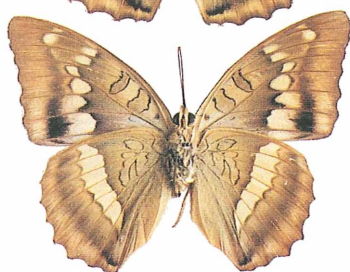
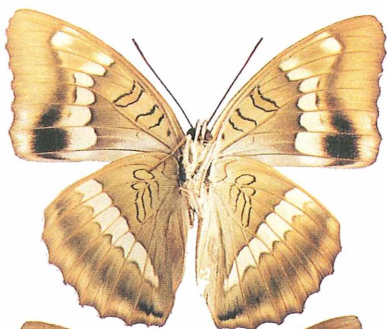
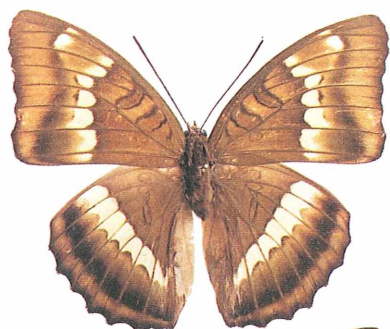
Colour plate XV

HUANG, H.: Some new nymphalids from the valleys of Nuijiang and Dulongjiang, China (Lepidoptera, Nymphalidae). – *Atalanta* **33** (3/4): 339–360.

- Fig. 1: *Euthalia alpherakyi alpherakyi* male upperside (Hunan).
Fig. 2: *Euthalia aristides* male upperside (Sichuan).
Fig. 3: *Euthalia alpherakyi alpherakyi* male underside (Hunan).
Fig. 4: *Euthalia aristides* male underside (Sichuan).
Fig. 5: *Euthalia yasuyukii* male upperside (Anhui).
Fig. 6: *Euthalia mingyiae* holotype male upperside.
Fig. 7: *Euthalia yasuyukii* male underside (Anhui).
Fig. 8: *Euthalia mingyiae* holotype male underside.

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Colour plate XV



Colour plate XVI

HUANG, H.: Some new nymphalids from the valleys of Nujiang and Dulongjiang, China (Lepidoptera, Nymphalidae). – *Atalanta* **33** (3/4): 339–360.

- Fig. 1: *Neptis themis theodora* male upperside (Qiqi, Nujiang, Yunnan).
Fig. 2: *Neptis themis theodora* f. *sylvarum* male upperside (Qiqi, Nujiang, Yunnan).
Fig. 3: *Neptis nemorum nemorum* male upperside (Gazu, Nujiang, Yunnan).
Fig. 4: *Neptis qianweiguoi* holotype male upperside.
Fig. 5: *Neptis themis theodora* male underside (Qiqi, Nujiang, Yunnan).
Fig. 6: *Neptis themis theodora* f. *sylvarum* male underside (Qiqi, Nujiang, Yunnan).
Fig. 7: *Neptis nemorum nemorum* male underside (Gazu, Nujiang, Yunnan).
Fig. 8: *Neptis qianweiguoi* holotype male underside.

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Colour plate XVI



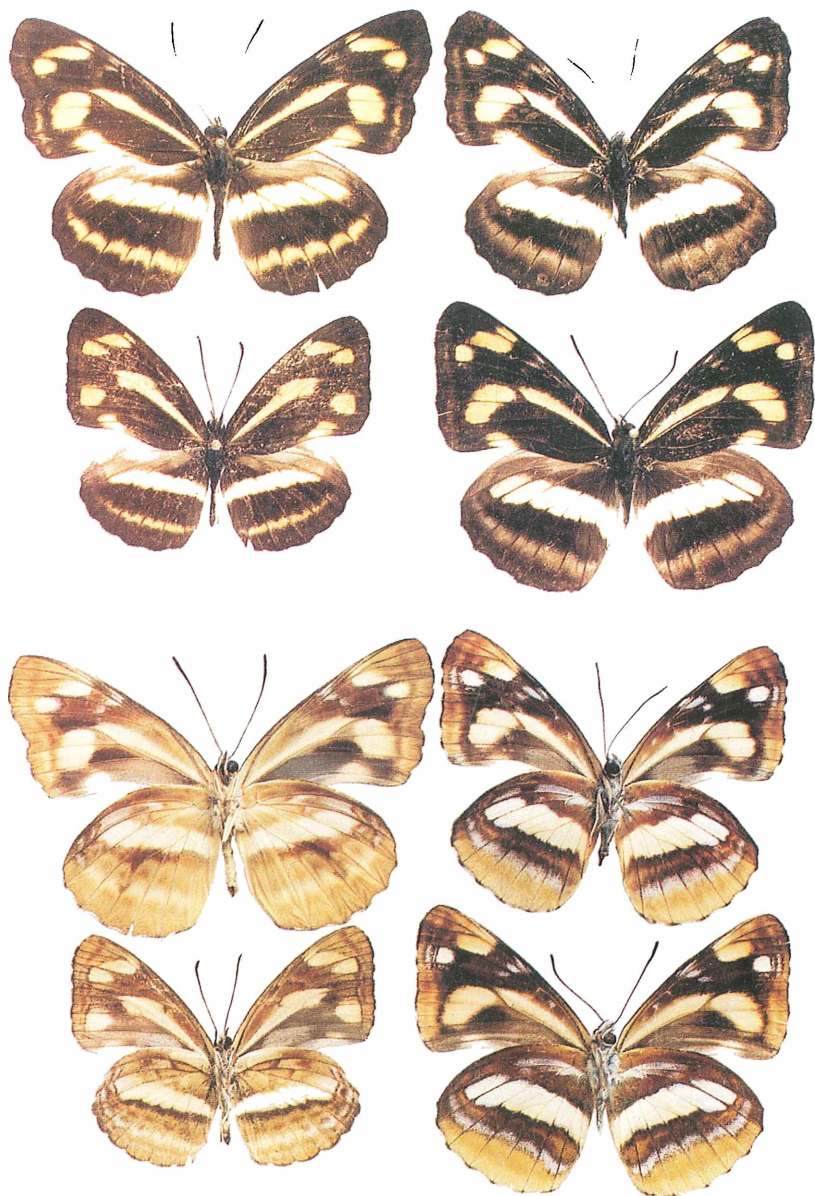
Colour plate XVII

HUANG, H.: Some new nymphalids from the valleys of Nujiang and Dulongjiang, China (Lepidoptera, Nymphalidae). – *Atalanta* **33** (3/4): 339–360.

- Fig. 1: *Neptis cydippe yongfui* holotype male upperside.
Fig. 2: *Pantoporia bieti lixingguoi* holotype male upperside.
Fig. 3: *Neptis lixinghei* holotype male upperside.
Fig. 4: *Neptis qianweiguoi* paratype male upperside (Longyuan, Dulongjiang, Yunnan).
Fig. 5: *Neptis cydippe yongfui* holotype male underside.
Fig. 6: *Pantoporia bieti lixingguoi* holotype male underside.
Fig. 7: *Neptis lixinghei* holotype male underside.
Fig. 8: *Neptis qianweiguoi* paratype male underside (Longyuan, Dulongjiang, Yunnan).

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Colour plate XVII



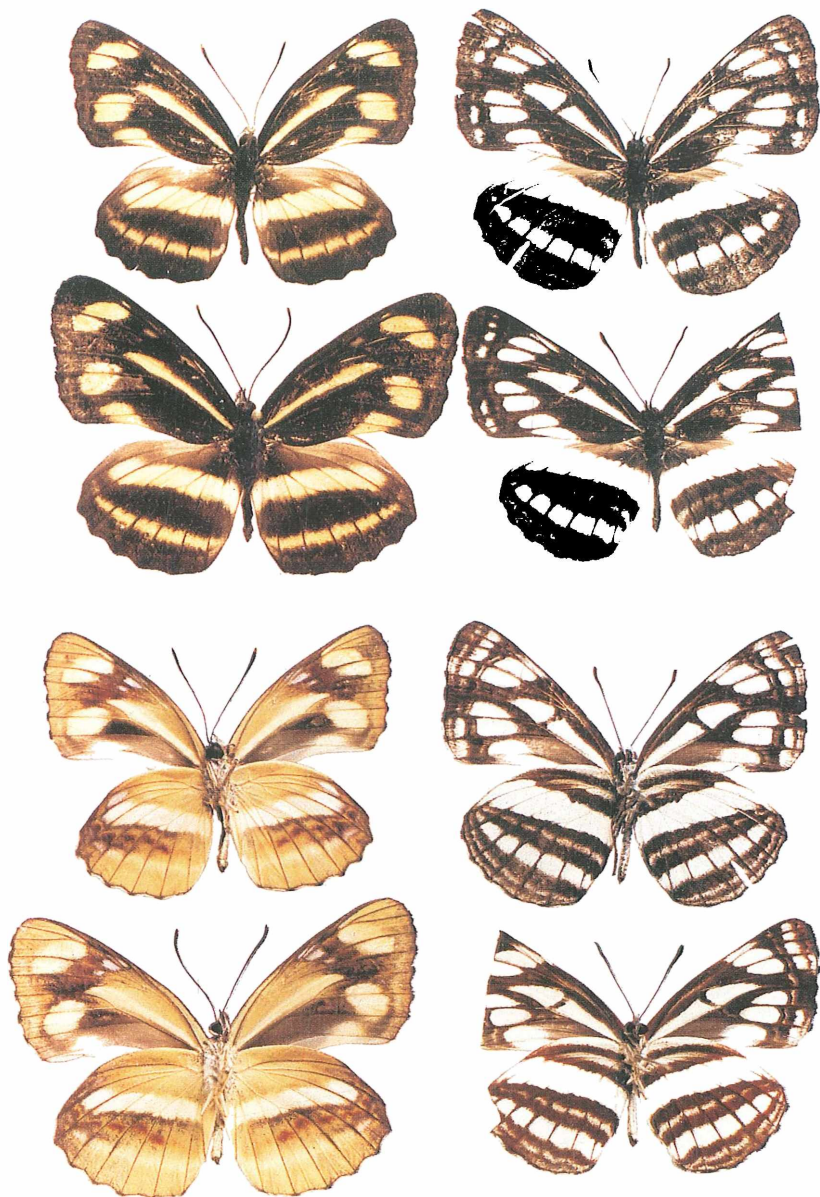
Colour plate XVIII

HUANG, H.: Some new nymphalids from the valleys of Nujiang and Dulongjiang, China (Lepidoptera, Nymphalidae). – *Atalanta* **33** (3/4): 339–360.

- Fig. 1: *Neptis antilope wuhaii* holotype male upperside.
Fig. 2: *Neptis antilope wuhaii* paratype male upperside (Nidadan, Nujiang, Yunnan).
Fig. 3: *Neptis mahendra dulongensis* holotype male upperside.
Fig. 4: *Neptis mahendra ursula* male upperside (Lisadi, Nujiang, Yunnan).
Fig. 5: *Neptis antilope wuhaii* holotype male underside.
Fig. 6: *Neptis antilope wuhaii* paratype male underside (Nidadan, Nujiang, Yunnan).
Fig. 7: *Neptis mahendra dulongensis* holotype male underside.
Fig. 8: *Neptis mahendra ursula* male underside (Lisadi, Nujiang, Yunnan).

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Colour plate XVIII



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Artikel/Article: [Some new nymphalids from the valleys of Nujiang and Dulongjiang, China \(Lepidoptera, Nymphalidae\) 339-360](#)