Atalanta (Dezember 2002) 33 (3/4): 361-372, col. pls XIX-XXIIIa, Würzburg, ISSN 0171-0079

Some new satyrids of the tribe Lethini from China¹

(Lepidoptera, Satyridae)

by HAO HUANG received 2.IX.2002

Abstract: This is the second of a series of papers dealing with the butterfly material obtained during my 2002 expedition to Nujiang and Dulongjiang, Yunnan. Two new subspecies of the genus *Neope*, one new species of the genus *Zophoessa*, one new species and three new sub-species of the genus *Lethe* are described and compared with their most allied taxa. In addition a new species of the genus *Neope* from my 2000 expedition to Chayu, S.E. Tibet, is described. All type specimens are preserved in Qingdao Education College and my private collection.

Neope oberthueri qiqia subspec. nov. (colour plate XIX, figs. 3, 7)

Diagnosis

Hitherto only two subspecies of N. oberthueri LEECH, 1891 are known: ssp. oberthueri from Sichuan (type locality: Omei), Shaanxi and Henan, ssp. *yangbiensis* Li, 1995 from N. Yunnan (type locality: Yangbi, near Dali). This new subspecies from Nujiang is somewhat similar to ssp. *yangbiensis*, but can be distinguished from the latter as well as from ssp. *oberthueri* by the following combination of characters in the male:

1) On the upperside of both wings, the postdiscal eyespots are rather prominent, with yellowish oval rings as broad as in ssp. yangbiensis, not obsolescent as in ssp. oberthueri; however those rings are apparently darker than in ssp. yangbiensis, not so bright yellowish as in the latter.

2) On forewing underside, the postdiscal eyespots are pale brown as in ssp. oberthueri, not so bright yellow as in ssp. yangbiensis, the blackish discal band inside of the eyespots is as broad as in ssp. oberthueri, much narrower than in ssp. yangbiensis, the subbasal areas in spaces 1b and 2 are yellowish brown, brighter than in ssp. oberthueri but not so golden yellow as in ssp. yangbiensis.

3) Hindwing underside is extensively dusted with whitish scales as in ssp. yangbiensis, but not

so densely as in that ssp., nevertheless much brighter in appearance than in ssp. *oberthueri*. 4) On hindwing underside, the two whitish patches in costa and base of space 3 are faint as in ssp. *yangbiensis*, not so bright and in sharp contrast with the dark ground colour as in ssp. oberthueri.

Remarks

These three subspecies of N. oberthueri need a revision of their ranks based upon examination of male genitalia in future. I have no material of both ssp. oberthueri and ssp. yangbiensis at

Report of H. HUANG's 2002 expedition to N.W. Yunnan for Lepidoptera. Part 2. 1

present. It is possible that they are not conspecific with one another. Photos will be taken of the male genitalia of ssp. *qiqia* and published in my thorough report of the 2002 expedition.

Type data

Holotype ඵ: Length of forewing: 32 mm. Qiqi, Nujiang valley, N.W. Yunnan, June 20th 2002. Paratypes: 6 ඵඵ, Qiqi, June 19th–21st 2002.

Etymology

The subspecific name is derived from the type locality of this new subspecies.

Neope pulaha **nuae** subspec. nov. (colour plate XIX, figs. 2, 6)

Specific classification Three species are recognized from the *Neope pulaha-pulahoides-ramosa* complex:

1) Neope pulaha (Moore, 1857)

Forewing upperside with male brand visible to the naked eye. Male clasp narrower, with apex protruding as a slender needle (a photo can be found in HUANG, 2001: 132, fig. 109; and a painting can be found in FUJIOKA, 1970: 62, fig. 14) (these characters according to FUJIOKA, 1970).

ssp. *pulaha* (col. pl. XIX, figs. 4, 8) (type locality: Sikkim) Sikkim, Bhutan, E. Nepal, S.E. Tibet (Namjagbarwa area only) (synonym: *Neope pulahoides xizangana* WANG, 1994 type locality: Linzhi).

ssp. didia (FRUHSTORFER, 1909) (type locality: Taiwan) Taiwan only.

ssp. pandyia (TALBOT, 1947) (type locality: Mussooree) N.W. Himalayas, W. Nepal.

ssp. emeinsis Lı, 1995 (type locality: Omei) Sichuan.

2) Neope pulahoides (Moore, 1892)

Forewing upperside with male brand invisible to the naked eye (this character according to FUJIOKA, 1970), pale bar before the end of the cell continuing across the cell at full width. Male clasp narrower, with apex gently pointed (a painting can be found in FUJIOKA, 1970: 62, fig. 14) (this character according to FUJIOKA, 1970).

ssp. *pulahoides* (col. pl. XIX, figs. 1, 5) (type locality: Karen Hills) Assam, Karen Hills, Nujiang valley (new record for Chinese fauna).

ssp. tamur Fusioкa, 1970 (type locality: East Nepal) East Nepal.

3) Neope ramosa LEECH, 1890 (type locality: W. China) W. & C. & E. China.

Forewing upperside with male brand prominent, pale bar before the end of the cell obsolescent. Size much bigger. Male clasp broader, with apex obtuse (a photo can be found in HUANG, 2001: 132, fig. 111).

ssp. chuni MELL, 1923 (type locality: Kuatun, Fujian) Fujian only.

It is very possible that *chuni* is only a spring form of *ramosa*, as all MELL's types came from March and April.

Another taxon, "Neope pulaha brunnescens MELL, 1923" from Guangdong and Zhejiang was proved by Мачимі Таканазні (in Коїwача, 1993) to be the spring form of Neope bremeri bremeri FELDER, 1862.

Diagnosis

The new subspecies from the Nujiang Valley can be easily distinguished from all the known subspecies of *N. pulaha* by the following combination of characters:

1) On forewing upperside, the pale spot before the end of the cell is enlarged along the end of the radius, absent from the discocellular, somewhat like in the wet season form of ssp. *pandyia*, not forming a distinct bar across the cell, whereas in all seasonal forms of ssp. *pulaha*, the dry season form of ssp. *pandyia* and the wet season form of ssp. *emeinsis*, it continues across the cell and becomes thinner to the end of the cubitus, whereas in ssp. *didia* it is replaced by a slender line along the discocellular.

2) On hindwing upperside, the yellowish markings in discal and postdiscal areas are fully developed as in ssp. *didia*, more pronounced than in the other three subspecies.

3) On hindwing underside, the basal half inside the discal line is darker while the outer half is much paler than in all other subspecies, thus the two areas are more in contrast with each other than in all the known seasonal forms of other subspecies.

Remarks

Hitherto only ssp. *pulaha*, ssp. *pandyia* and ssp. *didia* have their seasonal variations known. The unique holotype of the new subspecies belongs to the wet season form and so does ssp. *emeinsis* (holotype from August). In distribution the new subspecies is closer to ssp. *pulaha* and ssp. *emeinsis* than to the others.

Type data

Holotype σ : length of forewing: 31 mm. On path between Qiqi and Dongshaofang, Nujiang valley, Yunnan, June 23rd 2002.

Etymology

This new subspecies is named after the tribe of the Nu.

Neope chayuensis spec. nov. (colour plate XXIIIa, figs. 1, 3)

= Neope pulahoides pulahoides (MOORE, 1892): HUANG, 2001, Neue ent. Nachr. **51**: 107, 132, fig. 110 (misidentification).

Diagnosis

This new species closely resembles. *Neope pulahoides*, but can be distinguished from the latter by the following combination of characters:

1) Size is remarkably larger, average forewing length 37 mm against 32 mm in *N. pulahoides*.

2) Hindwing termen is more protruded and acute-angled at vein 4 than in *N. pulahoides*.

3) On forewing upperside, the pale spot before the end of the cell becomes narrower and obscure at the end of the cubitus, not continuing across the cell at full width as in all seasonal forms of *N. pulahoides*.

4) Male genitalia are different: male clasp is thicker than in *N. pulahoides*, with a process pointing upwards at the apex, not pointing forwards as in *N. pulahoides*.

This new species can be distinguished from *N. pulaha* by the following combination of characters:

1) On forewing upperside, there is no male brand visible to the naked eye.

2) Size is constantly larger than in *N. pulaha*, average forewing length 37 mm against 32 mm in *N. pulaha*.

3) Hindwing underside pattern is similar to that of *N. ramosa*, much brighter with more ocelli in the subbasal area than in *N. pulaha*.

4) Male genitalia are different: male clasp is thicker, with a blunt process pointing upwards near the apex, whereas in *N. pulaha* the apex of the clasp has its process pointing forwards as a needle.

This new species can be distinguished from *N. ramosa* (col. pl. XXIIIa, figs. 2, 4) by the following combination of characters:

1) On forewing upperside, the male brand, which is heavily marked in *N. ramosa*, is absent.

2) Size is a little smaller than in the corresponding wet season form of *N. ramosa*, average forewing length 37 mm against 41 mm in *N. ramosa*.

3) On forewing upperside, the spot before the end of the cell is much better marked than in *N. ramosa.*

4) Hindwing termen is more protruded at vein 4 than in *N. ramosa*.

5) Male genitalia are different: apex of the clasp has a process pointing upwards, not pointing forwards as in *N. ramosa*.

Remarks

To distinguish the new species, I provide the photos of specimens of *N. pulaha pulaha*, *N. pulaha qiqia*, *N. ramosa* and *N. pulahoides pulahoides* in this paper. Photographs will be taken of the male genitalia and published in my future report.

Type data

Holotype ♂: length of forewing: 37 mm. Tiyu, Chayu, S.E. Tibet, August 2nd 2000. Paratypes: 6 ♂♂, Lower Chayu and Tiyu, Tibet, late July to early August 2000.

Etymology

The specific name is derived from the type locality of the new species.

Zophoessa lisuae spec. nov. (colur plate XXI, figs.1, 5)

Diagnosis

This new species belongs to the Zophoessa sura (DOUBLEDAY, 1850)-group (sensu H. DE LESSE, 1957) and closely resembles Z. neofasciata (LEE, 1985) (col. pl. XXI, figs. 2, 6) (type locality: Gengma, S.W. Yunnan) (= Lethe nujiangensis YOSHINO, 1997 type locality: Mts. Gaoligongshan syn. nov.) and Z. baileyi (SOUTH, 1913) (col. pl. XXI, figs. 3, 7) (type locality: Chayu area, S.E. Tibet), but can be distinguished from them by the following combination of characters:

1) Like in *Z. neofasciata*, the forewing is broader than that of *Z. baileyi*, the hindwing is shorter and broader than in *Z. baileyi*.

2) Forewing upperside discal male brand is very extensive as in *Z. baileyi*, conjoined from dorsum to vein 4, whereas in *Z. neofasciata* it is usually interrupted by veins and not reaching vein 4.

3) On hindwing upperside, the dark postdiscal line is clearly marked as in Z. baileyi, not obsolescent as in Z. neofasciata.

4) Size is a little larger than in Z. *neofasciata*, forewing length 27 mm against 24 mm in Z. *neo-fasciata* (12 males examined).

5) On forewing underside, there is no submarginal lilacine line that is marked in Z. baileyi.

6) On hindwing underside, postdiscal and antediscal lines are even in width throughout as in *Z. baileyi*, whereas in *Z. neofasciata* they become much wider towards costa; both lines are more remote from each other than in either *Z. baileyi* or *Z. neofasciata*.

7) On hindwing underside, the upper half of the discal area between antediscal and postdiscal lines is pale brown, concolorous with ground colour, not silvery violet as in *Z. neofasciata*.

8) On hindwing underside, the postdiscal ocelli are all black-ringed as in *Z. baileyi*, whereas in *Z. neofasciata*, they are only black-ringed in spaces 1c and 2.

9) Male genitalia are different (two males from Nujiang valley and one male from S.E. Tibet of *Z. baielyi*, 7 males from Yaojiaping, Nujiang valley of *Z. neofasciata* dissected): size is nearly as in *Z. neofasciata*, much smaller than in *Z. baileyi*; uncus is conspicuously longer than in *Z. neofasciata*, nearly even in width throughout, not apparently swollen before the tip as in *Z. neofasciata*; clasp is much longer than in *Z. neofasciata*.

Remarks

Concerning the higher classification of the genus *Lethe* HÜBNER, [1818], BINGHAM (1905) divided the genus into three groups, according to sex-marks, FRUHSTORFER (1911) divided it into eight groups, besides retaining *Neope* MOORE, 1866 as a distinct genus, EVANS (1932) divided it into three groups according to wing venation and underside wing pattern, H. DE LESSE (1957), concerning male genitalia and external features almost following EVANS, divided it into three genera, corresponding to EVANS' three groups, viz. *Blanaida* KIRBY, 1877 (= *Neope*), *Zophoessa* DOUBLEDAY, [1849] and *Lethe*. In this paper I follow DE LESSE.

In the Z. sura-group (sensu DE LESSE, 1957), the new species should be placed into a subgroup (corresponding to the genus Kerrata MOORE, 1890—genotype: tristigmata), which is characterized in external features by the black and sharply marked male brand on the forewing upperside and rather smooth underside bands (not zigzag), consisting of Z. nigrifascia (LEECH, 1890) from W. & C. China, Z. ocellata (POUJADE, 1885) (col. pl. XXI, figs. 4, 8) from Sichuan, Z. baileyi from S.E. Tibet and N.W. Yunnan, Z. tristigmata (ELWES, 1887) (= lyncus DE NICEVILLE, 1897) from Sikkim and Assam, Z. neofasciata from W. Yunnan and Z. wui (HUANG, 1999) from S.E. Ti-

from Sikkim and Assam, Z. neofasciata from W. Yunnan and Z. wui (HUANG, 1999) from S.E. Ti-bet. At present only specimens of Z. tristigmata are not available to me, however the new spe-cies can be very easily distinguished from Z. tristigmata as well as from Z. ocellata by the very much broader male brand on the forewing upperside. I will publish photos of the male genita-lia of almost all species of this subgroup (except only Z. tristigmata) in my future report. Lethe nujiangensis, based upon a single male taken from Gaoligongshan (judging from Yo-SHINO's descriptions of other new taxa in the same paper, the exact type locality of nujian-gensis is most probably on the road between Lushui and Pianma), is undoubtedly a junior synonym of Z. neofasciata. I have obtained 12 males from Yaojiaping, on the road between Lushui and Pianma, and they are exactly identical with YOSHINO's unique holotype. My collect-ing locality of neofasciata is just one of the paratype localities of Z. neofasciata, although the original illustration of the holotype of neofasciata is very obscure due to the bad printing. It is very obvious that YOSHINO, when describing his new species, entirely overlooked LEE's descrip-tion of neofasciata. Z. neofasciata is somewhat variable in the extension of the male brand on the forewing upperside and the shape of the hindwing: the male brand can be entering space 3 or missing from space 3, the hindwing termen can be a little protruded at vein 4 or rather smooth at vein 4. smooth at vein 4.

It should be noted that *Z. lisuae* is almost sympatric with *Z. baileyi* in the northern part of the Nujiang valley of W. Yunnan, they have been encountered in localities no more than 10 km apart from each other. *Z. neofasciata* seems to be restricted to the central and southern parts of the Nujiang valley in W. Yunnan.

Type data

Holotype J: length of forewing: 27 mm. On road between Kongdang and Gongshan, Nujiang valley, Yunnan, July 17th 2002.

Etymology

The specific name is derived from the tribe of the Lisu of Nujiang area.

Lethe umedai albofasciata subspec. nov. (colour plate XX, figs. 2-4, 6-8)

Diagnosis

Hitherto only the nominotypical subspecies of *Lethe umedai* KOIWAYA, 1998 is known from Sichuan (type locality: Kangding) and N. Vietnam (MONASTYRSKY & DEVYATKIN, 2000: 480), the new subspecies from the Dulongjiang Valley can be easily distinguished from the former by the following combination of characters in the male: 1) On forewing upperside, the subapical black ocellus has no white pupil. 2) On forewing underside, the dark brown zigzag discal band is margined by a whitish band on its outside, whereas in ssp. *umedai* the area just outside the discal band is yellowish brown

and not forming a band.

3) On hindwing underside, the discal area is more dusted with white scales than in ssp. umedai.

4) On hindwing underside, the discal line is more strongly zigzag in space 1c, always connected to the subbasal line, whereas in ssp. *umedai*, the discal line is never touching the subbasal line in space 1c.

Remarks

The female of ssp. *umedai* is still unknown at present. From the Dulongjiang Valley, I obtained a female of the new subspecies, which has a very broad white discal band on both sides of the forewing. The female seems to be very rare in nature, this is reflected by the fact that I captured 14 males but only encountered one female.

The male genitalia of the new subspecies have been examined and no difference can be found from the nominotypical subspecies.

Type data

Holotype $\vec{\sigma}$: length of forewing: 31 mm. Ban, Dulongjiang valley, Yunnan, 2400 m, July 12th 2002.

Paratypes: 13 ♂♂, same data as holotype. 1 ♀, on path between Xiongdang and Mabiluo, Dulongjiang valley, Yunnan, 2300 m, July 13th 2002.

Etymology

The subspecific name is due to the whitish discal band on the forewing underside in the male and the white discal band on both sides of the forewing in the female.

> *Lethe liae* spec. nov. (colour plate XX, figs. 1, 5)

Diagnosis

This new species belongs to the *Lethe trimacula* LEECH, 1890-group (sensu DE LESSE, 1957) and is very similar to *L. umedai*, *L. proxima* LEECH, 1894 and *L. trimacula*, but can be distinguished from all of them by the following combination of characters in the male:

1) On forewing upperside, the subapical black ocellus is ill-defined as in *L. proxima*, not clearly defined as in either *L. trimacula* or *L. umedai*.

2) On forewing underside, there is no serrate submarginal line outside the subapical ocellus in spaces 3–7, such a serrate line is prominent in *L. proxima, L. trimacula* and *L. umedai*.

3) On forewing underside, the dark brown discal band is rather smooth, not so strongly zigzag as in *L. umedai* and *L. trimacula*, and is margined by whitish colouring on its outer side, almost forming an additional band as in *L. trimacula* and *L. umedai albofasciata*, different from that of *L. proxima* and *L. umedai umedai*.

4) On forewing underside, the dark brown discal band is curved inwards gently in space 3, almost as in *L. umedai*, not zigzag as in *L. trimacula* or curved outwards as in *L. proxima*.

5) On hindwing underside, the subapical double ocelli are directed to the tornus as in *L. umedai*, not directed to the end of vein 3 as in *L. proxima* and *L. trimacula*.

6) On hindwing underside, as in *L. umedai*, the discal line is much closer to the subapical ocelli in space 6 than in *L. proxima* and *L. trimacula*.

7) Male genitalia are very different: uncus is as long as in *L. umedai* and *L. proxima*, much longer than in *L. trimacula*, and is even in width as in *L. trimacula*, not swollen at the middle as in

L. umedai and L. proxima; gnathos (brachium) is as long as that of L. umedai and L. proxima, extending beyond the middle of uncus, much longer than in *L. trimacula*.

Remarks

I will provide photos of the male genitalia of *L. liae* and *L. umedai albofasciata* in my future report.

Type data

Holotype 3: length of forewing: 29 mm. Qigi, Nujiang valley, Yunnan, 2100 m, July 29th 2002.

Etymology

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

Lethe latiaris lishadii subspec. nov. (colour plate XXII, figs. 4, 8)

Diagnosis

This new subspecies is very similar to the nominotypical subspecies of *Lethe latiaris* HEWITSON, 1863 (col. pl. XXII, figs. 3, 7) from Sikkim (type locality), Bhutan, Assam, S.E. Tibet (Metok only) and N.W. Yunnan (Dulongjiang Valley only), but can be distinguished from the latter as well as from ssp. *perimele* FRUHSTORFER, 1911 from S. Burma (type locality: Tandong, Tenasserim), Karen Hills, Vietnam and Laos by the following combination of characters in the male: 1) Underside ground colour is more yellowish and less brownish than in the other subspecies.

2) On hindwing underside, all postdiscal ocelli are much smaller than in the other subspecies.

3) On hindwing underside, the dark brown antediscal and discal lines are more remote from each other than in the other subspecies.

Remarks

In distribution, the new subspecies is very close to ssp. *latiaris*, because I encountered one pair of ssp. latiaris in the Dulongjiang Valley. The above mentioned diagnostic characters are not due to seasonal variations. In my collection, the specimens of L. latiaris latiaris have seasonal variations as follows: one pair from Metok, S.E. Tibet, June has its underside ground colour much more yellowish than the five males from Metok, August and September, without any reddish tint, one pair from Dulongjiang valley, June is rather reddish brown as specimens from Metok, August and September. The type series of the new subspecies was taken at the Nujiang Valley, June, however, they are constantly different from all specimens of ssp. latiaris in the above mentioned diagnostic characters 2 and 3.

I have dissected all specimens of L. latiaris in my collection and cannot find any reliable difference among them in male genitalia.

From Yunnan, there is another little known species described, which is related to L. latiaris, viz. Lethe unistigma LEE, 1985. According to LEE's description, *L. unistigma* is of smaller size (length of forewing 27 mm against 30–32 mm in *latiaris* and *lishadii*), upperside forewing male brand absent (prominent in both *latiaris* and *lishadii*) and tuft of recumbent black hairs on hindwing upperside is not placed near the cell (near the cell in both latiaris and lishadii), thus has nothing to do with L. latiaris lishadii.

Recently two new species were added as relatives of *L. latiaris*, viz. *L. guansia* SUGIYAMA, 1999 from Guangxi and *L. konkakini* MONASTYRSKY & DEVYATKIN, 2000 from Vietnam. In my opinion, *L. konkakini* should be a valid species because it is sympatric with *L. latiaris perimele* in Vietnam. However, It is possible that *L. guansia* is a subspecies of *L. latiaris*, with the main difference only in the extension of the red colouring on the hindwing underside. The genitalia differences between *L. latiaris* and *L. guansia* are very slight and insufficient to support a specific rank of *guansia*. *L. latiaris lishadii* can be easily distinguished from *guansia* by the hindwing underside being without any reddish colouring, all postdiscal ocelli being much smaller and the antediscal line being remote from the discal line.

Type data

Holotype J: length of forewing: 30 mm. Lishadi, Nujiang valley, Yunnan, 1300 m, June 6th 2002.

Paratypes: 2 ♂♂. Lishadi, June 6th-7th 2002.

Etymology

The subspecific name is derived from the type locality of the new subspecies.

Lethe marginalis **obscurofasciata** subspec. nov. (colour plate XXII, figs. 2, 6)

Diagnosis

This new subspecies from the Nujiang Valley can be distinguished from the nominotypical subspecies of *L. marginalis* MOTSCHULSKY, 1860 (col. pl. XXII, figs. 1, 5) from Japan, Korea, C. & E. China and Sichuan by the following combination of characters in both sexes:

1) Upperside ground colour is more blackish and less brownish than in ssp. *marginalis*.

2) On forewing upperside, there is almost no trace of a pale discal band that is well marked from space 2 to costa in ssp. *marginalis*.

3) Underside ground colour is more grayish and less brownish than in ssp. marginalis.

4) On forewing underside, the dark discal band is only sparsely dusted with yellow scales on its outer side, not followed by a 1.5 mm-broad yellow band as in ssp. *marginalis*.

Remarks

There is no difference in male genitalia between the new subspecies and ssp. *marginalis*, I have dissected three males of ssp. *marginalis* from Sichuan and three males of the new subspecies. The above mentioned difference between the two taxa is not due to seasonal variation, because all the compared specimens were taken at July.

Type data

Holotype ở: length of forewing: 31mm. Gazu, Nujiang valley, Yunnan, 1800m, July 26th 2002. Paratypes: 7 ởở, 2 ♀♀, Gazu and Qiqi, July 24th–28th 2002; 4 ởở, Sijitong, Nujiang valley, Yunnan, 1900m, July 17th–22nd 2002.

Etymology

The subspecific name is due to the weakly marked discal band on both sides of the forewing.

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Explanation of colour plate XIX (p. 443):

- Fig. 1: Neope pulahoides pulahoides male upperside (Lishadi, Nujiang valley, June 2002).
- Fig. 2: Neope pulaha nuae subspec. nov. holotype male upperside.
- Fig. 3: Neope oberthueri qiqia subspec. nov. holotype male upperside.
- Fig. 4: Neope pulaha pulaha male upperside (Metok, Tibet, September 1995).
- Fig. 5: Neope pulahoides pulahoides male underside (Lishadi, Nujiang valley, June 2002).
- Fig. 6: Neope pulaha nuae subspec. nov. holotype male underside.
- Fig. 7: Neope oberthueri qiqia subspec. nov. holotype male underside.
- Fig. 8: Neope pulaha pulaha male underside (Metok, Tibet, September 1995).

Explanation of colour plate XX (p. 445):

- Fig. 1: Lethe liae spec. nov. holotype male upperside.
- Fig. 2: Lethe umedai albofasciata subspec. nov. holotype male upperside.
- Fig. 3: Lethe umedai albofasciata subspec. nov. paratype female upperside.
- Fig. 4: Lethe umedai albofasciata subspec. nov. paratype male upperside.
- Fig. 5: Lethe liae spec. nov. holotype male underside.
- Fig. 6: Lethe umedai albofasciata subspec. nov. holotype male underside.
- Fig. 7: Lethe umedai albofasciata subspec. nov. paratype female underside.
- Fig. 8: Lethe umedai albofasciata subspec. nov. paratype male underside.

Explanation of colour plate XXI (p. 447):

- Fig. 1: Zophoessa lisuae sp. nov. holotype male upperside.
- Fig. 2: Zophoessa neofasciata male upperside (Yaojiaping, Nujiang valley, Yunnan, June 2002).
- Fig. 3: Zophoessa baileyi male upperside (Qiqi, Nujiang valley, Yunnan, June 2002).
- Fig. 4: Zophoessa ocellata male upperside (S. Sichuan, June 1998).
- Fig. 5: Zophoessa lisuae spec. nov. holotype male underside.
- Fig. 6: Zophoessa neofasciata male underside (Yaojiaping, Nujiang valley, Yunnan, June 2002).
- Fig. 7: Zophoessa baileyi male underside (Qiqi, Nujiang valley, Yunnan, June 2002).
- Fig. 8: Zophoessa ocellata male underside (S. Sichuan, June 1998).

Explanation of colour plate XXII (p. 449):

- Fig. 1: Lethe marginalis marginalis male upperside (Qingchengshan, Sichuan, July 1991).
- Fig. 2: Lethe marginalis obscurofasciata subspec. nov. holotype male upperside.
- Fig. 3: Lethe latiaris latiaris male upperside (Dulong valley, Yunnan, June 2002).
- Fig. 4: Lethe latiaris lishadii sspec. nov. holotype male upperside.

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

Fig. 5: *Lethe marginalis marginalis* male underside (Qingchengshan, Sichuan, July 1991). Fig. 6: *Lethe marginalis obscurofasciata* subspec. nov. holotype male underside.

Fig. 7: Lethe latiaris latiaris male underside (Dulong valley, Yunnan, June 2002).

Fig. 8: Lethe latiaris lishadii subspec. nov. holotype male underside.

1	3
2	4
5	7
6	8

Explanation of colour plate XXIIIa (p. 451):

Fig. 1: Neope chayuensis spec. nov. holotype male upperside.

Fig. 2: Neope ramosa male upperside (Guatun, Fujian, July 1990).

Fig. 3: Neope chayuensis spec. nov. holotype male underside.

Fig. 4: Neope ramosa male underside (Guatun, Fujian, July 1990).

1	3
2	4

address of the author

HUANG HAO 5–3, East, 1# Dong-Ting-Hu Road Qingdao 266071 China email: cmdhhxx@hotmail.com Colour plate XIX

HUANG, H.: Some new satyrids of the tribe Lethini from China (Lepidoptera, Satyridae). Atalanta **33** (3/4): 361–372.

Fig. 1: Neope pulahoides pulahoides male upperside (Lishadi, Nujiang valley, June 2002).

Fig. 2: Neope pulaha nuae subspec. nov. holotype male upperside.

Fig. 3: Neope oberthueri qiqia subspec. nov. holotype male upperside.

Fig. 4: Neope pulaha pulaha male upperside (Metok, Tibet, September 1995).

Fig. 5: Neope pulahoides pulahoides male underside (Lishadi, Nujiang valley, June 2002).

Fig. 6: Neope pulaha nuae subspec. nov. holotype male underside.

Fig. 7: Neope oberthueri qiqia subspec. nov. holotype male underside.

Fig. 8: Neope pulaha pulaha male underside (Metok, Tibet, September 1995).

1	3
2	4
5	7
6	8

Colour plate XIX



Colour plate XX

HUANG, H.: Some new satyrids of the tribe Lethini from China (Lepidoptera, Satyridae). Atalanta **33** (3/4): 361–372.

Fig. 1: Lethe liae spec. nov. holotype male upperside.

Fig. 2: Lethe umedai albofasciata subspec. nov. holotype male upperside.

Fig. 3: Lethe umedai albofasciata subspec. nov. paratype female upperside.

Fig. 4: Lethe umedai albofasciata subspec. nov. paratype male upperside.

Fig. 5: Lethe liae spec. nov. holotype male underside.

Fig. 6: Lethe umedai albofasciata subspec. nov. holotype male underside.

Fig. 7: Lethe umedai albofasciata subspec. nov. paratype female underside.

Fig. 8: Lethe umedai albofasciata subspec. nov. paratype male underside.

1	3
2	4
5	7
6	8



Colour plate XX

HUANG, H.: Some new satyrids of the tribe Lethini from China (Lepidoptera, Satyridae). Atalanta 33 (3/4): 361-372.

Fig. 1: Lethe liae spec. nov. holotype male upperside.

Fig. 2: Lethe umedai albofasciata subspec. nov. holotype male upperside.

Fig. 3: Lethe umedai albofasciata subspec. nov. paratype female upperside.

Fig. 4: Lethe umedai albofasciata subspec. nov. paratype male upperside.

Fig. 5: Lethe liae spec. nov. holotype male underside.

Fig. 6: Lethe umedai albofasciata subspec. nov. holotype male underside.

Fig. 7: *Lethe umedai albofasciata* subspec. nov. paratype female underside. Fig. 8: *Lethe umedai albofasciata* subspec. nov. paratype male underside.

1	3
2	4
5	7
6	8



Colour plate XXI

HUANG, H.: Some new satyrids of the tribe Lethini from China (Lepidoptera, Satyridae). Atalanta **33** (3/4): 361–372.

Fig. 1: *Zophoessa lisuae* sp. nov. holotype male upperside.

Fig. 2: Zophoessa neofasciata male upperside (Yaojiaping, Nujiang valley, Yunnan, June 2002).

Fig. 3: Zophoessa baileyi male upperside (Qiqi, Nujiang valley, Yunnan, June 2002).

Fig. 4: Zophoessa ocellata male upperside (S. Sichuan, June 1998).

Fig. 5: Zophoessa lisuae spec. nov. holotype male underside.

Fig. 6: Zophoessa neofasciata male underside (Yaojiaping, Nujiang valley, Yunnan, June 2002).

Fig. 7: Zophoessa baileyi male underside (Qiqi, Nujiang valley, Yunnan, June 2002).

Fig. 8: Zophoessa ocellata male underside (S. Sichuan, June 1998).

1	3
2	4
5	7
6	8

Colour plate XXI

Colour plate XXII

HUANG, H.: Some new satyrids of the tribe Lethini from China (Lepidoptera, Satyridae). Atalanta **33** (3/4): 361–372.

Fig. 1: Lethe marginalis marginalis male upperside (Qingchengshan, Sichuan, July 1991).

Fig. 2: Lethe marginalis obscurofasciata subspec. nov. holotype male upperside.

Fig. 3: Lethe latiaris latiaris male upperside (Dulong valley, Yunnan, June 2002).

Fig. 4: Lethe latiaris lishadii subspec. nov. holotype male upperside.

Fig. 5: *Lethe marginalis marginalis* male underside (Qingchengshan, Sichuan, July 1991).

Fig. 6: Lethe marginalis obscurofasciata subspec. nov. holotype male underside.

Fig. 7: Lethe latiaris latiaris male underside (Dulong valley, Yunnan, June 2002).

Fig. 8: Lethe latiaris lishadii subspec. nov. holotype male underside.

1	3
2	4
5	7
6	8

Colour plate XXII



Colour plate XXIIIa

HUANG, H.: Some new satyrids of the tribe Lethini from China (Lepidoptera, Satyridae). Atalanta **33** (3/4): 361–372.

Fig. 1: Neope chayuensis spec. nov. holotype male upperside.

Fig. 2: Neope ramosa male upperside (Guatun, Fujian, July 1990).

Fig. 3: Neope chayuensis spec. nov. holotype male underside.

Fig. 4: Neope ramosa male underside (Guatun, Fujian, July 1990).



Farbtafel XXIIIb

EITSCHBERGER, U. & P. HOFMANN: Morphologische Untersuchungen an einigen Aporia crataegi-Populationen aus dem Iran (Lepidoptera, Pieridae). – Atalanta **33** (3/4): 373–387.

Abb. 1a, b: Erwachsene L4-Raupe von *Aporia crataegi rhodinea* Hofmann & Eckweiler, 2001, Iran, Yazd, Shir Kuh, 5.V.2002. Foto: ten Hagen.

Abb. 2a, b: Puppe, lateral und dorsal von *Aporia crataegi rhodinea* Hofmann & Eckweiler, 2001, Iran, Yazd, Shir Kuh, 5.V.2002. Foto: ten Hagen.

1a		
1b	2a	2b



Colour plate XXIIIa / Farbtafel XXIIIb

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Digitale Literatur/Digital Literature

Zeitschrift/Journal: Atalanta

Jahr/Year: 2002

Band/Volume: 33

Autor(en)/Author(s): Huang Hao

Artikel/Article: <u>Some new satyrids of the tribe Lethini from China</u> (Lepidoptera, Satyridae) 361-372