

Notes on the genus *Aulocera* BUTLER from China with description of a new species from Yunnan (Lepidoptera, Nymphalidae)

by

HAO HUANG & CHUN-HAO WANG

received 21.III.2017

Abstract: *Aulocera jingxiaomeiae* spec. nov. (Satyrinae: Satyrini) is described from NW. Yunnan, China. *Aulocera chumbica* MOORE, [1892] is revalidated as a separate species from *A. swaha* (KOLLAR, [1844]), with *A. padma* var. *fulva* EVANS, 1923 as its subspecies, viz. *A. chumbica fulva* EVANS, 1923 stat. nov. *Aulocera magica sakaii* SUGIYAMA, 2015 stat. nov. is transferred from *A. merlina sakaii* SUGIYAMA, 2015. The ♂ genitalia of *Aulocera jingxiaomeiae* spec. nov., *A. loha chinensis* SAKAI et al., 2001, *A. padma verres* FRUHSTORFER, 1911, *A. saraswati chayuwensis* HUANG, 2001, *A. swaha garuna* FRUHSTORFER, 1911, *A. chumbica chumbica* MOORE, 1893 and *A. chumbica fulva* EVANS, 1923 are illustrated in details.

Introduction: We have made a rather complete collection of the Chinese species of the genus *Aulocera* BUTLER, 1867. In this paper we focus on a new species and its allies, but omit *A. ellenae* (GROSS, 1959), *A. koiwayai* SAKAI et al., 2001 and the *A. pumilus* (FELDER & FELDER, [1867]) group. We only examined a few specimens of *A. ellenae sichuana* SAKAI et al., 2001 from western Sichuan, however we did not see any specimens of *A. ellenae ellenae* (GROSS) and *A. koiwayai* SAKAI et al.. The *A. pumilus* (FELDER & FELDER) group is full of taxonomic problems and deserves a separate paper in the future.

Abbreviations:

IZAS: Institute of Zoology, Chinese Academy of Science, Beijing, P. R. China.

CHH: Collection of Hao Huang, Qingdao.

CLJ: Collection of Jian Luo, Beijing.

CWCH: Collection of Chun-Hao Wang, Beijing.

CZJQ: Collection of Jian-Qing Zhu, Shanghai

HT: Holotype.

PT: Paratype.

TL: Type locality

Description

Aulocera jingxiaomeiae spec. nov. (figs. 1, 17, 18, 30)

HT ♂ (figs. 1, 30): China, Yunnan Province, Diqing Tibetan Autonomous Prefecture, Weixi County, Pantiange, 2500 m, 20.VII.1981, S.-Y. WANG leg., deposited in IZAS.

PTs: 2 ♂♂ (CHH, CLJ), Yunnan, Diqing, Weixi County, 2900 m, 8.VIII.2016, X.-M. JING & C.-H. WANG leg.; 1 ♂ (CWCH), Yunnan, Diqing, Weixi, Machang, 2900 m, 16.VII.2006, A.-M. CHEN leg.

Etymology: This new species is named after Ms. XIAO-MEI JING, the wife of the junior author, who collected one of the paratypes.

Diagnosis: This new species is similar to *A. loha* (DOHERTY, 1886) in having no visible ♂ brand on the forewing upper-side, but can be easily distinguished from the latter by the following combination of ♂ characters.

- 1) White discal spots in spaces 2-3 on forewing upperside with distal part black-dusted.
- 2) Whitish discal band on both sides of the hindwing entering the discocellular cell broadly, making the end of discocellular cell marked by a larger whitish patch than in *A. loha* (DOHERTY).

♂ genitalia:

- 3) Gnathos in lateral view straight, not upcurved as in *A. loha* (DOHERTY).
- 4) Upper branch of valva tapered in lateral view, not even in width throughout as in *A. loha* (DOHERTY).
- 5) Upper branch of valva wider in dorsal view.

This new species can be distinguished from other species of the genus *Aulocera* by the ♂ having no ♂ brand on the forewing upperside.

Remarks: This new species is sympatric with *A. loha chinensis* SAKAI et al., 2001 in all of the known localities. We dissected two ♂♂ of *A. jingxiaomeiae* spec. nov. and six ♂♂ of *A. loha chinensis* SAKAI et al. from various localities and found that the above-mentioned differences in the ♂ genitalia are constant. *A. loha* (DOHERTY) was originally described from "Bireg Mts., NW. Kumaon" (NW. Himalayas), with the following three subspecies known.

- 1) *A. l. loha* (DOHERTY, 1886) from NW. India and W. Nepal. GROSS (1959: 285, pl. 5, fig. 4) illustrated a ♂ from Kulu, NW. Himalayas, which is almost indistinguishable from *A. l. chinensis* SAKAI et al. from N. Yunnan. GROSS (1959) found no difference between the specimens from NW. Himalayas and Yunnan and treated the specimen from Yunnan as *A. l. loha* (DOHERTY) too. However, the populations from Yunnan were described recently as *A. l. chinensis*

SAKAI et al., 2001. GROSS (1959: 266, fig. 17) illustrated a hand drawing of ♂ genitalia of *A. loha loha* (DOHERTY) taken from a specimen from Sikkim, which should belong to *A. l. japroa* TYTLER, 1939. SAKAI et al. (2001), after examining some specimens from NW. India and W. Nepal, valued the absence of the ♂ brand on the forewing upperside of the ♂♂ as a diagnostic character for this species. Though there is no information of the ♂ genitalia of *A. l. loha* (DOHERTY) published, it can be sure that it differs from *A. jingxiaomeiae* **spec. nov.** in the above mentioned external characters (under the diagnosis heading).

- 2) *A. l. japroa* TYTLER from NE. India (Naga Hills as TL), N. Myanmar, Bhutan, Sikkim and E. Nepal. TYTLER (1939) stated that *A. l. japroa* TYTLER has “the white fascia on both wings broader” and the ground color of underside “much darker” and “the white striation more extended and pronounced” than in *A. l. loha* (DOHERTY). It should be noted that *A. jingxiaomeiae* **spec. nov.** has a narrower discal band on the forewing than in *A. l. loha* (DOHERTY). SAKAI et al. (2001) examined some specimens from N. Myanmar, Sikkim and E. Nepal and regarded all these populations as *A. l. japroa* TYTLER. The ♂ genitalia of a specimen from Sikkim, illustrated by GROSS (1959: 266, fig. 17) has an upcurved gnathos and an even dorsal branch of valva as in *A. l. chinensis* SAKAI et al. We examined a ♂ from Dulongjiang, Yunnan (fig. 6), the adjacent area of Kachin, N. Myanmar, which probably belongs to this subspecies. Nevertheless, a close examination of the type material of *A. l. japroa* TYTLER is required in the future.
- 3) *A. l. chinensis* SAKAI et al. from Yunnan (Yulong Xueshan as TL) and Sichuan. The holotype, as illustrated herein (after Sakai et al., 2002), has the clear discal spots in spaces 2 & 3 on forewing upperside and a small white patch at the end of the discocellular cell of the hindwing. We examined a good number of specimens of this subspecies from Weixi and Dali. The ♂ genitalia, as illustrated (figs. 31, 32), have an upcurved gnathos and an even dorsal branch of valva. We obtained a single ♂ from Bingzhongluo, Gongshan (fig. 5) which does not fit any known subspecies of *A. loha* (DOHERTY) in external features but has the same genitalic characters (fig. 33) as in *A. loha* (DOHERTY).
A. padma verres FRUHSTORFER, 1911 has been described from SW China too, and it is necessary to discuss this taxon in more details. GROSS (1959) designed a ♂ as a neotype and illustrated its photos in black and white (reproduced herein as fig. 21) and its genitalia. This neotype is characterized by the wide and clear discal bands on both wings upperside, the subcostal spots conjoined to discal spot in space 4 on forewing underside with their inner edges in a straight line, and an upturned upper branch of valva and a triangular juxta in the ♂ genitalia. Our specimens of *A. padma verres* FRUHST. from Yunnan match with this neotype in both external features (fig. 4) and the ♂ genitalia (fig. 34). GROSS (1959) also illustrated a ♂ specimen of *A. padma padma* (KOLLAR, [1844]) from Kulu (the same area as TL - “Kashmir”), which matches with the neotype of *A. padma verres* FRUHST. in the character of the subcostal spots on the forewing underside. We checked the other subspecies of *A. padma* (KOLLAR) in the literature and found that most of them are in common with *A. padma padma* (KOLLAR) in the character of the subcostal spots on forewing underside except for *A. padma thawgawa* TYTLER, 1939.
A. padma thawgawa TYTLER has an uncertain taxonomic position and deserves a detailed discussion. TYTLER (1939) described this taxon from “Hthawgaw, N.-E. Burma” and compared it only with *A. padma padma* (KOLLAR) from NW. Himalayas. It was described to be “very much larger and much darker”, with a much broader white band on both surfaces of both wings, and with a very distinct white striation on the underside, “carried right up to the base of the hindwing”. This description fits *A. padma verres* FRUHST. too and it is necessary to examine the type material in a further revision in future. However, it is obvious that *A. jingxiaomeiae* **spec. nov.** has the thinner discal bands on both wings and has no clear striation at basal area of hindwing underside, doing nothing with *A. padma thawgawa* TYTLER.

We take this opportunity to study some more species of *Aulocera* from China (figs. 7-16, 35-38), and the following taxonomic changes are presented.

Taxonomic accounts:

Aulocera swaha (KOLLAR, [1844]) (figs. 10, 36).

Satyris swaha KOLLAR, [1844]: 444 [TL: Masuuri, Garhwal].

Aulocera swaha: MOORE, 1882: 236.

Aulocera swaha tellula FRUHSTORFER, 1911: 309 [TL: Mardan, N.W. Provinces] (Subspecies).

Aulocera swaha kurruma EVANS, 1923: 783 [TL: Safed Koh] (Synonym of *A. padma tellula* FRUHST).

Aulocera swaha gilgitica TYTLER, 1926: 253 [TL: Astor; Chilas; Gilgit] (Subspecies).

Aulocera swaha garuna FRUHSTORFER, 1911: 309 [TL: Kulu]; Huang, 2000: 245, record from Shibuqi, SW. Tibet (Subspecies).

Aulocera swaha parthicola CLENCH & SHOUMATOFF, 1956: 141-191 (Subspecies).

Satyris (Aulocera) swaha: GROSS, 1959: 279.

Satyris (Aulocera) swaha forsteri GROSS, 1959: 280 [TL: Kabul, Afghanistan] (Synonym of *A. swaha parthicola* CLENCH & SHOUMATOFF).

Satyris (Aulocera) swaha schaeferi GROSS, 1959: 281 [TL: Ghilinggaon, Mustangbhot, Nepal] (Subspecies).

Satyris (Aulocera) swaha lobbichleri GROSS, 1959: 282 [TL: Pisang, Manangbhot, Nepal] (Subspecies).

Aulocera swaha amjadkarimi SAKAI, 2016: 7 [TL: Donson Pass, Chitral, Pakistan] (Subspecies).

Specimens examined: 4 ♂♂ (two dissected), 1 ♀ (CHH) from Shibuqi, Zhada, Ali Prefecture, SW. Tibet.

Remarks: This species is restricted to the west of central Nepal and is characterized by a much wider discal band on

the forewing. We noticed the following important genitalic characters for this species: 1) uncus and gnathos much longer than in *A. chumbica* MOORE; 2) juxta in ventral view more triangular in shape, with posterior part much narrower than in *A. chumbica* MOORE; 3) aedoeagus in dorsal or ventral view with a few carinae aedoeagi along lateral margins.

***Aulocera chumbica chumbica* MOORE, 1893 (figs. 7, 37) stat. rev.**

Aulocera chumbica MOORE, 1893: 30 [TL: Chumbi Valley, near Yadong].

Aulocera padma var. *chumbica*: BINGHAM, 1905: 128.

Aulocera padma chumbica: FRUHSTORFER, 1911: 309; TALBOT, 1947: 292.

Aulocera loha chumbica: GROSS, 1959: 290.

Aulocera swaha chumbica: SAKAI et al., 2001: 45, figs. 50-61, syntypes.

Specimens examined: 5 ♂♂ (three dissected) (CHH, CZJQ) from Yadong and Zhangmu, SC. Tibet.

Remarks: Our specimens collected from the area near the TL match with the syntypes, illustrated by SAKAI et al. (2001). We noticed the following important genitalic characters for this species: 1) uncus and gnathos much shorter than in *A. swaha* (KOLLAR); 2) juxta in ventral view more oblong in shape, with posterior part much wider than in *A. swaha* (KOLLAR); 3) aedoeagus in dorsal or ventral view without any carinae aedoeagi found in *A. swaha* (KOLLAR). This species is hardly distinguishable from *A. loha* (DOHERTY) in ♂ genitalia; that is why GROSS (1959) treated this species as a subspecies of *A. loha* (DOHERTY). However, SAKAI et al. (2001) noticed that this taxon has a well marked ♂ brand which is entirely absent in *A. loha* (DOHERTY).

In distribution, *A. chumbica* MOORE is allopatric with *A. loha* (DOHERTY), restricted to a few valleys in the E. Himalyas.

***Aulocera chumbica fulva* EVANS, 1923 stat. nov. (figs. 8, 38).**

Aulocera padma fulva EVANS, 1923: 783 [TL: Abor Valley].

Aulocera loha fulva: HUANG, 2000: 154.

Aulocera swaha fulva: SAKAI et al., 2001: 45, figs. 62-65, syntype ♂.

Specimens examined: 3 ♂♂ (two dissected), 2 ♀♀ (CHH) from Pai, Milin, SE. Tibet.

Remarks: The TL, "Abor Valley" actually means Motuo area, SE Tibet. However, this species does not occur in Motuo area but in its adjacent Tibetan areas, such as Milin. EVANS (1923) had no knowledge about the Tibetan areas explored by F. M. BAILEY in 1913. Our specimens can be regarded as topotypes and they match with the ♂ syntype illustrated by SAKAI et al. (2001). We found that there is no constant difference in ♂ genitalia between this taxon and *A. chumbica chumbica* MOORE.

***Aulocera magica sakaii* SUGIYAMA, 2015 stat. nov. (fig. 14).**

Aulocera merlina merlina: SAKAI et al., 2001: 39 (figs. 10-13).

Aulocera merlina sakaii SUGIYAMA, 2015: 32 [TL: Zhongdian, NW Yunnan].

Specimens examined: 1 ♂ (CHH) from the border between Lijiang and Weixi, NW Yunnan.

Remarks: *Aulocera merlina sakaii* SUGIYAMA is apparently closer to *A. magica amida* (GROSS, 1959) than to *A. merlina* (OBERTHÜR, 1890), and we have examined the ♂ genitalia of all these taxa. *Aulocera magica amida* (GROSS) might be a separate species from *A. magica* (OBERTHÜR, 1886), with *A. merlina sakaii* SUGIYAMA as its subspecies. However, more specimens need to be examined in the future. We tentatively treated both, *A. magica amida* (GROSS) and *A. merlina sakaii* SUGIYAMA as subspecies of *A. magica* (OBERTHÜR) which is characterized in the ♂ genitalia by an obsolete upper branch of valva. The ♂ genitalia of *A. magica magica* (OBERTHÜR) are illustrated in SAKAI et al. (2001) and those of *A. magica amida* (GROSS) in GROSS (1959).

Aulocera merlina (OBERTHÜR) was correctly illustrated by OBERTHÜR (1890), GROSS (1959) and D'ABRERA (1990), with its ♂ genitalia correctly illustrated by GROSS (1959: 266, fig. 22).

Aulocera magica (OBERTHÜR) and *A. merlina* (OBERTHÜR) are externally distinguished chiefly by the ground color of the hindwing underside which is more reddish in *A. merlina* (OBERTHÜR) than in *A. magica* (OBERTHÜR), and by the appearance of the discal band on the hindwing which is more conjoined at vein 4 in *A. merlina* (OBERTHÜR) than in *A. magica* (OBERTHÜR). However, the presence or absence of the cell streak on the hindwing underside seems not to be important. *Aulocera merlina pulcheristriata* HUANG, 2001 is probably a local form of *A. magica amida* (GROSS, 1959), however only a single ♀ has been known at present; the formal revision needs an examination of the ♂♂ in the future.

Checklist of the *Aulocera* taxa from China [excluding *A. pumilus* (FELDER & FELDER) group] (TL is marked by an asterisk):

1a. *A. lativitta lativitta* LEECH, 1892 - W. Sichuan (Yajiang*).

1b. *A. lativitta minshanensis* SAKAI, AOKI & YAMAGUCHI, 2001 - S. Gansu (Zhouqu*).

2a. *A. magica magica* (OBERTHÜR, 1886) - W. Sichuan (no detailed TL, presumably Kanding area).

2b. *A. magica amida* (GROSS, 1959) - NW. Yunnan (Deqin*; Nujiang Valley).

? = *A. merlina pulcheristriata* HUANG, 2001 - Chawalong* [possible synonym].

2c. *A. magica sakaii* SUGIYAMA, 2015 - NW. Yunnan (Zhongdian*, Weixi & Lijiang).

3. *A. merlina* (OBERTHÜR, 1890) - NW. & N. Yunnan (no detailed TL, presumably Lijiang area explored by R. P. DELAVAY), W. Sichuan.

4. *A. saraswati chayuiensis* HUANG, 2001 - SE. Tibet (Chayu* only).
- 5a. *A. loha chinensis* SAKAI, AOKI & YAMAGUCHI, 2001 - NW. & N. Yunnan (Yulongxueshan*), W. Sichuan.
- 5b. *A. loha japroa* TYTLER, 1939 - NE. India (Nagaland*); Sikkim; Bhutan; N. Myanmar; NW. Yunnan (Dulongjiang only).
- 5c. *A. loha* ssp. incert. - NW. Yunnan (Nujiang valley only).
6. *A. jingxiaomeiae* HUANG & WANG **spec. nov.** - NW. Yunnan (Weixi* only).
7. *A. swaha garuna* FRUHSTORFER, 1911 - NW. India (Kulu*); SW. Tibet (Shibuqi only).
- 8a. *A. chumbica chumbica* MOORE, 1893 - N. India (Chumbi valley*); C. Nepal; SC. Tibet (Yadong; Zhangmu).
- 8b. *A. chumbica fulva* EVANS, 1923 - SE. Tibet (Milin area*).
9. *A. padma verres* FRUHSTORFER, 1911 - NW. Yunnan (Tsekou*; Weixi), W. Sichuan.
- 10a. *A. ellenae ellenae* (GROSS, 1959) - NW. Yunnan (Deqin*).
- 10b. *A. ellenae sichuana* SAKAI, AOKI & YAMAGUCHI, 2001 - W. Sichuan (Xinduqiao* only).
11. *A. koiwayai* SAKAI, AOKI & YAMAGUCHI, 2001 - NE. Tibet (Qamdo* only).
12. *A. brahminus brahminus* (BLANCHARD, [1844]) - NW. India (Kashmir*); SW. Tibet (W. Zhada only).
13. *A. brahminoides* MOORE, [1893] - N. India (Chumbi valley*); C. Nepal; Sikkim; SC. Tibet (Yadong only).
- 14a. *A. sybillina sybillina* (OBERTHÜR, 1890) - W. Sichuan (Kangding*).
- 14b. *A. sybillina bianor* (GRUM-GRSHIMAILO, 1891) - E. Qinghai ("Sinin-Schan"*).
- 14c. *A. sybillina pygmaea* HOLIK, 1949 - S. Gansu (Peilingshan*).
- 14d. *A. sybillina holiki* (GROSS, 1959) - C. Gansu (Qilianshan, Wuwei*).
- 14e. *A. sybillina yunnanicus* (GROSS, 1959) - NW. Yunnan (Lijiang*), S. Sichuan.

Acknowledgements: Dr. CHUN-SHENG WU (Beijing) allowed the senior author to check the Satyrinae collection in IZAS. Mr. SI-YAO HUANG (Beijing) exchanged his specimens of *A. padma verres* FRUHST. and *A. magica sakaii* SUGIYAMA with the senior author. Mr. JIAN-QING ZHU loaned his specimens from Tibet to the senior author for an examination. Mr. AN-MING CHEN (Wuhan) exchanged his specimen of *A. jingxiaomeiae* **spec. nov.** to the junior author. Mr. JIAN LUO (Beijing) and Ms. XIAO-MEI JING (Beijing) accompanied the junior author in his collecting trip to Yunnan.

References

- D'ABRERA, B. (1990): Butterflies of the Holarctic Region, part 2. - Hill House, Victoria.
- EVANS, B. W. H. (1932): The Identification of Indian butterflies, 2nd edition revised. - Bombay Natural History Society, Bombay.
- FUJIOKA, T. (1970): Butterflies collected by the Lepidopterologica Research Expedition to Nepal Himalaya, 1963 - part 1 Papilionoidea. - Special Bulletin of the Lepidopterological Society of Japan **4**: 1-25, Tokyo.
- GROSS, F. J. (1959): Zur Schmetterlings-Fauna Ostasiens I. Gattung *Satyrus* LATR., Untergattung *Aulocera* BUT. (Lep. Satyridae). - Bonner Zoologische Beiträge **2** (4): 261-293, Bonn.
- OBERTHÜR, C. (1890): Lèpidoptères de Chine. - Études d'entomologie **13**: 37-45, Pl. 9-10, Rennes.
- SAKAI, S. (2016): New butterflies from Afghanistan, Pakistan, Myanmar and Tibet. - Pallarge **10**: 1-24, Gifu.
- SAKAI, S., AOKI, T. & S. YAMAGUCHI (2001): Notes on the genus *Aulocera* BUTLER (Nymphalidae, Satyrinae) from China and its neighbors. - Butterflies **30**: 36-57, Tokyo.
- SAKAI, S., AOKI, T. & S. YAMAGUCHI (2002): Corrigenda and postscript to "Notes on the genus *Aulocera* BUTLER (Nymphalidae, Satyrinae) from China and its neighbors". - Butterflies **31**: 56, Tokyo.
- SUGIYAMA, H. (2015): Notes on new and interesting Sino-Himalayan butterflies. - Pallarge **9**: 29-53, Gifu.
- TALBOT, G. (1947): The fauna of British India, including Ceylon and Burma. Butterflies **2**. - Taylor and Francis, London.
- TYTLER, H. C. (1939): Notes on some new and interesting butterflies chiefly from Burma, part 1. - Journal of the Bombay Natural History Society **41**: 235-252, Bombay.

Addresses of the authors

HAO HUANG
503, East, #1 Dong-ting-hu Road
Qingdao, P.R. China
Email: cmdhxx@hotmail.com

CHUN-HAO WANG
No. 701, Building 22
Section Three of Anzhenli
Chaoyang District, Beijing, P.R. China.
Email: yuece@126.com



Figs. 1-4: ♂ habitus of *Aulocera* species under same scale, upperside (left half) and underside (right half). (1) *A. jin-xiaomeiae* spec. nov., HT ♂; (2-3) *A. lola chinensis* SAKAI, AOKI & YAMAGUCHI, 2001; (2) Weixi, NW. Yunnan; (3) Dali, N. Yunnan; (4) *A. padma verres* FRUHSTORFER, 1911, Weixi, NW. Yunnan.



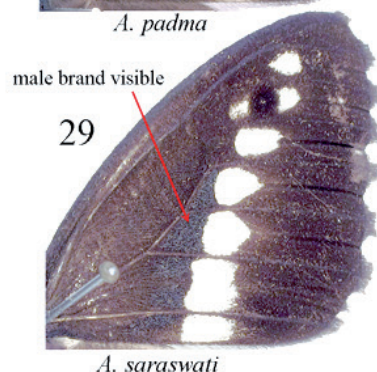
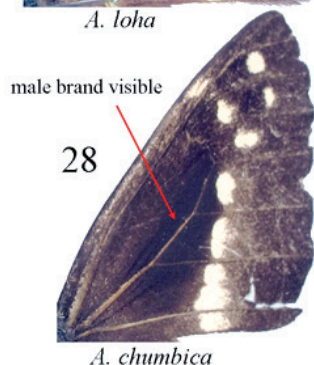
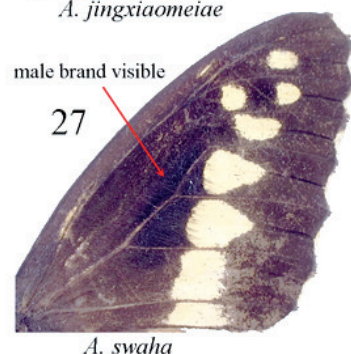
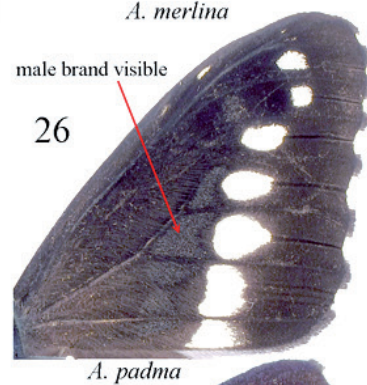
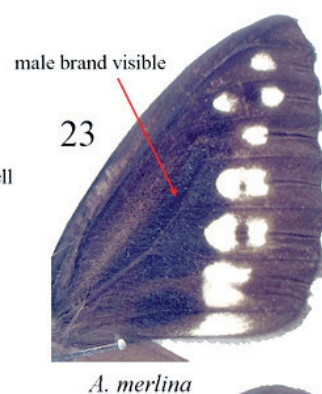
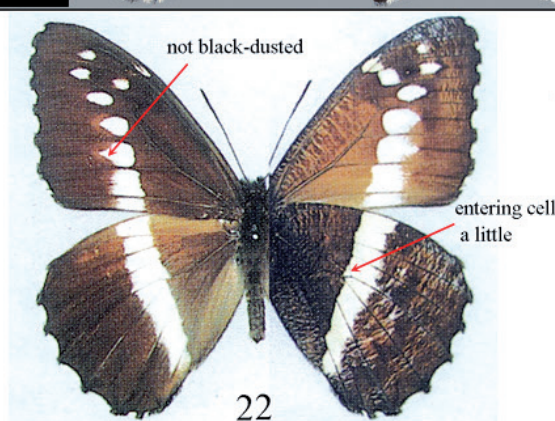
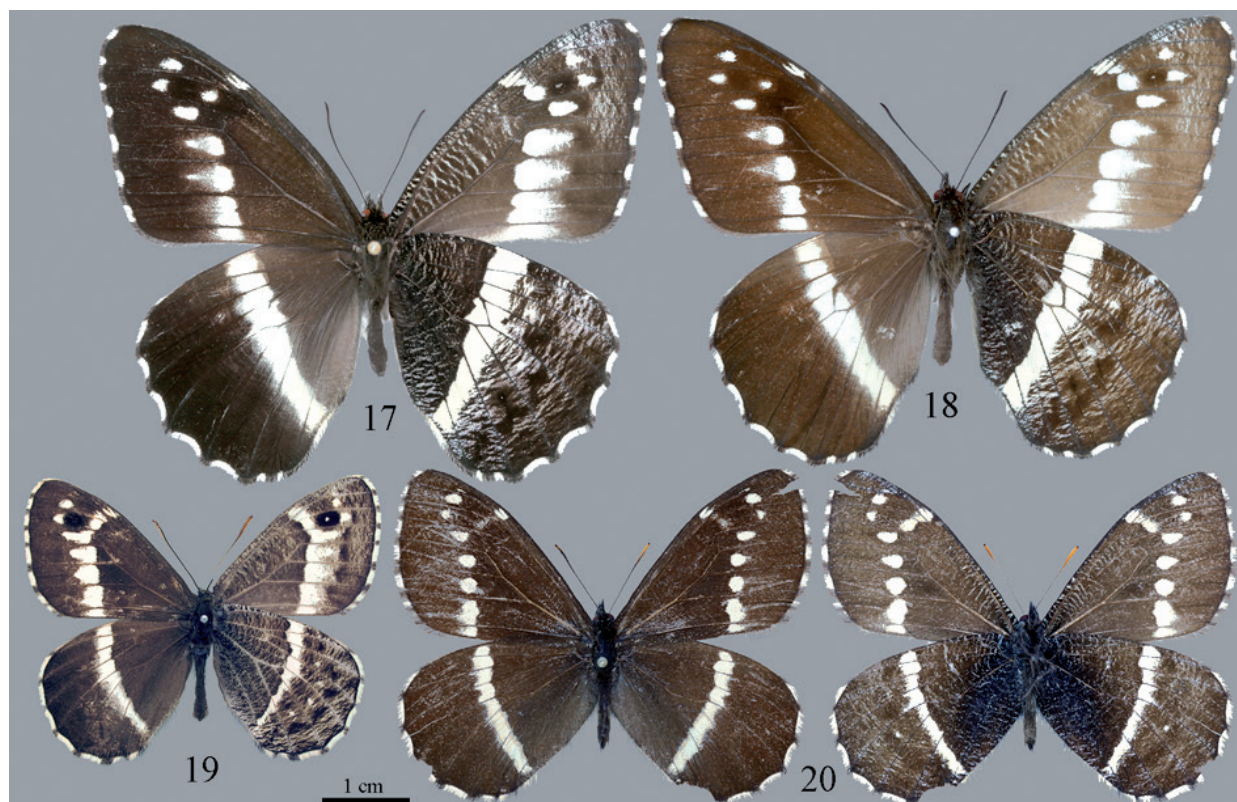
Figs. 5-8: ♂ habitus of *Aulocera* species under same scale, upperside (left half) and underside (right half). (5) *A. loha* ssp. incert., Bingzhongluo, Gongshan, NW. Yunnan; (6) *A. loha japroa* TYTLER, 1939 Dulongjiang, NW. Yunnan; (7) *A. chumbica chumbica* MOORE, 1893, Yadong, SC. Tibet; (8) *A. chumbica fulva* EVANS, 1923, Pai, SE. Tibet.



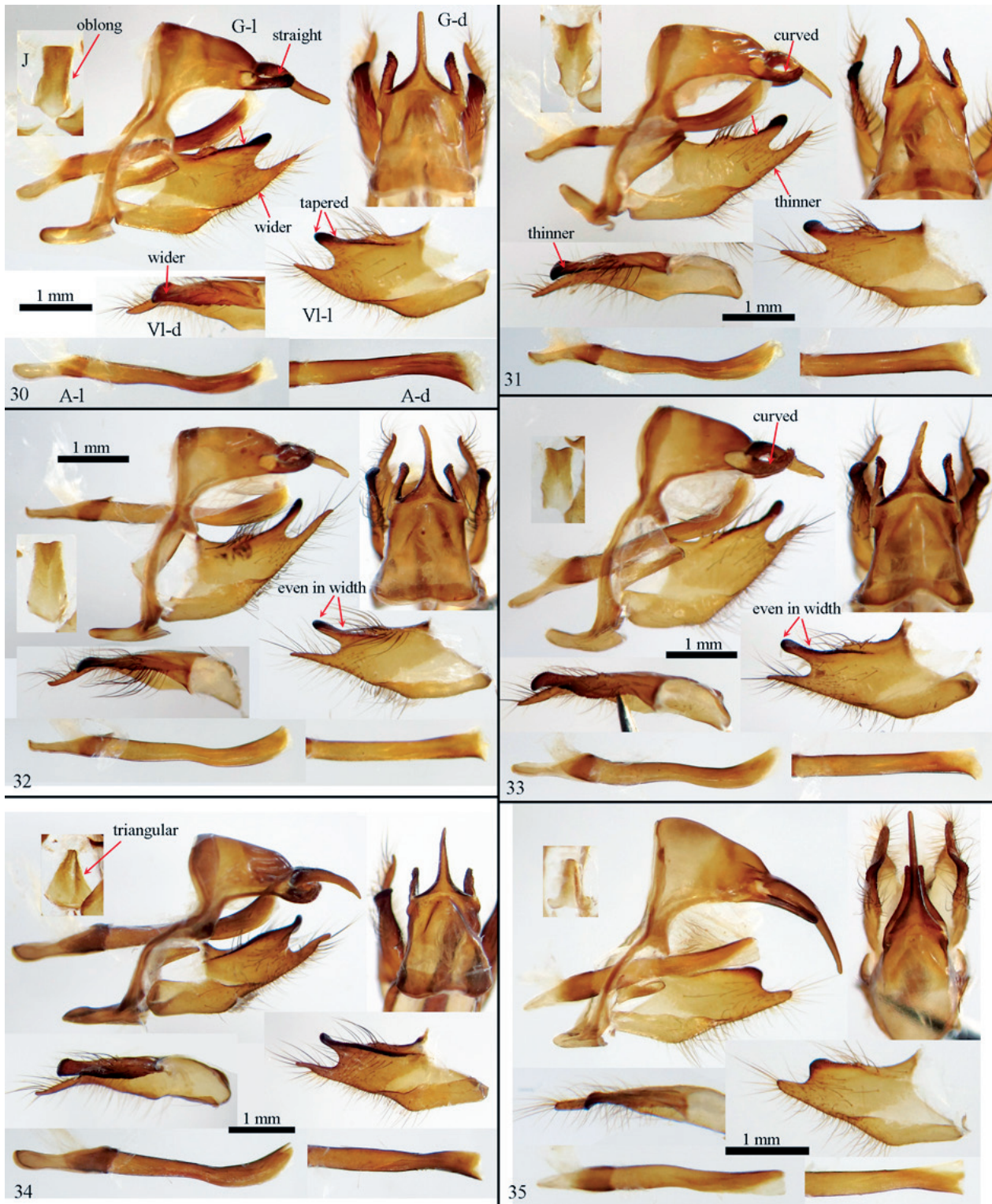
Figs. 9-12: ♂ habitus of *Aulocera* species under same scale, upperside (left half) and underside (right half). (9) *A. saraswati chayuwensis* HUANG, 2001, PT ♂, Chayu; (10) *A. swaha garuna* FRUHSTORFER, 1911, Shibuqi, SW. Tibet; (11) *A. lativitta lativitta* LEECH, 1892, Xinduqiao, Sichuan; (12) *A. magica magica* (OBERTHÜR, 1886), Kanding, W. Sichuan.



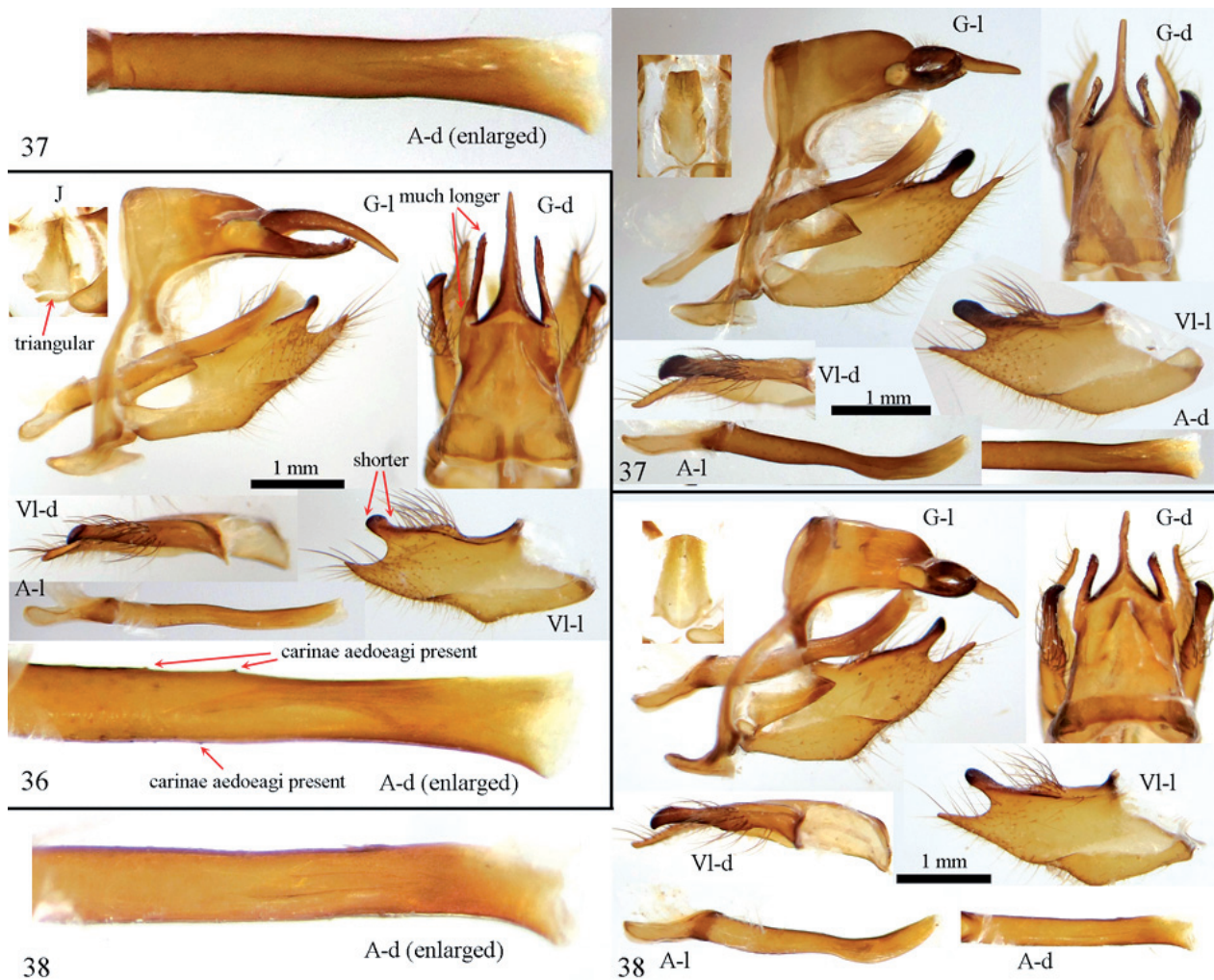
Figs. 13-16: ♂ habitus of *Aulocera* species under same scale, upperside (left half) and underside (right half). (13) *A. magica amida* (GROSS, 1958), Mingyong, Deqin, NW. Yunnan; (14) *A. magica sakaii* SUGIYAMA, 2015, border between Weixi and Lijiang, NW. Yunnan; (15) *A. merlina* (OBERTHÜR, 1890), Qujing, N. Yunnan; (16) *A. sybillina yunnanicus* (GROSS, 1958), Luojiangshan, S. Sichuan.



Figs. 17-20: ♂ habitus of *Aulocera* species under same scale, upperside (left half) and underside (right half). (17-18) *A. jingxiaomeiae* spec. nov., PTs; (19) *A. brahminus brahminus* (BLANCHARD, [1844]), Zhada, SW. Tibet; (20) *A. brahminoides* MOORE, [1893], Yadong, SC. Tibet.
Figs. 21-22: Type specimens in the literature - (21) *A. padma verres* FRUHSTORFER, 1911, neotype ♂, after GROSS (1958); (22) *A. loha chinensis* SAKAI, AOKI & YAMAGUCHI, 2001, HT ♂, after SAKAI et al. (2002).
Figs. 23-29: Right forewing in oblique view to show ♂ brand on the upperside.



Figs. 30-35: ♂ genitalia of *Aulocera* species. (30) *A. jingxiaomeiae* spec. nov., HT; (31-32) *A. loha chinensis* SAKAI, AOKI & YAMAGUCHI, 2001; (31) specimen shown in fig. 2; (32) fig. 3; (33) *A. loha* ssp. incert., fig. 5; (34) *A. padma verres* FRUHSTORFER, 1911, fig. 4; (35) *A. saraswati chayuiensis* HUANG, 2001, fig. 9. G-l = genitalia in lateral view with left valva removed; G-d = genitalia in dorsal view; J = juxta in ventral view; VI-d = left valva in dorsal view; VI-l = left valva in lateral view; A-d = aedoeagus in dorsal view; A-l = aedoeagus in lateral view.



Figs. 36-38: ♂ genitalia of *Aulocera* species. (36) *A. swaha garuna* FRUHSTORFER, 1911, fig. 10; (37) *A. chumbica chumbica* MOORE, 1893, Yadong, SC Tibet; (38) *A. chumbica fulva* EVANS, 1923, fig. 8. G-l = genitalia in lateral view with left valva removed; G-d = genitalia in dorsal view; J = juxta in ventral view; VI-d = left valva in dorsal view; VI-l = left valva in lateral view; A-d = aedoeagus in dorsal view; A-l = aedoeagus in lateral view.

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Autor(en)/Author(s): Huang Hao, Wang Chung-Hao

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