# Additional notes on the Genus Solus Watson, 1913

(Lepidoptera, Saturniidae) by Song-Yun Lang received 8.XII.2024

Abstract: The genus Solus Watson, 1913 is studied and it is divided into two species complexes, viz. the drepanoides Moore, [1866]-complex and the parvifenestratus Bryk, 1944-complex. A revised checklist of the genus is provided. The validity of Solus drepanoides houae Lang, 2017, which was sunk to a junior synonym of Solus parvifenestratus Bryk, 1944 by Brechlin (2022), is recovered, and meanwhile, it is raised to specific status, viz. Solus houae Lang, 2017 stat. rev. et nov. The validity of Solus parvifenestratus sinjaevi Nässig, 1994 stat. rev., which was treated by Brechlin (2007) as a junior synonym of Solus parvifenestratus Bryk, is also recovered.

Solus WATSON, 1913 is a small oriental genus with only two species had been recognised before 2015, viz. S. drepanoides (MOORE, [1866]) from C. Himalayas (Darjeeling, Sikkim, Bhutan) and S. parvifenestratus BRYK, 1944 from N. & W. Myanmar, S.W. China (Yunnan, Sichuan), N. Vietnam (Nässig, 1989, 1994; Brechlin, 2007). Since 2015, several new species have been discovered and several formerly known subspecies have been raised to specific status by different authors (Brechlin, 2015, 2022; Lang, 2017; NAUMANN & SMETACEK, 2023). NAUMANN & SMETACEK (2023) described two new species from N.E. India and noted that a new species forms a small group in the genus with S. drepanoides (MOORE) and another new species is a member of the complex around S. parvifenestratus BRYK. The situation is similar to other newly enrolled species which are closely related either to S. drepanoides (MOORE) or to S. parvifenestratus BRYK. Therefore, though additional species were added, there are still only two basic types (basing upon two old species respectively) could be recognised in Solus WATSON. Here, they are treated as two species complexes, viz. the drepanoides Moore-complex and the parvifenestratus BRYK-complex (fig. 8). The two complexes' ranges are overlapped in a limited nodal region including the East Himalayas (S.E. Tibet) and the Mts. Gaoligong (W. Yunnan) (LANG, 2017). From this converging node, the range of the drepanoides Moore-complex narrowly extends westwards to Sikkim along the south slope of the Himalayas, whereas the range of the parvifenestratus BRYK-complex widely expands eastwards to C. China and southeastwards to C. Vietnam. Undoubtedly, the two species complexes are two natural entities in this genus, but it is still controversial about their levels. For different scholars, these two complexes also can be treated as two species with their own different geographical subspecies, because all "species" in each "species complex" are allopatric. Even, S. drepanoides Moore and S. parvifenestratus BRYK can be treated as two superspecies, and then, the remaining taxa are semispecies of corresponding superspecies. In fact, all treatments mentioned above are the same essence but in systems with different levels, viz. the species-complex/species system, the superspecies/semispecies system, and the species/subspecies system. In this paper, for avoiding more taxonomic changes, the present author follows recent and current papers involved (Brechlin, 2022; Naumann & Smetacek, 2023) and selects the species-complex/species system to explain this genus. However, maybe the species/subspecies system is the most reasonable one.

Materials: Specimens examined in this study are kept in Chongqing Museum of Natural History, Beibei, CHINA (CMNH) and Song-Yun Lang's collection, Beibei, CHINA (LSY).

# Identification of species complexes

- A) Diagnosis of the *Solus drepanoides* Moore-complex (figs. 8A, 8C1): 1) on the forewing, the small hyaline dot in the space  $m_1$  is separated from or only touched with the main hyaline patch in the space  $r_5$ ; 2) hindwing is not elongated; 3) the  $\sigma$  transtilla is simply built and shortened; 4) each branch of the  $\sigma$  uncus is not forked again apically; 5) the  $\sigma$  valva is short; the harpe is shorter than or as long as the upper hook; the upper hook is armless; 6) the caudal opening of the  $\sigma$  aedoeagus is relatively long and it is about one third the total length of the aedoeagus.
- B) Diagnosis of the *Solus parvifenestratus* BRYK-complex (fig. 8E1): 1) on the forewing, the small hyaline dot in the space  $m_1$  is deeply inserted inside the outer edge of the main hyaline patch in the space  $r_5$ ; 2) hindwing is often elongated with its tornus; 3) the  $\sigma$  transtilla is ridgy and extremely elongated; 4) each branch of the  $\sigma$  uncus is bifurcate again apically; 5) the  $\sigma$  valva is very long; the harpe is obviously longer than the upper hook; the upper hook has a discernable arm; 6) the caudal opening of the  $\sigma$  aedoeagus is relatively short and it is about one fifth the total length of the aedoeagus.

#### A check list of the genus Solus WATSON, 1913

Genus Solus WATSON, 1913

- I. The *drepanoides* Moore-complex
  - 1. Solus drepanoides (Moore, [1866]), Type locality (TL): Darjeeling.
  - 2. Solus medogiana Brechlin, 2015, TL: China, Tibet, Nyingchi, near Metok (= Solus wui Lang, 2017, TL: Medog, S.E. Tibet, China).
  - 3. Solus pseudodrepanoides Naumann & Smetacek, 2023, TL: India, Mishmi Hills.
  - 4. Solus houae Lang, 2017 stat. rev. et nov., TL: Yaojiaping, Lushui, N.W. Yunnan, China.
- II. The parvifenestratus BRYK-complex
  - 5. Solus parvifenestratus BRYK, 1944
    - 5a. Solus parvifenestratus parvifenestratus BRYK, TL: Kambaiti.
    - 5b. Solus parvifenestratus gabaidanus Nässig, 1989, TL: [Burma], Mt. Victoria, Pako[k]ku/ Chin Hills.
    - 5c. Solus parvifenestratus sinjaevi Nässig, 1994 stat. rev., TL: Fansipan, N. Vietnam.
    - 5d. Solus parvifenestratus phupana Brechlin, 2022, TL: Laos (NE), Houaphan Prov., Phu Pan summit.
  - 6. Solus loba LANG, 2017, TL: Medog, S.E. Tibet, China.

- 7. Solus tawanga Naumann & Smetacek, 2023, TL: India (NE), Ziro, Pange valley.
- 8. Solus kontuma Brechlin, 2015, TL: Vietnam, Kon Tum prov., Mt. Ngoc Linh.
- 9. Solus sichuanus Brechlin, 2007, TL: Sichuan prov., Qingchenghou Mts.
- 10. Solus chongqingana Brechlin, 2015, TL: China, Chongqing, [Wulong], Meng Huan Gu.

#### **Taxonomic account**

Solus houae LANG, 2017 stat. rev. et nov. (figs. 1C-6C, 8C1)

Cricula drepanoides: CHU & WANG, 1996, Fauna Sin. Ins. (5): 149 (partim).

Solus drepanoides houae Lang, 2017, Atalanta 48 (1-4): 240, figs. 2, 3, 8, 12c. TL: Yaojiaping, Lushui, N.W. Yunnan, China. Solus parvifenestratus: Brechlin, 2022, Ent.-Satsph. 15 (1): 70. [misidentification]

Material: holotype (HT) of Solus drepanoides houae LANG, CHINA: Yunnan, Lushui, Yaojiaping, 2700 m, 9.VI.2015, leg. Song-Yun LANG, SATU0005, CMNH; paratype of Solus drepanoides houae LANG, same data as HT, SATU0006, LSY.

Notes: It is without any doubt that this species is a component of the Solus drepanoides Moore-complex, however, surprisingly, Brechlin (2022) treated it as a junior synonym of Solus parvifenestratus Bryk basing upon his farfetched reasons: < ... Die später, im Juni 2015 gefangene S. drepanoides houae LANG, 2017 stammt aus NW-Yunnan, Lushui, Yaojiaping bei ca. 25°49'N / 98°51'E. Falter der Gattung meiner (Brechlin) Sammlung aus dem gleichen Areal nahe Caojian und Yunlong (alles NW von Dali) mit den Geokoordinaten 25°46'N / 99°51'E bzw. 25°50'N / 99°17'E gehören mit den Barcode [in BOLD]-Etiketten "BC-RBP0970-0972 sicher zu S. parvifenestratus parvifenestratus. Auch extern-morphologisch würde ich (Brechlin) die beiden bei Lang (2017: 242 ff) abgebildeten (HT- & PT-) houae Falter als dieses Taxon, S. p. parvifenestratus, ansehen. Damit stelle ich S. drepanoides houae LANG, 2017 syn. nov. nun als jüngeres subjektives Synonym zu S. p. parvifenestratus [S. drepanoides houae LANG, 2017 comes from N.W. Yunnan, Lushui, Yaojiaping at approx. 25°49'N/98°51'E. Moths of the genus in my (Brechlin) collection from the same area near Caojian and Yunlong (all northwest of Dali) with the Geo coordinates 25°46'N / 99°51'E or 25°50'N / 99°17'E with the barcode in BOLD labels "BC-RBP0970-0972" certainly belong to S. parvifenestratus parvifenestratus BRYK. Also on external morphological, I (Brechlin) would consider the two moths of house (HT & PT) depicted in Lang (2017: 242 ff) to be S. parvifenestratus parvifenestratus BRYK. Therefore, I (Brechlin) place S. drepanoides house Lang, 2017 as a junior subjective synonym for S. parvifenestratus parvifenestratus BRYK] ... (BRECHLIN, 2022)>. Incredibly, BRECHLIN (2022) has confounded two species complexes which is a basic foundation in Solus WATSON. Therefore, to clarify the truth, the present author have to provide an easy-understanding illustrated table (fig. 8) for a comparison of the drepanoides Moore-complex, including S. houae Lang stat. rev. et nov., and the parvifenestratus Brykcomplex. Then, with a help of comparison table (fig. 8), the treatment in Brechlin (2022) can be clearly defeated.

Now, in the *Solus drepanoides* Moore-complex, four species are recognised, viz. *S. drepanoides* (Moore), *S. medogiana* Brechlin, *S. pseudodrepanoides* Naumann & Smetacek and *S. houae* Lang **stat. rev.** et **nov.** As mentioned above, all four species are allopatric, the former three are known from the East Himalayan regions, and the last one is from the south section of the Gaoligong Mts. If a scholar considers the complex as a species, then the four taxa are its subspecies.

Distribution: S.W. China (W. Yunnan).

## Solus medogiana Brechlin, 2015 (figs. 1B-6B)

Solus medogiana Brechlin, 2015, Ent.-Satsph. 8 (2): 8. TL: Nyingchi, Tibet; Brechlin, 2022, Ent.-Satsph. 15 (1): 70; Naumann & Smetacek, 2023, Bionotes 25 (3): 69.

Solus wui Lang, 2017, Atalanta 48 (1-4): 240, figs. 4, 9, 12d. TL: Medog, S.E. Tibet, China. [synonymised by Brechlin (2022)]

Material: HT ♂ of *Solus wui* Lang, paratype of *Solus medogiana* Brechlin, CHINA: Tibet, Medog, Hanmi, 2000 m, 17.VII.2013, leg. Chao Wu, SATU0002, CMNH.

**Notes:** At the beginning, the present author believed that this species is the third type in this genus, but now, it is clear that it perfectly falls into the category of the *Solus drepanoides* Moore-complex. Its difference with *S. drepanoides* Moore is not more obvious than the difference between *S. houae* Lang **stat. rev.** et **nov.** and *S. drepanoides* Moore. Therefore, it is the same situation that if a scholar considers the *drepanoides* Moore-complex as a species, then *S. medogiana* Brechlin should be its subspecies. **Distribution:** S.W. China (S.E. Tibet).

#### **Solus loba** Lang, 2017 (figs. 1D-6D)

Solus parvifenestratus loba Lang, 2017, Atalanta 48 (1-4): 241, figs. 5, 10. TL: Medog, Tibet, China; Brechlin, 2022, Ent.-Satsph. 15 (1): 70. Solus loba: Naumann & Smetacek, 2023, Bionotes 25 (3): 71.

Solus drepanoides: Liu, 2024, Ins. Syst. Evo. 55: 2, fig. 1A. [misidentification]

Material: HT ♂ of Solus parvifenestratus loba Lang, CHINA: Tibet, Medog, 80K, 2000 m, 6.VIII.2012, leg. Song-Yun Lang, SATU0003, CMNH.

Notes: Liu (2024: fig. 1A) identified a \$\textit{solus loba}\$ Lang from Medog, S.E. Tibet as \$S\$. drepanoides (Moore). According to Liu (2024), the author believed that the genus only have two species and even without any subspecies. If so, he should identify his figured moth A as \$S\$. parvifenestratus Bryk, but not as \$S\$. drepanoides (Moore). After Brechlin (2022), this is the second recent case that some people confused the two entities in \$Solus\$ Watson. So, again, it is indeed worth to provide a comparison table (fig. 8) to tell people how to identify the two species complexes in this genus. On the other hand, the fauna on the earth is gradually evolving all the time, instead of an immutable scenario, so the existence of different geographical subspecies, the processes of speciation, is completely reasonable. However, it is not meaning that all described subspecies are right, but it is also not meaning that we should deny all subspecies.

\*\*Distribution: S.W. China (S.E. Tibet).

## Solus parvifenestratus sinjaevi Nässig, 1994 stat. rev. (figs. 1F-6F)

Solus parvifenestratus sinjaevi Nässig, 1994, Nach. Ent. Ver. Apollo 15 (3): 351. TL: Mt. Fan Si Pan, vic. Cha Pa, N-Vietnam. Solus parvifenestratus parvifenestratus: Brechlin, 2007, Entomofauna (Monographie 1): 44.

Material: 1 °, CHINA: Yunnan, Pingbian, Mt. Daweishan, 25.VII.2018, leg. Hao Huang, SATU0010, LSY; 1 °, CHINA: Yunnan, Pingbian, Mt. Daweishan, 2000 m, 11.VI.2011, leg. Hao Huang, SATU0011, LSY; 1 °, N. VIETNAM: Yen Bai, 6/2023, leg. Dang Ngoc Van, purchased by Si-yao Huang from eBay, SATU0021, LSY.

Notes: This subspecies is suggested to be recovered because of the long distance between its range and that of the nominate subspecies. Both subspec. parvifenestratus BRYK and subspec. sinjaevi Nässig have two color forms respectively, viz. the grey form and the vivid form. The grey form of subspec. sinjaevi Nässig (fig. 1F1) is darker than the corresponding form of subspec. parvifenestratus BRYK (figs. 1E2-5). The vivid form of subspec. sinjaevi Nässig (fig. 1F2-3) is deep earth yellow, whereas the same form of subspec. parvifenestratus BRYK (fig. 1E1) is reddish ochreous. The upper hook of the 3 valva (fig. 3F) is more robust and more bent than that of subspec. parvifenestratus BRYK (fig. 3E). Comparing with other specimens of subspec. sinjaevi Nässig (1F1, 1F3, 3F1, 3F3), the valva (3F2) of the 3 (1F2) from Mt. Daweishan is obviously small with very narrow upper hook and arm, and maybe it is caused of individual variation.

Distribution: S.W. China (S.E. Yunnan), N. Vietnam.

### Solus kontuma Brechlin, 2015 (figs. 1I-6I)

Solus kontuma Brechlin, 2015, Ent.-Satsph. 8 (2): 9, Abb. 5, 11. TL: Vietnam, Kon Tum prov., Mt. Ngoc Linh [W-slopes].

Material: 3 or, C. VIETNAM: Kon tum, Ngoc Linh, 5-6/2023, leg. Dang Ngoc Van, purchased by Si-yao Huang from eBay, SATU0018-20, LSY.

**Notes:** *Solus kontuma* Brechlin from C. Vietnam is the southeasternmost record of this genus. This is a quite distinct taxon in the *parvifenestratus* Bryk-complex. Its upper hook of the or valva (fig. 3I) is blunt apically and only weakly bent inwards, whereas it is more pointed apically and very strongly arched inwards in *S. parvifenestratus sinjaevi* Nässig from N. Vietnam (fig. 3F).

**Distribution**: C. Vietnam.

### Solus chongqingana Brechlin, 2015 (figs. 1H-6H)

Solus chongqingana Brechlin, 2015, Ent.-Satsph. 8 (2): 8, Abb. 3, 9. TL: China, Chongqing, [Wulong], Meng Huan Gu.

Material: 1 °, CHINA: Chongqing, Nanchuan, Mt. Jinfo-shan, 18.IX.2015, leg. Shu-heng Li, SATU0008, CMNH; 1 °, CHINA: Hubei, Shenongjia, between Hongping and Muyu, 1.VI.2019, leg. Si-yao Huang, SATU0009, LSY.

**Notes:** Here, a specimen (H2) collected from Shennongjia, W. Hubei, C. China is arranged in this taxon. It is not only the northernmost record of this genus, but also the easternmost record of this genus. Possibly, *Solus chongqingana* Brechlin is only a junior synonym of *S. sichuanus* Brechlin.

Distribution: China (Chongqing, W. Hubei).

Postscript: During 2012 and 2013, I collected 3 or specimens of *Solus* Watson from Tibet (1 from Cona and 2 from Medog). After examining their genitalia, I found that they might be 3 species, however, only 2 species had been known in *Solus* Watson then. I asked Naumann and Brechlin for their related papers and meanwhile I shared my viewpoints with them and consulted them on this topic. I also picked off all legs of the 3 Tibetan specimens and sent the legs respectively and equally to Naumann and Brechlin. The communications with them were all discontinued in the end of 2013, and both of them have not sent me the results of their DNA test since then. However both, Naumann and Brechlin, had finally uploaded their results to "boldsystems.org" (Table 1). In 2015, I collected 3 or specimens belonging to 2 species from Lushui County (1 from Pianma on the west slope of the Gaoligong Mts. and 2 from Yaojiaping on the east slope of the same ridge), W. Yunnan. It finally promoted me to finish a paper which was published in 2017 with descriptions of a new species and two new subspecies in *Solus* Watson from Tibet and Yunnan. Unfortunately, the new species had been already published by Brechlin in 2015. It is *S. medogiana* Brechlin, 2015 (= *S. wui* Lang, 2017), namely the third species discussed above. When Brechlin described *S. medogiana* Brechlin, he appointed the specimen in my hand as a paratype (3 paratypes in total) which is also the HT of *S. wui* Lang (Table 1: No. 2).

Inexplicably, Brechlin (2015, 2022) distorted the facts about me. Brechlin (2015) never mentioned me, viz. Song-Yun Lang, which name are repeated many times in Brechlin (2022). Brechlin (2022) said that < ... Mein (Brechlin) zuvor mehrfacher Versuch, Song-Yun Lang diesbezüglich erneut zu kontaktieren, schlug leider fehl [Unfortunately, my (Brechlin) previous multiple attempts to contact Song-Yun Lang again about this matter failed] ... > , therefore, it seems that he had to publish Brechlin (2015) alone. But, the question is why "Song-Yun Lang" is totally absent in Brechlin (2015)? A person, who first let him to know the third species in this genus and provided him moth legs for DNA test, is totally absent in his paper, not only in the main text but also in the acknowledgements (Brechlin, 2015). If he forgot my name, why he mentioned my name again and again in Brechlin (2022). Even if Mr. Song-Yun Lang totally disappeared because of death or being captured by aliens, can this be used as a reason for the erasion of his name from Mr. Brechlin's brain? When Brechlin (2015) had to mentioned the used specimen kept in my collection, he even only simply wrote my collection as <in chinesischer Privatsammlung>. Obviously, I totally became an anonymous local Chinese collector in Brechlin (2015). But, interestingly, I eventually obtained my names a few years later in Brechlin (2022). Brechlin (2022) said that he had told Song-Yun Lang the results of DNA barcoding (It is not true. When he receive my envelope with moth legs, he indeed reply me and said that he received the legs. But he has not sent me any email since then). So, I never received any news from Brechlin since the end of 2013, including the results of his DNA test, his plan to publication and the final publication. It can be easily concluded that Brechlin (2015) intended to make the absence of Song-Yun Lang who is a co-discoverer of the new taxon, but when he found that Song-Yun Lang is still present, he had to provide an excuse in Brechlin (2022) for a reason of the absence of Song-Yun Lang in Brechlin (2015). However, his excuse is apparently unconvincing.

Brechlin is a lepidopterist who mainly studies on Saturniidae and Sphingidae, and he has already authored more than 1600 new taxa (https://species.wikimedia.org/wiki/Ronald\_Brechlin). So, I'm very surprising that he treated *Solus drepanoides houae* Lang as a junior synonym of *S. parvifenestratus* Bryk. According to the illustrated table (fig. 8), it is very clear that the taxon *houae* Lang belongs to the *drepanoides* Moore-complex but not to the *parvifenestratus* Bryk-complex. Therefore, Brechlin (2022) failed to recognise two basic natural entities in this genus. He has specimen of *S. parvifenestratus* Bryk from W. Yunnan and obtained its DNA barcoding, so he confirmed that his specimen is a genuine *S. parvifenestratus* Bryk. Sure, it is totally no problem. But, curiously, the next, he proposed that *S. drepanoides houae* Lang, which is also from W. Yunnan, should be a junior synonym of the

genuine *S. parvifenestratus* BRYK. It is a logic which is similar to that a Kenyan leopard should be a lion because Kenya is the homeland of lions. He even never had examined *S. drepanoides houae* LANG in his research. When he made his treatment, he never mentioned the obvious differences of  $\sigma$  genitalia between *S. drepanoides houae* LANG and *S. parvifenestratus* BRYK which were well illustrated in a detail plate in LANG (2017), but he only mentioned their so-called superficial similarity as well as their close distributional records (two places in W. Yunnan). So, his classification on this topic is purely subjective.

Frankly, though Brechlin was dishonestly published a new taxon in 2015 and gave some false reasons in 2022, it is not the reason which invoke me to write a paper to talk about this trivial thing. The true reason which caused me to write this paper is his taxonomic treatments on this genus. My propose in this paper is to provide a comparative anatomy of  $\sigma$  genitalia of the genus *Solus* Watson, which can prove that there are two natural entities present in this genus. As mentioned above, it can hardly be confirmed that whether the two entities are two species-complexes, or two superspecies, or two species. Actually, I prefer to treat them as two species and all other taxa should be their own subspecies. But for avoiding more taxonomic treatments, I follow their current popular way in this genus and treat those geographic populations as species which respectively belong to the two species-complexes.

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Address of the author

Song-Yun Lang
Chongqing Museum of Natural History
400700, Beibei, China
e-mail: langsongyun@gmail.com

Specimen	In this paper	LSY/CMNH	Naumann	Brechlin
No. 1	A	SATU0001	Barcode SNB 5393	BC-RBP 8098
No. 2	В	SATU0002	Barcode SNB 5394	BC-RBP 8099
No. 3	D	SATU0003	Barcode SNB 5395	BC-RBP 8100

Table 1: Serial numbers of three Tibetan *Solus* Watson specimens kept in LSY/CMNH with their corresponding sample IDs on the website of BOLDsystems uploaded by Naumann and Brechlin respectively.

Serial numbers in figs. 1-6 & 8: A. Solus drepanoides (Moore, [1866]), Tibet, Cona, SATU0001, LSY. B. S. medogiana Brechlin, 2015, paratype (HT of S. wui Lang), Tibet, Medog, SATU0002, CMNH. C. S. houae Lang, 2017 stat. rev. et nov.: (C1) HT, Yunnan, Lushui, Yaojiaping, SATU0005, CMNH; (C2) paratype, ditto, SATU0006, LSY. D. S. loba Lang, 2017, HT, Tibet, Medog, SATU0003, CMNH. E. S. parvifenestratus parvifenestratus Bryk, 1944: (E1) Yunnan, Lushui, Pianma, SATU0007, LSY; (E2) Yunnan, Weixi, SATU0014, LSY; (E3) ditto, SATU0015, LSY; (E4) ditto, SATU0016, LSY; (E5) ditto, SATU0017, LSY; (E6) Yunnan, Yulong, SATU0012, LSY. F. S. parvifenestratus sinjaevi Nässig, 1994 stat. rev.: (F1) Yunnan, Pingbian, SATU0010, LSY; (F2) ditto, SATU0011, LSY; (F3) N. VIETNAM, Yen Bai, SATU0021, LSY. G. S. sichuanus Brechlin, 2007, Sichuan, Dayi, SATU0013, LSY. H. S. chongqingana Brechlin, 2015: (H1) Chongqing, Nanchuan, SATU0008, CMNH; (H2) Hubei, Shennongjia, SATU0009, LSY. I. S. kontuma Brechlin, 2015: (I1) C. VIETNAM, Kon tum, Ngoc Linh, SATU0018, LSY; (I2) ditto, SATU0019, LSY; (I3) ditto, SATU0020, LSY.



Fig. 1:  $\ensuremath{\vec{\sigma}}$  adult of Solus Watson, 1913, dorsal side.



Fig. 2: ♂ adult of *Solus* Watson, 1913, ventral side.

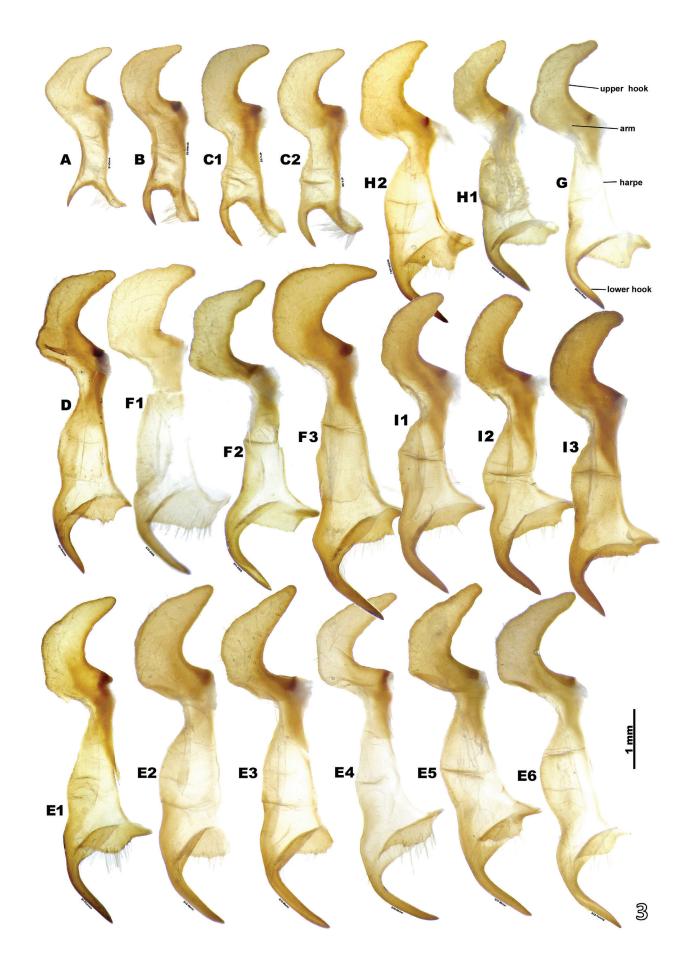


Fig. 3:  $\[ \]$  valva of  $\[ Solus \]$  Watson, 1913, inner side (expanded).

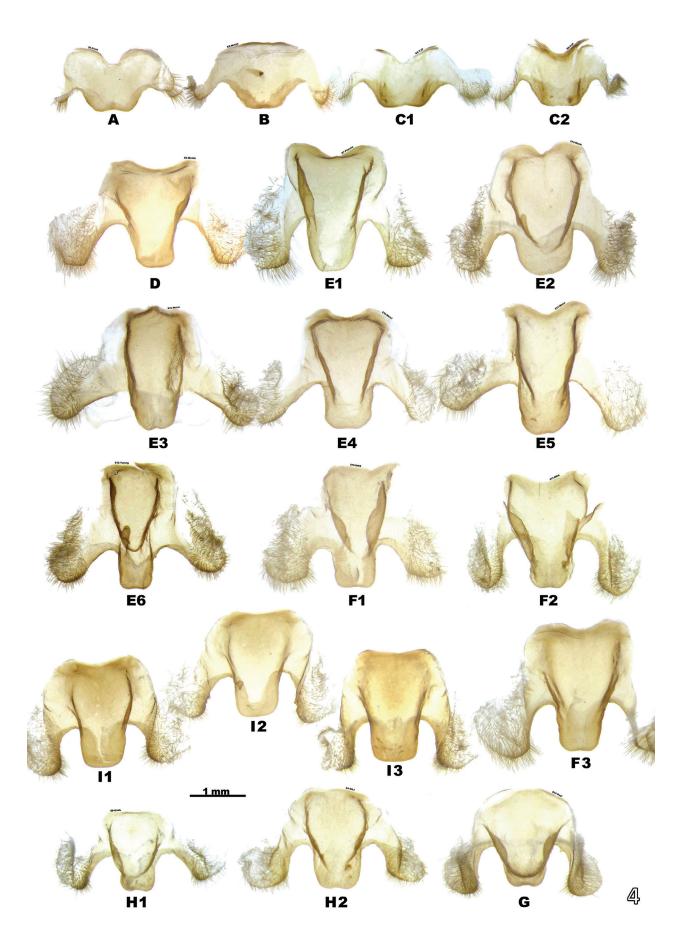


Fig. 4: ♂ transtilla of *Solus* Watson, 1913 in dorsal view.

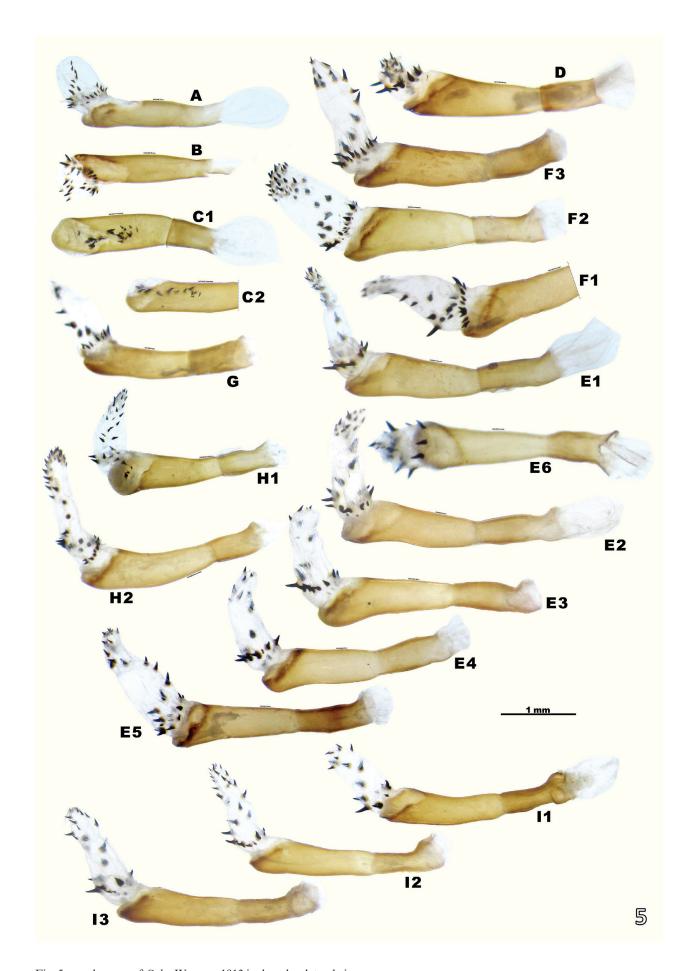


Fig. 5:  $\ensuremath{\sigma}$  aedoeagus of Solus Watson, 1913 in dorsal or lateral view.

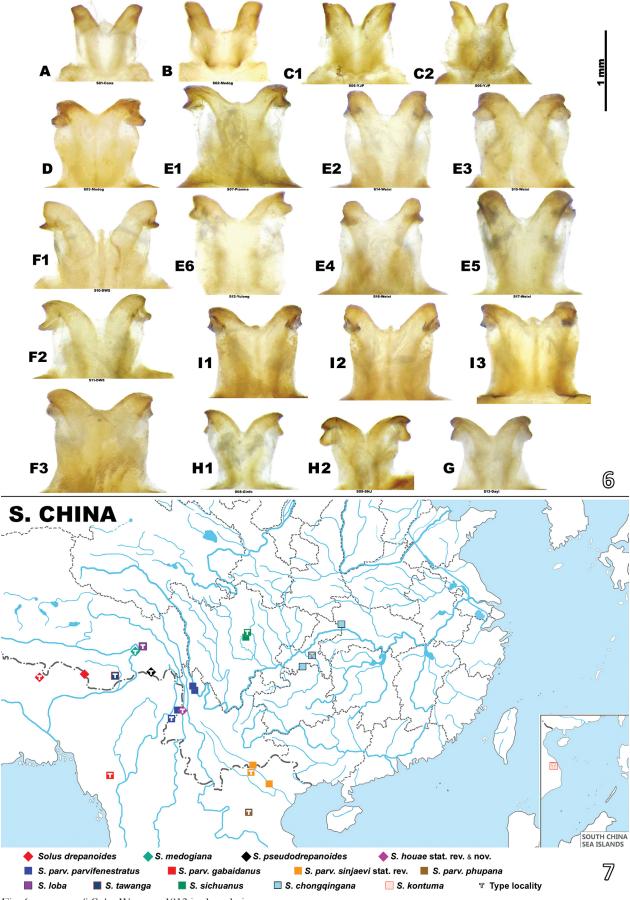


Fig. 6:  $\ensuremath{\mbox{\scriptsize of}}$  uncus of Solus Watson, 1913 in dorsal view.

Fig. 7: Distribution map of *Solus* Watson (taxa of the *drepanoides* Moore-complex are plotted in rhombus; taxa of the *parvifenestratus* Bryk-complex are plotted in square).

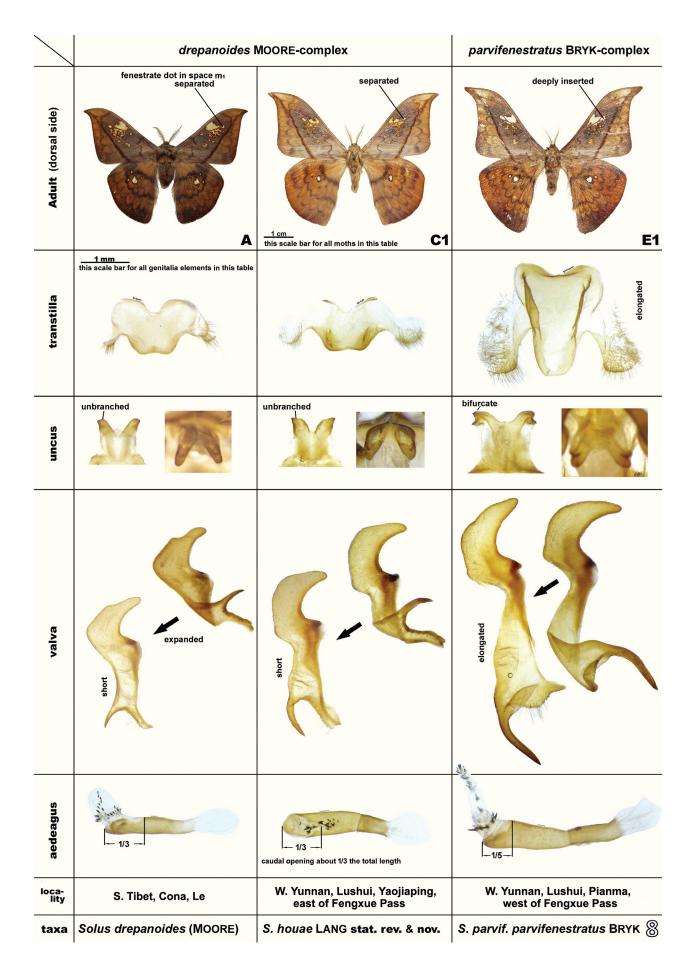


Fig. 8: An illustrated table for a comparison of the Solus drepanoides MOORE-complex and the S. parvifenestratus BRYK-complex.

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Autor(en)/Author(s): Lang Song-Yun

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