A Contribution to the Butterfly Fauna of Southern Yunnan

(Lepidoptera, Rhopalocera)

by

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Abstract: This is a report of the butterflies collected by the first author in the extreme south of Yunnan, China during the summer of 2003. In total 256 species are listed with their collecting localities. Some species are given taxonomic notes. Previous reports and species recently described from this area are also discussed and revised.

Introduction

The extreme south of Yunnan province, usually called Xi-shuang-ban-na, is the most southern part of the Chinese territory, just to the north of Laos. The forests of this area have been proved to be tropical forests and the biological diversity of this area is the most abundant in China. Although there were many entomological expeditions to this area since the new China was erected, only two reports were formally published concerning its butterfly fauna. The first one was written by C.-L. Lee (1962b) on a collection made by the Academia Sinica Expedition to Yunnan during 1955–1957, it recorded 124 species from Xi-shuang-ban-na. The second one was written by Wang & Fan (2002), concerning only lycaenids. Sparsely included into a book named "Butterflies Fauna Sinica: Lycaenidae", it recorded 60 species of lycaenids from Xi-shuang-ban-na. Besides these reports, only a few papers were published on new taxa taken from this area, such as Lee (1962a), Yoshino (1995, 1997 and 1999) and Wang & Zhu (1997).

Supported by Qingdao Vocational and Technical College, the first author had the opportunity to collect there during late June and the whole of July in 2003. The collecting yielded one new species (*Miletus bannanus* Huang & Xue described separately) and some new records of butterflies for the Chinese fauna (marked with an asterisk in the list). Some recently described butterflies were also rediscovered, such as *Sinthusa menglaensis* (Wang, 1997 comb. nov.). Within this paper, at first a full report of the 2003 collecting will be presented, with comments on some interesting or little known taxa, followed by a discussion and partly repetition of the previous two reports on this area.

The main collecting localities are introduced as following: 1) Wang-tian-shu (about 21.6°N, 101.6°E), 3 km north of Bu-bang village, 18 km north of Meng-la county, at the west part of the Meng-la Nature Reserve, where the habitats include open ground at the river, a wooded valley along a small branch of Nan-la river and the dark ground within the deep rain forest, and I collected many species including the very rare *Quedara flavens, Hypolycaena menglaensis* and *Mota massyla* during late June and late July. 2) Ye-xiang-gu (Wild-elephant-valley, about 22.2°N, 100.9°E), 15 km north of Meng-yang town, in the southern part of the Meng-yang Nature Reserve, where the habitats include open ground at the river and the rain forest along a small river, and I collected many species including some newly recorded *Ypthima* and *Halpe* species during early July and late July. 3) Meng-lun, between Meng-la and Meng-yang, where I collected a few species along a road within the rain forest during early July. 4) 20 km west of Meng-la, where I collected some special species including the unique new species of *Miletus* on some paths within the rain forest during mid July. 5) 50 km north of Meng-yang, where I collected a few species along a road in the forest during the end of July.

List of the 2003 collection

Papilionidae

1. *Troides helena cerberus* (C. & R. Felder, [1865])
   Wang-tian-shu, 20 km west of Meng-la.

2. *Troides aeacus aeacus* (C. & R. FELDER, 1860)
   Ye-xiang-gu.
3. *Atrophaneura aidoneus aidoneus* (DOUBLEDAY, 1845)
   Ye-xiang-gu.
4. *Atrophaneura zaleucus zaleucus* (HEWITSON, [1865])
   Wang-tian-shu, 20 km west of Meng-la.
5. *Chilasa epycides epycides* (HEWITSON, 1862)
   Wang-tian-shu.
6. *Chilasa paradoxa telearchus* (HEWITSON, 1852)
   Wang-tian-shu.
7. *Chilasa clytia clytia* (LINNAEUS, 1758)
   Wang-tian-shu.
8. *Papilio demoleus demoleus* LINNAEUS, 1758
   Wang-tian-shu.
9. *Papilio helenus helenus* LINNAEUS, 1758
   Wang-tian-shu, Ye-xiang-gu.
10. *Papilio nephelus chaon* WESTWOOD, 1845
    Wang-tian-shu, Ye-xiang-gu.
11. *Papilio memnon agenor* LINNAEUS, 1758
    Wang-tian-shu.
12. *Papilio bianor ganesa* DOUBLEDAY, 1842
    Ye-xiang-gu, 50 km north of Meng-yang.
13. *Papilio paris paris* LINNAEUS, 1758
    Ye-xiang-gu, 50 km north of Meng-yang.
14. *Graphium agetes agetes* (WESTWOOD, [1843])
    Wang-tian-shu.
15. *Graphium antiphates pompilius* (FABRICIUS, 1787)
    Wang-tian-shu.
16. *Graphium sarpedon sarpedon* (LINNAEUS, 1758)
    50 km north of Meng-yang.
17. *Graphium eurypylus cheronus* (FRUHSTORFER, [1903])
    Wang-tian-shu.
18. *Graphium chironides chironides* (HONRATH, [1884])
    Wang-tian-shu.
19. *Graphium agamemnon agamemnon* (LINNAEUS, 1758)
    Wang-tian-shu.
20. *Lamproptera curius curius* (FABRICIUS, 1787)
    Wang-tian-shu.

Pieridae

21. *Delias pasithoe pasithoe* (LINNAEUS, 1767)
    Ye-xiang-gu.
22. *Delias acalis acalis* (GODART, 1819)
    Ye-xiang-gu.
23. *Delias hyparete indica* (WALLACE, 1867)
    Wang-tian-shu.
24. *Pieris canidia canidia* (SPARRMAN, 1768)
    Wang-tian-shu.
25. *Cepora nadina nadina* (LUCAS, 1852)
    Wang-tian-shu.
26. *Appias nero galba* (WALLACE, 1867)
    Wang-tian-shu.

27. *Appias lyncida eleonora* (Boisduval, 1836)
Ye-xiang-gu.
28. *Appias albina darada* (C. & R. Felder, [1865])
Wang-tian-shu.
29. *Appias lalassis lalassis* Grose-Smith, 1887
Wang-tian-shu.
30. *Appias indra thronion* Fruhstorfer, 1910
Wang-tian-shu.
31. *Catopsilia pomona pomona* (Fabricius, 1775)
Wang-tian-shu, Ye-xiang-gu.
32. *Hebomoia glaucippe glaucippe* (Linnaeus, 1758)
Wang-tian-shu.
33. *Gandaca harina burmana* Moore, [1906]
Ye-xiang-gu, Meng-lun.
34. *Eurema blanda silhetana* (Wallace, 1867)
Wang-tian-shu.
35. *Eurema hecabe hecabe* (Linnaeus, 1758)
Wang-tian-shu.
36. *Eurema andersonii sadanobui* Shirozu & Yata, 1982
Wang-tian-shu, Ye-xiang-gu.

Nymphalidae
Danainae
37. *Parantica melaneus* (Cramer, [1775])
Wang-tian-shu.
38. *Parantica aglea melanoides* Moore, 1883
Wang-tian-shu.
39. *Danaus genutia genutia* (Cramer, [1779])
Wang-tian-shu.
40. *Euploea mulciber mulciber* (Cramer, [1777])
Wang-tian-shu, Ye-xiang-gu.
41. *Euploea core godartii* Lucas, 1853
Wang-tian-shu.
42. *Tirumala septentrionis septentrionis* (Butler, 1874)
Wang-tian-shu.

Acraeinae
43. *Acraea issoria sordice* (Fruhstorfer, 1914)
Wang-tian-shu.

Nymphalinae
44. *Ariadne ariadne pallidior* (Fruhstorfer, 1899)
Wang-tian-shu, Ye-xiang-gu.
45. *Cethosia biblis biblis* (Drury, [1773])
20 km west of Meng-la.
46. *Cethosia cyane euanthes* Fruhstorfer, 1912
20 km west of Meng-la.
47. *Vindula erota erota* (Fabricius, 1793)
Wang-tian-shu.
48. *Cirrochroa tyche mithila* Moore, 1872
Wang-tian-shu.
49. *Vagrans egista sinha* (Kollar, [1844])
Wang-tian-shu.

50. *Cupha erymanthis erymanthis* (DRURY, [1773])
Ye-xiang-gu.
51. *Argyreus hyperbius hyperbius* (LINNAEUS, 1764)
Wang-tian-shu.
52. *Vanessa cardui cardui* (LINNAEUS, 1758)
Wang-tian-shu.
53. *Symbrenthia hippoclus lucina* (CRAMER, 1780)
Wang-tian-shu.
54. *Junonia lemonias lemonias* (LINNAEUS, 1758)
50 km north of Meng-yang.
55. *Junonia orithya ocyale* (HÜBNER, [1819])
Ye-xiang-gu.
56. *Junonia atlites atlites* (LINNAEUS, 1763)
Wang-tian-shu.
57. *Junonia iphita iphita* (CRAMER, [1779])
Wang-tian-shu.
58. *Junonia almana almana* (LINNAEUS, 1758)
50 km north of Meng-yang.
59. *Junonia hierta hierta* (FABRICIUS, 1798)
Ye-xiang-gu.
60. *Hypolimnas bolina bolina* (LINNAEUS, 1758)
Ye-xiang-gu.
61. *Doleschallia bisaltide continentalis* FRUHSTORFER, 1899
Ye-xiang-gu.
62. *Kallima inachus siamensis* FRUHSTORFER, 1912
Ye-xiang-gu.
63. *Cyrestis thyodamas thyodamas* DOYERE, [1840]
Wang-tian-shu.
64. *Neptis harita harita* MOORE, [1875]
Wang-tian-shu. Two males were captured and the examination of male genitalia proved them to be *harita*. However both specimens have the inner edge of the discal band on the underside of the hindwing directed to the costa at the end of vein 8, resembling that of *ilira*.
65. *Neptis nata adipala* MOORE, 1872
Wang-tian-shu.
66. *Neptis yerburii pandoces* ELIOT, 1969
Wang-tian-shu.
67. *Neptis soma shania* EVANS, 1924
Wang-tian-shu.
68. *Neptis clinia susruta* MOORE, 1872
Wang-tian-shu.
69. *Neptis sappho astola* MOORE, 1872
Wang-tian-shu.
70. *Neptis hylas kamarupa* MOORE, 1874
Wang-tian-shu.
71. *Neptis namba namba* TYTLER, 1915 (= *Neptis lucida* LEE, 1962 syn.)
Wang-tian-shu.
72. *Phaedyma columella martabana* (MOORE, 1881)
Ye-xiang-gu.
73. *Pantoporia hordonia hordonia* (STOLL, [1790])
Wang-tian-shu.
74. **Pantoporia dindinga* (BUTLER, 1877) (col. pl. XI, fig. 2)
Meng-lun. The specimen and male genitalia (fig. 2) as illustrated.

75. **Pantoporia assamica* (Moore, 1881) (col. pl. XI, fig. 1)
Ye-xiang-gu. The specimen and male genitalia (fig. 1) as illustrated. The previous record of this species from Hainan (Gu & Chen, 1997) is a misidentification of another species, probably *dindinga*.
76. *Athyma selenophora latifascia* (Talbot, 1936)
Wang-tian-shu, Ye-xiang-gu.
77. *Athyma pravara indosinica* (Fruhstorfer, 1906)
Wang-tian-shu, Ye-xiang-gu.
78. *Athyma ranga obsolescens* (Fruhstorfer, 1906)
Wang-tian-shu, Ye-xiang-gu.
79. *Athyma zeroca galaesus* (Fruhstorfer, 1912)
Wang-tian-shu, Ye-xiang-gu.
80. *Athyma opalina* (Kollar, [1844])
Wang-tian-shu.
81. *Athyma nefte asita* Moore, [1858]
Wang-tian-shu.
82. *Athyma perius perius* (Linnaeus, 1758)
Wang-tian-shu.
83. *Moduza procris procris* (Cramer, [1777]
Ye-xiang-gu.
84. *Auzakia danava danava* (Moore, [1858])
Wang-tian-shu.
85. *Parthenos sylvia gambrisius* (Fabricius, 1787)
Wang-tian-shu.
86. *Tanaecia jahnu jahnu* (Moore, [1858])
Ye-xiang-gu.
87. *Tanaecia julii julii* (Lesson, 1837)
Wang-tian-shu.
88. *Cynitia cocytus ambrysus* (Fruhstorfer, 1913)
Wang-tian-shu.
89. *Cynitia lepidea cognata* Moore, 1897
Ye-xiang-gu.
90. *Cynitia telchinia* (Menetries, 1857)
20 km west of Meng-la.
91. *Euthalia evelina annamita* (Moore, 1879)
Wang-tian-shu.
92. *Euthalia franciae raja* (C. & R. Felder, 1859)
20 km west of Meng-la.
93. *Euthalia phemius phemius* (Doubleday, [1848])
20 km west of Meng-la.
94. *Euthalia confucius sadona* Tytler, 1940
50 km north of Meng-yang.
95. *Euthalia lubentina lubentina* (Cramer, [1777])
50 km north of Meng-yang.
96. *Euthalia anosia anosia* (Moore, [1858])
20 km west of Meng-la.
97. *Euthalia monina kesava* (Moore, 1859)
20 km west of Meng-la, Wang-tian-shu, 50 km north of Meng-yang.
98. *Lexias pardalis jadeitina* (Fruhstorfer, 1913)
Ye-xiang-gu.
99. *Lexias dirtea bontouxi* (Vitalis de Salvaza, 1924)
Ye-xiang-gu.
100. *Lexias cyanipardus grandis* Yokochi, 1991
Wang-tian-shu.

101. *Stibochiona nicea nicea* (GRAY, 1846)
Wang-tian-shu.
102. *Dichorragia nesimachus nesimachus* (DOYERE, [1840])
Wang-tian-shu.

Charaxinae
103. *Mimathyma ambica miranda* (FRUHSTORFER, 1902)
Ye-xiang-gu.
104. *Rohana parisatis staurakius* (FRUHSTORFER, 1913)
Wang-tian-shu.
105. *Euripus nyctelius euploeoides* C. & R. FELDER, [1867]
Wang-tian-shu.
106. *Hestinalis nama nama* (DOUBLEDAY, 1845)
Wang-tian-shu.
107. *Polyura eudamippus nigrobasalis* (LATHY, 1898)
Ye-xiang-gu.
108. *Polyura athamas athamas* (DRURY, [1773])
Wang-tian-shu.
109. *Polyura schreiber assamensis* (ROTHSCHILD, 1899)
Wang-tian-shu.
110. *Charaxes bernardus hierax* (C.& R. FELDER, [1867])
Wang-tian-shu.

Calinaginae
111. **Calinaga sudassana sudassana* MELVILL, 1893
Ye-xiang-gu. Although this species has specimens found in several Chinese collections, its formal record for the Chinese fauna has never been published.

Amathusiinae
112. *Stichophthalma louisa mathilda* JANET, 1905
Ye-xiang-gu.
113. *Discophora sondaica zal* WESTWOOD, [1851]
Ye-xiang-gu.
114. *Faunis eumeus incerta* (STAUDINGER, [1887])
Ye-xiang-gu.
115. *Faunis canens arcesilas* STICHEL, 1933
Ye-xiang-gu.

Satyrinae
116. *Melanitis phedima ganapati* FRUHSTORFER, 1908
Ye-xiang-gu.
117. *Melanitis leda leda* (LINNAEUS, 1758)
Ye-xiang-gu.
118. *Melanitis zitenius auletes* FRUHSTORFER, 1908
Ye-xiang-gu.
119. *Lethe mekara crijnana* FRUHSTORFER, 1911
Wang-tian-shu.
120. *Lethe europa gada* FRUHSTORFER, 1911
Ye-xiang-gu.
121. *Lethe kansa vaga* FRUHSTORFER, 1911
Ye-xiang-gu.
122. *Lethe confusa confusa* AURIVILLIUS, [1898] (= *Lethe confusa fuhaica* LEE, 1962 syn.)
Wang-tian-shu.

123. *Lethe verma stenopa* Fruhstorfer, 1908
Wang-tian-shu.
124. *Mandarinia regalis baronesa* Fruhstorfer, 1906
Wang-tian-shu.
125. *Ethope noirei* (Janet, 1896)
Ye-xiang-gu.
126. *Zipaetis unipupillata unipupillata* Lee, 1962 (= *Zipaetis scylax hani* Yoshino, 1997 syn.)
Ye-xiang-gu.
127. *Orsotriaena medus medus* (Fabricius, 1775)
Wang-tian-shu.
128. *Elymnias malelas ivena* Fruhstorfer, 1911
Wang-tian-shu.
129. *Elymnias vasudeva burmensis* (Moore, [1893])
20 km west of Meng-la.
130. *Elymnias nesaea apelles* Fruhstorfer, 1902
Wang-tian-shu.
131. *Mycalesis francisca sanatana* Moore, [1858]
Wang-tian-shu.
132. *Mycalesis gotama charaka* Moore, 1874
Wang-tian-shu, Ye-xiang-gu.
133. *Mycalesis intermedia* (Moore, [1892]) (col. pl. XI, fig. 5)
Ye-xiang-gu. The previous records of this species in Chinese literatures are unreliable. This is the first true record of this species for the Chinese fauna. The specimen and male genitalia (fig. 4) are illustrated, the hair tuft on the upperside of the left hindwing has been taken off to show the brand.
134. *Mycalesis mineus subfasciata* (Moore, 1882) (col. pl. XI, figs. 3, 4)
Ye-xiang-gu. Only one male has been captured, and the specimen and male genitalia (fig. 3) are illustrated, the hair tuft on the upperside of the left hindwing has been taken off to show the brand. We take this opportunity to illustrate the male genitalia of *M. perseoides* (Moore, [1892]) (figs. 5, 6), which are taken from the specimens from Hekou, SE. Yunnan.
135. *Mycalesis sangaica tunicula* Fruhstorfer, 1911
Ye-xiang-gu.
136. *Mycalesis malsara* Moore, [1858]
Ye-xiang-gu.
137. **Ypthima similis similis* Elwes & Edwards, 1893 (col. pl. XI, fig. 7)
Ye-xiang-gu. The male genitalia have been examined.
138. *Ypthima baldus baldus* (Fabricius, 1775)
Wang-tian-shu, Ye-xiang-gu.
139. **Ypthima sobrina* Elwes & Edwards, 1893
Ye-xiang-gu. Only one female has been captured and its genitalia have been examined.
140. *Ypthima huebneri* Kirby, 1871
Wang-tian-shu.
141. *Ypthima savara savara* Grose-Smith, 1887 (col. pl. XI, fig. 6)
Ye-xiang-gu. Only one male was captured and its male genitalia is examined.
142. **Ypthima akbar* Talbot, 1947
Ye-xiang-gu. The male genitalia have been examined.

Riodinidae
143. *Zemeros flegyas flegyas* (Cramer, [1780])
Wang-tian-shu, Ye-xiang-gu.
144. *Dodona deodata deodata* Hewitson, 1876
Ye-xiang-gu.
145. *Dodona egeon egeon* (Westwood, [1851])
20 km west of Meng-la.

146. *Dodona adonira learmondi* TYTLER, 1940
Wang-tian-shu.
147. *Abisara fylla fylla* (WESTWOOD, [1851])
Wang-tian-shu.
148. *Abisara chelina chelina* (FRUHSTORFER, [1904])
Wang-tian-shu.

Lycaenidae
149. *Miletus mallus gethusus* (FRUHSTORFER, [1917])
Wang-tian-shu, Ye-xiang-gu. All specimens captured have been dissected and proved to be true *mallus* according the genitalia examination.
150. *Miletus archilochus archilochus* (FRUHSTORFER, 1913)
20 km west of Meng-la. Only one female was captured, its identification was based upon external features.
151. *Miletus bannanus* HUANG & XUE, 2004
20 km west of Meng-la.
152. *Allotinus drumila aphtonius* FRUHSTORFER, 1914
Wang-tian-shu.
153. *Spalgis epeus epeus* (WESTWOOD, [1851])
Wang-tian-shu.
154. *Taraka hamada mendesia* FRUHSTORFER, 1918
Wang-tian-shu.
155. *Caleta roxus roxana* (DE NICEVILLE, 1897)
Ye-xiang-gu.
156. *Caleta elna noliteia* (FRUHSTORFER, 1918)
Ye-xiang-gu.
157. *Pithecops corvus correctus* COWAN, 1966
Ye-xiang-gu.
158. *Zizeeria karsandra* (MOORE, 1865)
50 km north of Meng-yang.
159. *Pseudozizeeria maha diluta* (FELDER, 1865)
Wang-tian-shu.
160. *Acytolepis puspa gisca* (FRUHSTORFER, 1910)
Wang-tian-shu.
161. *Celatoxia marginata marginata* (DE NICEVILLE, [1884])
Wang-tian-shu.
162. *Celastrina argiolus iynteana* (DE NICEVILLE, [1884])
Wang-tian-shu.
163. *Celastrina lavendularis limbata* (MOORE, 1879)
Wang-tian-shu, Ye-xiang-gu.
164. *Shijimia moorei moorei* (LEECH, 1889)
Wang-tian-shu.
165. *Megisba malaya sikkima* MOORE, 1884
Wang-tian-shu.
166. *Catochrysops panormus exiguus* (DISTANT, 1886)
Wang-tian-shu.
167. *Jamides bochus bochus* (STOLL, [1782])
Wang-tian-shu.
168. *Jamides celeno aelianus* (FABRICIUS, 1793)
Wang-tian-shu, Ye-xiang-gu.
169. *Jamides alecto alocina* SWINHOE, 1915
Wang-tian-shu.

170. *Nacaduba pactolus continentalis* Fruhstorfer, 1916
Wang-tian-shu. The identifications of this species and the following species of this genus group are based upon the examination of male genitalia.
171. *Nacaduba kurava euplea* Fruhstorfer, 1916
Wang-tian-shu.
172. *Nacaduba beroe gythion* Fruhstorfer, 1916
Wang-tian-shu.
173. *Ionolyce helicon merguiana* (Moore, 1884)
Wang-tian-shu, Ye-xiang-gu, Meng-lun, 20 km west of Meng-la.
174. *Prosotas lutea sivoka* (Evans, 1910)
Wang-tian-shu.
175. *Prosotas aluta coelestis* (Wood-Mason & de Niceville, [1887])
Wang-tian-shu.
176. *Prosotas nora ardates* (Moore, 1874)
Wang-tian-shu, Ye-xiang-gu, Meng-lun.
177. *Prosotas pia marginata* Tite, 1963
Wang-tian-shu.
178. *Prosotas bhutea bhutea* (de Niceville, [1884])
20 km west of Meng-la.
179. *Prosotas dubiosa indica* (Evans, 1925)
Wang-tian-shu.
180. *Una usta usta* (Distant, 1886)
50 km north of Meng-yang.
181. *Niphanda asialis marcia* (Fawcett, 1904)
Ye-xiang-gu.
182. *Anthene emolus emolus* (Godart, [1824])
Wang-tian-shu, Ye-xiang-gu.
183. *Anthene lycaenina lycambes* (Hewitson, [1878])
Wang-tian-shu, Ye-xiang-gu.
184. *Heliophorus ila urius* Eliot, 1963
Ye-xiang-gu. Male genitalia have been examined.
185. *Heliophorus epicles latilimbata* (Fruhstorfer, 1908)
Wang-tian-shu, 20 km west of Meng-la. All males appear closer to ssp. *latilimbata* from Sikkim than to ssp. *phoenicoparyphus* (Holland, 1878) from Hainan Island in both external features and male genitalia.
186. *Arhopala oenea* (Hewitson, [1869])
Ye-xiang-gu.
187. *Arhopala pseudocentaurus nakula* (C. & R. Felder, 1860)
Ye-xiang-gu.
188. *Arhopala paramuta paramuta* (de Niceville, [1884])
Ye-xiang-gu.
189. **Mota massyla* (Hewitson, 1862) (col. pl.. XI, fig. 8)
Wang-tian-shu. An astonishing catch, only one female was obtained. This species, together with its genus, is new to the Chinese fauna.
190. *Surendra quercetorum quercetorum* (Moore, [1858])
Wang-tian-shu.
191. *Zinaspa todara karennia* (Evans, 1925)
Wang-tian-shu.
192. *Spindasis syama peguanus* (Moore, 1884)
Wang-tian-shu.
193. *Spindasis lohita batina* (Fruhstorfer, [1912])
Ye-xiang-gu.

194. *Yasoda tripunctata tripunctata* (HEWITSON, [1863])
Wang-tian-shu.
195. *Yasoda androconifera* FRUHSTORFER, [1912]
Wang-tian-shu.
196. *Loxura atymnus continentalis* FRUHSTORFER, [1912]
Wang-tian-shu.
197. **Tajuria yajna* (DOHERTY, 1886) ssp. (col. pl. XI, fig. 9)
Ye-xiang-gu. Only one male was captured and it shows more similarities to ssp. *yajna* from NW. India than to ssp. *ellisi* EVANS from Burma. For exact identification more material is needed in the future.
198. *Remelana jangala ravata* (MOORE, [1866])
50 km north of Meng-yang.
199. *Ancema ctesia agalla* (FRUHSTORFER, [1912])
50 km north of Meng-yang.
200. *Hypolycaena erylus himavantus* FRUHSTORFER, [1912]
Wang-tian-shu, Ye-xiang-gu.
201. *Hypolycaena othona matiana* (FRUHSTORFER, [1912])
Wang-tian-shu, Ye-xiang-gu.
202. *Zeltus amasa amasa* (HEWITSON, [1865])
Wang-tian-shu, Ye-xiang-gu.
203. *Rapala manea schistacea* (MOORE, 1879)
Ye-xiang-gu.
204. *Rapala varuna orseis* (HEWITSON, [1863])
Wang-tian-shu.
205. *Sinthusa menglaensis* (WANG, 1997 **comb. nov.**) (= *Chliaria menglaensis* WANG, 1997)
Wang-tian-shu. Only a single female was obtained this time (col. pl. XI, fig. 10). Hitherto only two females have been collected ever, this proves the species to be extremely rare in nature. Our specimen collected in July should belong to the wet-season form, with all underside markings narrower than those of the holotype taken in April (the unique holotype should belong to the dry-season form).
An examination of wing-venation, wing-pattern and female genitalia proves this species to be a member of the genus *Sinthusa*, not *Chliaria* (currently treated as a synonym of *Hypolycaena*).
In venation, the forewing has 11 veins, the hindwing is tailed only at vein 2, not tailed at vein 1b. In wing pattern, there is a cell spot on the underside of the hindwing. In female genitalia all structures are very similar to those of *Sinthusa chandrana*. A description of female genitalia (fig. 11) is as follows (compared with *Sinthusa chandrana* (fig. 12) and *Sinthusa virgo* (fig. 13)).
In all the three species examined, apophysis anterioris present in almost the same degree, apophysis posterioris almost as long as or a little longer than 8th tergum, papilla analis similarly shaped, with its length conspicuously longer than its width in lateral view, 8th sternum not sclerotized at all, without genital plate or lamella, ostium opening between the 7th and 8th sternum and its entrance not sclerotized, ductus bursae and corpus bursae clearly delimited in thickness, ductus bursae a little shorter than or subequal to 8th tergum, the attachment point of ductus seminalis arising from the dorsal surface of ductus bursae and closer to corpus bursae than to ostium, almost at ⅔ from ostium. The differences between these three species are found mainly in the sclerotization of ductus bursae and signum of corpus bursae as follows. Signum has its inner process rounded and ear-shaped at the inner edge in both *menglaensis* and *virgo*, but has its inner process sharply pointed and thorn-shaped at the inner edge in *chandrana*. Sclerotization is somewhat semi-cylindric and fully developed for almost the whole length along the ventral surface of ductus bursae in both *menglaensis* and *chandrana*, only leaving the immediate entrance of the ostium and dorsal surface of ductus bursae membranous. That sclerotization does not reach the opening of the corpus bursae in *menglaensis*, but extends dorsally to form a sclerotized plate just above the opening of the corpus bursae in *chandrana*. In *virgo* the sclerotization is much more reduced, composed of a short semi-cylindric sclerotized portion near the opening of the ostium and a very small irregular sclerotized area inside of the ductus bursae at the attachment point of ductus seminalis.

206. **Bindahara phocides phocides* (Fabricius, 1793)
Wang-tian-shu. Only one female was encountered and captured. A friend of the first author also captured a single male at a forest near Jing-hong.
207. **Araotes lapithis lapithis* (Moore, [1858])
Ye-xiang-gu. Only one female was encountered and captured.
208. *Curetis bulis bulis* (Westwood, [1851])
Wang-tian-shu, Ye-xiang-gu.
209. *Curetis acuta acuta* Moore, 1877
Wang-tian-shu.

Hesperiidae
210. *Burara amara* (Moore, [1866])
Wang-tian-shu.
211. *Hasora badra badra* (Moore, [1858])
Ye-xiang-gu.
212. *Badamia exclamationis* (Fabricius, 1775)
Ye-xiang-gu.
213. **Celaenorrhinus vietnamicus* Devyatkin, 1998
Wang-tian-shu, Ye-xiang-gu. Although some specimens have been found in Chinese collections, this species is recorded here formally for the Chinese fauna (genitalia: fig. 7).
214. *Celaenorrhinus nigricans nigricans* (de Niceville, 1885)
Wang-tian-shu.
215. *Celaenorrhinus dhanada affinis* Elwes & Edwards, 1897
Wang-tian-shu.
216. *Pseudocoladenia dan fabia* (Evans, 1949)
Wang-tian-shu, Ye-xiang-gu.
217. *Sarangesa dasahara dasahara* (Moore, [1866])
Ye-xiang-gu, Meng-lun.
218. *Gerosis phisara phisara* (Moore, 1884)
Ye-xiang-gu.
219. *Tagiades litigiosa litigiosa* Möschler, 1878
Ye-xiang-gu.
220. *Odontoptilum angulata angulata* (C. Felder, 1862)
Ye-xiang-gu.
221. *Astictopterus jama olivascens* Moore, 1878
Wang-tian-shu.
222. *Arnetta atkinsoni* (Moore, 1878)
Ye-xiang-gu. This population from S. Yunnan had been named ssp. *sinensis* Lee, 1962. It seems to be only a synonym of *atkinsoni*.
223. *Ochus subvittatus subvittatus* (Moore, 1878)
Wang-tian-shu, Ye-xiang-gu.
224. *Ampittia dioscorides etura* (Mabille, 1891)
50 km north of Meng-yang.
225. *Sovia albipectus* (de Niceville, 1891)
Ye-xiang-gu.
226. **Halpe zema zema* (Hewitson, 1877)
Ye-xiang-gu. This species, together with the following four, has been examined in male genitalia (fig. 8).
227. *Halpe porus* (Mabille, [1877])
Ye-xiang-gu.
228. *Halpe hauxwelli* Evans, 1937
Ye-xiang-gu.

229. **Halpe arcuata* EVANS, 1937 (? = *Halpe muoi* HUANG, 1999)
Ye-xiang-gu. *Halpe muoi* described from Qu-jing, NE. Yunnan is most probably a synonym of *Halpe arcuata*. The formal revision needs an examination of the type material of *arcuata* in the future.
230. **Halpe wantona* SWINHOE, 1893
Ye-xiang-gu (fig. 9).
231. *Pithauria stramineipennis* WOOD-MASON & DE NICEVILLE, [1887]
Wang-tian-shu.
232. *Iambrix salsala salsala* (MOORE, [1866])
Wang-tian-shu.
233. **Koruthaialos butleri* DE NICEVILLE, [1884]
Wang-tian-shu, Ye-xiang-gu, 20 km west of Meng-la. Male genitalia have been examined.
234. *Koruthaialos sindu sindu* (C. & R. FELDER, 1860)
Wang-tian-shu.
235. *Koruthaialos rubecula hector* WATSON, 1893
Wang-tian-shu.
236. *Stimula swinhoei swinhoei* (ELWES & EDWARDS, 1897)
Wang-tian-shu.
237. *Ancistroides nigrita diocles* (MOORE, [1866])
Wang-tian-shu.
238. *Notocrypta feithamelii alysos* (MOORE, [1866])
Wang-tian-shu.
239. *Notocrypta curvifascia curvifascia* (C. & R. FELDER, 1862)
Wang-tian-shu.
240. *Notocrypta clavata theba* EVANS, 1949
Wang-tian-shu. Male genitalia have been examined.
241. *Cupitha purreea* (MOORE, 1877)
Wang-tian-shu.
242. **Quedara flavens* DEVYATKIN, 2000 (col. pl. XI, fig. 11)
Wang-tian-shu. An interesting catch, only one male was encountered (genitalia: fig. 10) and captured. It was originally described from Vietnam.
243. *Matapa aria* (MOORE, [1866])
Ye-xiang-gu.
244. *Potanthus nesta nesta* (EVANS, 1934)
Ye-xiang-gu. This species, together with the following four, has been examined in male genitalia.
245. *Potanthus ganda ganda* (FRUHSTORFER, 1911)
Ye-xiang-gu. *Potanthus tropica menglana* LEE, 1962 from this area should be only a synonym of *P. ganda ganda*, the formal revision will be given in another paper.
246. *Potanthus palnia palnia* (EVANS, 1914)
Ye-xiang-gu.
247. *Potanthus rectifasciata* (ELWES & EDWARDS, 1897)
Ye-xiang-gu. This population from S. Yunnan had been named ssp. *menglana* LEE, 1962. It should be a synonym of *rectifasciata*, the formal revision will be published in another paper.
248. *Potanthus mingo ajax* (EVANS, 1932)
Wang-tian-shu.
249. *Telicota ohara jix* EVANS, 1949
Ye-xiang-gu.
250. **Parnara apostata hulsei* DEVYATKIN & MONASTYRSKII, 1999
Wang-tian-shu. Male genitalia have been examined.
251. *Pelopidas agna agna* (MOORE, [1866])
50 km north of Meng-yang.
252. *Polytremis lubricans lubricans* (HERRICH-SCHÄFFER, 1869)
Wang-tian-shu.

253. *Baoris farri farri* (Moore, 1878)
Wang-tian-shu, Ye-xiang-gu.
254. *Caltoris cahira austeni* (Moore, [1884])
Ye-xiang-gu. This species, together with the following two, has been examined in male genitalia.
255. *Caltoris kumara moorei* (Evans, 1926)
Ye-xiang-gu. This population is much darker and blacker on the underside of the hindwing than the typical *moorei* from Sikkim, the syntype of *moorei* examined.
256. *Caltoris bromus bromus* (Leech, 1893)
Ye-xiang-gu.

The following species that have been reported in literature from Xi-shuang-ban-na are not found in our list. Some of the records by Lee are apparently unreliable because no information has been published in his report except scientific names only. However the records of lycaenids by Wang & Fan and the new descriptions by Yoshino all have specimens illustrated, so further comments on their works are possible here.

Papilionidae
1. *Menelaides aristolochiae goniopeltis*: Lee, 1962b; Meng-yang. The correct name is *Pachliopta aristolochiae*.
2. *Papilio machaon verityi*: Lee, 1962b; Jing-hong.
3. *Papilio castor kanlanpanus*: Lee, 1962a; Meng-han.
4. *Graphium xenocles*: Lee, 1962b; Meng-han.

Pieridae
5. *Delias lativitta tai* Yoshino, 1999; Meng-la. This taxon has been merged into *Delias lativitta yunnana* Talbot, 1937.
6. *Delias berinda adelma*: Lee, 1962b; Meng-hai.
7. *Prioneris thestylis*: Lee, 1962b; Meng-han.
8. *Pieris brassicae nepalensis*: Lee, 1962b; Meng-hai, Jing-hong.
9. *Pieris melete*: Lee, 1962b; Meng-hai, Meng-yang. This is probably a misidentification of *P. erutae*.
10. *Cepora coronis*: Lee, 1962b; Da-Meng-long.
11. *Ixias pyrene*: Lee, 1962b; Meng-han, Jing-hong.
12. *Catopsilia crocale*: Lee, 1962b; Meng-han, Jing-hong, Da-Meng-long.

Nymphalidae
13. *Limnas chrysippus*: Lee, 1962b; Meng-yang, Jing-hong. The correct name is *Danaus chrysippus*.
14. *Tirumala limniace*: Lee, 1962b; Meng-han, Meng-yang, Meng-hai.
15. *Euploea klugi* [sic!]: Lee, 1962b; Meng-han. The correct name is *Euploea klugii*.
16. *Ypthima zodia*: Lee, 1962b; Meng-hai. This is probably a misidentification of *Ypthima melli*, because the first author has found specimens of *melli* instead of *zodia* in the collection of the Institute of Zoology, Chinese Academy of Science, Beijing.
17. *Ypthima methora*: Lee, 1962b; Meng-hai.
18. *Mycalesis perseus*: Lee, 1962b; Jing-hong. This species and the following two are unreliable records, although these species may inhabit this area.
19. *Mycalesis perseoides*: Lee, 1962b; Meng-han.
20. *Mycalesis visala*: Lee, 1962b; Meng-han, Meng-hai, Jing-hong.
21. *Mycalesis mamerta*: Lee, 1962b; Meng-yang, Meng-han, Meng-hai. This is probably a misidentification of *M. malsara*.
22. *Elymnias hypermnestra hypermnestra*: Lee, 1962b; Meng-han.
23. *Thaumantis diores diores*: Lee, 1962b; Meng-han.
24. *Thauria lathyi amplifascia*: Lee, 1962b; Jing-hong.
25. *Discophora timora*: Lee, 1962b; Meng-han.

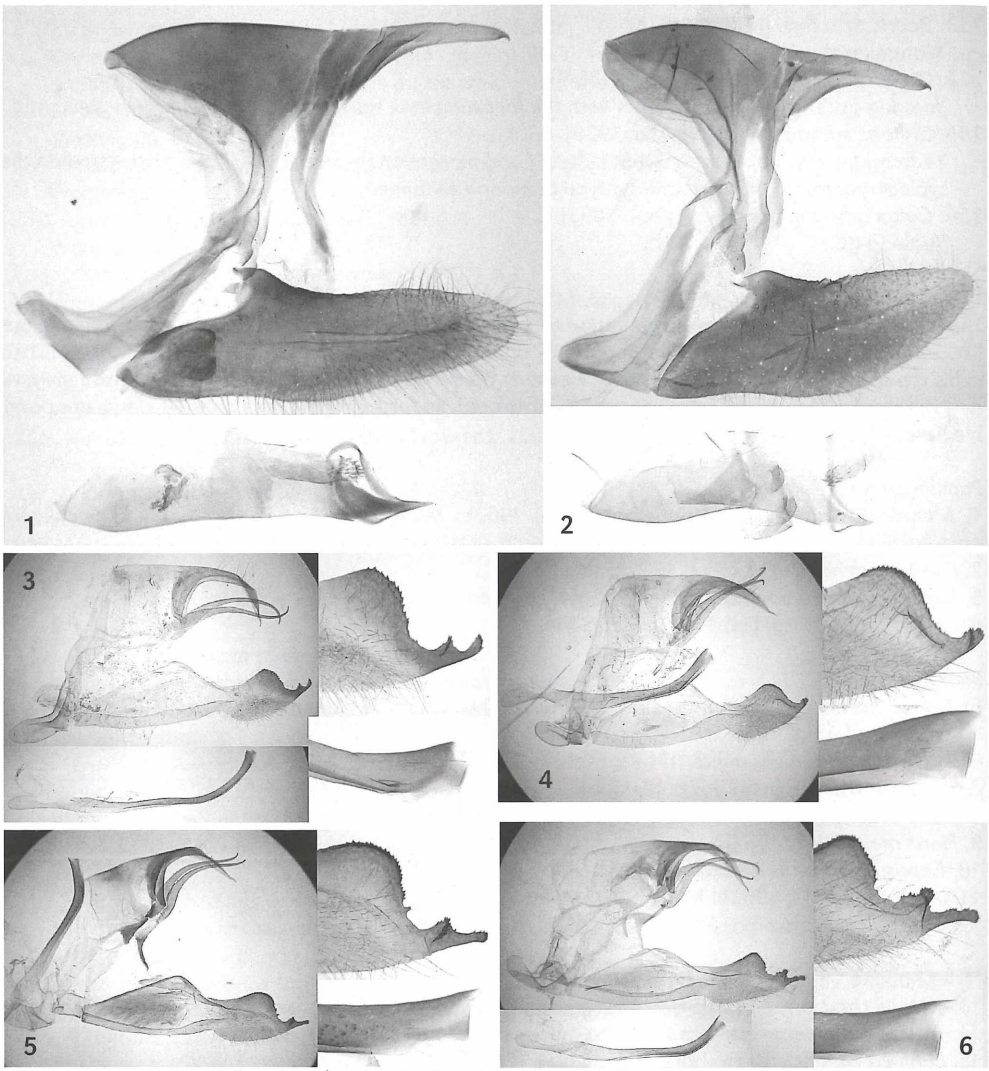
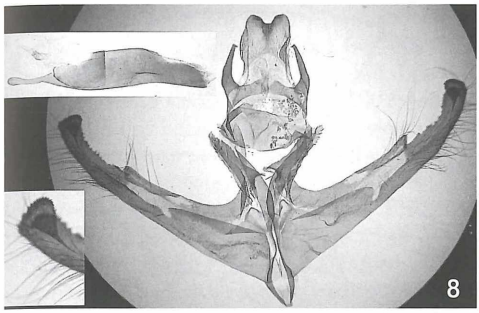
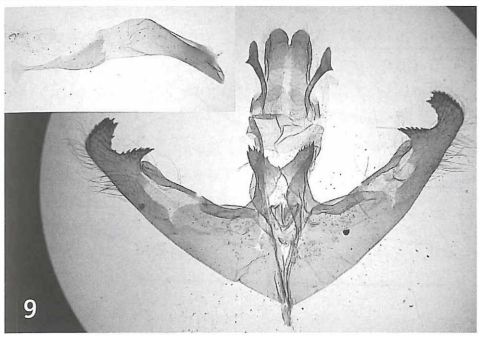
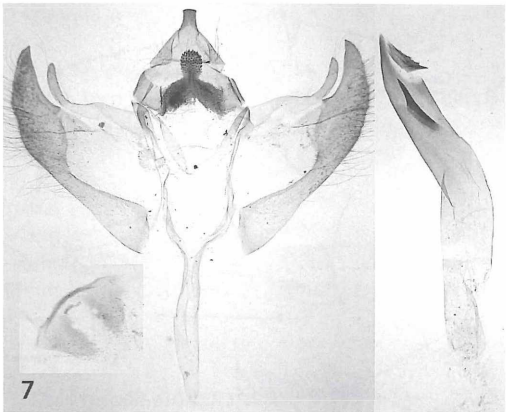


Fig. 1: Male genitalia of *Pantoporia assamica* (specimen illustrated) consisting of genital capsule in lateral view (top) with left valva and aedeagus removed, and of aedeagus in lateral view (bottom). Fig. 2: Male genitalia of *Pantoporia dindinga* (specimen illustrated) consisting of genital capsule in lateral view (top) with left valva and aedeagus removed, and of aedeagus in lateral view (bottom). Fig. 3: Male genitalia of *Mycalesis mineus subfasciata* (specimen illustrated) consisting of genital capsule in lateral view (left top) with left valva and aedeagus removed, of aedeagus in lateral view (left bottom), of enlarged tip of valva in lateral view (right top) and of enlarged tip of aedeagus in lateral view (right bottom). Fig. 4: Male genitalia of *Mycalesis intermedia* (specimen illustrated) consisting of genital capsule in lateral view (left) with left valva removed, of enlarged tip of valva in lateral view (right top) and of enlarged tip of aedeagus in lateral view (right bottom). Fig. 5: Male genitalia of *Mycalesis perseoides* (Hekou, SE. Yunnan, specimen not illustrated) consisting of genital capsule in lateral view (left) with left valva removed, of enlarged tip of valva in lateral view (right top) and of enlarged tip of aedeagus in lateral view (right bottom). Fig. 6: Male genitalia of *Mycalesis perseoides* (Hekou, SE. Yunnan, specimen not illustrated) consisting of genital capsule in lateral view (left top) with left valva and aedeagus removed, of aedeagus in lateral view (left bottom), of enlarged tip of valva in lateral view (right top) and of enlarged tip of aedeagus in lateral view (right bottom).







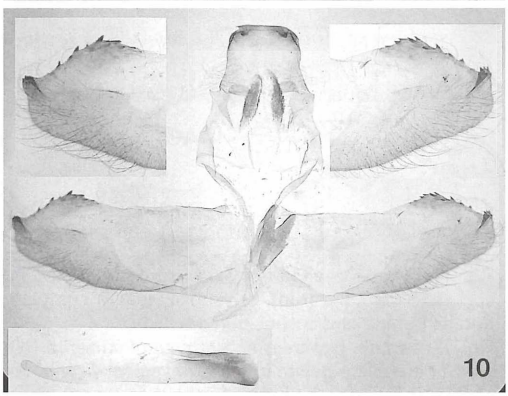


Fig. 7: Male genitalia of *Celaenorrhinus vietnamicus* (Wang-tian-shu, specimen not illustrated) consisting of genital capsule spread with tegumen, uncus and gnathos in ventral view and both clasps (valvae) in inner lateral view (left), of juxta spread (left bottom) and of aedeagus in lateral view (right).

Fig. 8: Male genitalia of *Halpe zema zema* (Ye-xiang-gu, specimen not illustrated) consisting of genital capsule spread with tegumen, uncus and gnathos in ventral view and both clasps (valvae) in inner lateral view (right), of aedeagus in lateral view (left top) and of enlarged tip of left clasp (left bottom).

Fig. 9: Male genitalia of *Halpe wantona* (Ye-xiang-gu, specimen not illustrated) consisting of genital capsule spread with tegumen, uncus and gnathos in ventral view and both clasps (valvae) in inner lateral view (right), and of aedeagus in lateral view (left top).

Fig. 10: Male genitalia of *Quedara flavens* (specimen illustrated) consisting of genital capsule spread with tegumen, uncus and gnathos in ventral view and both clasps (valvae) in inner lateral view (center), of aedeagus in lateral view (bottom), of enlarged tip of left clasp (left) and of enlarged tip of right clasp (right).

26. *Rohana nakula panna* Yoshino, 1995; Xi-shuang-ban-na.
27. *Neptis cartica*: Lee, 1962b; Meng-han, Meng-hai; *Neptis cartica pagoda* Yoshino, 1997; Meng-hai.
28. *Neptis sankara xishuanbannaensis* Yoshino, 1997; Meng-hai.
29. *Chitoria sordita* [sic!] *hani* Yoshino, 1999; Meng-hai. The correct name is *Chitoria sordida hani*.
30. *Kaniska canace*: Lee, 1962b; Meng-han.

Riodinidae

31. *Dodona ouida palaya*: Lee, 1962b; Meng-yang.

Lycaenidae

32. *Poritia phama*: Lee, 1962b; Meng-yang. An unreliable record, the first author has failed to locate this specimen in the collection of the Institute of Zoology, Chinese Academy of Science, Beijing.

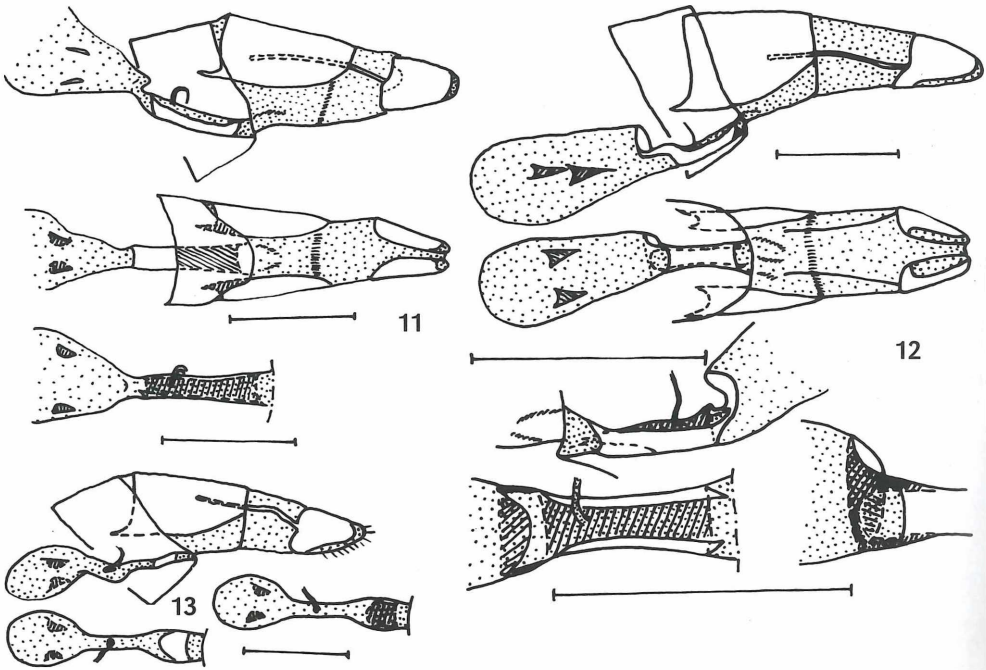


Fig. 11: Female genitalia of *Sinthusa menglaensis* (Mengla, S. Yunnan) consisting of the lateral view of complete genitalia (top), of ventral view of complete genitalia (center), and of dorsal view of enlarged ductus bursae and corpus bursae.
Fig. 12: Female genitalia of *Sinthusa chandrana* (Nujiang valley, NW. Yunnan) consisting of the lateral view of complete genitalia (top), of ventral view of complete genitalia (upper center), of right lateral view of ductus bursae and base of corpus bursae to show the sclerotization, of dorsal view of ductus bursae and base of corpus bursae (left bottom), and of ventral view of conjoining portion between ductus bursae and corpus bursae to show the sclerotization.
Fig. 13: Female genitalia of *Sinthusa virgo* (Dulong valley, NW. Yunnan) consisting of the lateral view of complete genitalia (top), of ventral view of ductus bursae and corpus bursae (left), and of dorsal view of ductus bursae and corpus bursae (right).

33. *Poritia ericynoides elsiei*: WANG & FAN, 2002; Meng-la.
34. *Miletus boisduvali*: LEE, 1962b, Meng-hai; *Miletus boisduvali*: WANG & FAN, 2002, Meng-la. According to the illustration of specimens (WANG & FAN, 2002: plate 1) and male genitalia (WANG & FAN, 2002: 8, fig. 4), the record of this species by WANG & FAN should be a misidentification of *Miletus chinensis*.
35. *Miletus chinensis chinensis*: WANG & FAN, 2002; Meng-la. The male specimen illustrated by WANG & FAN (2002: plate 1) in figures 25 and 26 as *chinensis* is correct. However, those specimens illustrated in figures 27–30 should be a misidentification of *Miletus mallus gethusus*.
36. *Logania marmorata marmorata*: WANG & FAN, 2002; Meng-la.
37. *Arhopala perimuta perimuta*: WANG & FAN, 2002; Meng-la.
38. *Thaduka multicaudata multicaudata*: WANG & FAN, 2002; Meng-la.
39. *Flos chinensis*: WANG & FAN, 2002; Meng-la.
40. *Flos diardi menglunensis* WANG & FAN, 2002; Meng-lun. Based upon a single female, this taxon does not seem to be valid. It may be just a synonym of *Flos diardi diardi* (HEWITSON, 1862), which is distributed from India through Burma to Indo-China.
41. *Flos gunnanensis* WANG & FAN, 2002; Meng-la. Based upon a single female, this taxon is hardly distinguishable from *Flos anniella artegal* (DOHERTY, 1889).

42. *Catapaecilma major major*: Wang & Fan, 2002; Meng-la.
43. *Horaga syrinx sikkima*: Wang & Fan, 2002; Meng-la.
44. *Ticherra acte*: Lee, 1962b; Meng-hai. *Ticherra acte acte*: Wang & Fan, 2002; Meng-la.
45. *Chliaria kina kina*: Wang & Fan, 2002; Meng-la. The current name is *Hypolycaena kina*, the genus *Chliaria* has been treated as a synonym of *Hypolycaena*.
46. *Rapala suffusa suffusa*: Wang & Fan, 2002; Meng-la.
47. *Heliophorus indicus*: Wang & Fan, 2002; Meng-la.
48. *Petrelaea dana dana*: Wang & Fan, 2002; Meng-la.
49. *Syntarucus plinius plinius*: Wang & Fan, 2002; Meng-la.
50. *Celastrina dilecta*: Lee, 1962b (*Udara dilecta*); Meng-han, Meng-yang.
51. *Neopithesops* [sic!] *zalmora* [sic!]: Lee, 1962b; Meng-yang. *Neopithecops zelmora zelmora*: Wang & Fan, 2002; Meng-la.
52. *Castalius rosimon*: Lee, 1962b; Da-Meng-long.
53. *Tarucus plinius*: Lee, 1962b; Meng-yang.
54. *Catochrysops strabo*: Lee, 1962b; Jing-hong. *Catochrysops strabo strabo*: Wang & Fan, 2002; Meng-la.
55. *Euchrysops cnejus*: Lee, 1962b; Meng-hai. *Euchrysops cnejus*: Wang & Fan, 2002; Meng-la.
56. *Zizula hylax*: Wang & Fan, 2002; Meng-la.
57. *Euchrysops pandava*: Lee, 1962b; Meng-yang. The correct name is *Chilades pandava*.
58. *Chilades lajus lajus*: Wang & Fan, 2002; Meng-la.
59. *Freyeria putli putli*: Wang & Fan, 2002; Meng-la.

Hesperiidae

60. *Matapa pseudosasivarna* Lee, 1962a; Meng-yang. After an examination of the unique holotype, the first author considers this taxon as a possible synonym of *Matapa sasivarna*.
61. *Oriens gola yunnana* Lee, 1962a; Da-Meng-long.
62. *Parnara ganga*: Lee, 1962b; Da-Meng-long.

Remarks

In total 318 species have been reported from Xi-shuang-ban-na in literature. The actual butterfly fauna of this area should be much richer than what we have discovered. As far as we know, several Chinese expeditions have been made to this area during the last years but the collecting results have never been published and we unfortunately have no chance to see these collections. The butterflies listed in Lee's paper were mainly captured in March and April, the collection made by Wang was obtained in April, and our own collection was taken from June and July. Therefore, further expeditions should concentrate on August–October and we believe that they will bring back more new discoveries.

References

Aoki, T. & Y. Uemura (1984): Studies on the genus *Ypthima* in Thailand. – Tokurana (6/7): 71–103.
Bridges, C. A. (1988): Catalogue of Papilionidae and Pieridae.
Bridges, C. A. (1988): Catalogue of Lycaenidae and Riodinidae.
Bridges, C. A. (1988): Catalogue of Hesperiidae.
Brooks, G. J. (1949): New subspecies in the genera *Faunis, Aemona, Stichophthalma* and *Enispe*, with revisional notes. – Ent. **82**: 256–259.
Cantlie, K. (1962): The Lycaenidae portion (except the *Arhopala* group) of Brigadier Evans' The Identification of Indian butterflies, 1932. – Bomb. Nat. His. Soc.
Chou, I. et al. (1994): Monographia Rhopalocerorum Sinensium. – Henan Science and Technology.
D'Abrera, B. (1982–1986): Butterflies of the Oriental Region. **1–3**. – Hill house, Melbourne.
D'Abrera, B. (1990–1993): Butterflies of the Holarctic Region. **1–3**. – Hill house, Melbourne.

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

DEVYATKIN, A. L. (1997): A new species of *Halpe* MOORE, 1878 (Lepidoptera: Hesperiidae) from North Vietnam. – Atalanta **28** (3/4): 121–124.

DEVYATKIN, A. L. (1998): Hesperiidae of Vietnam, 3. A new species of *Celaenorrhinus* HÜBNER, 1819 from Vietnam, with revisional notes on the *C. aurivittata* (MOORE, 1879) group. – Neue ent. Nachr. **41**: 289–294.

DEVYATKIN, A. L. (1998): Hesperiidae of Vietnam, 4. A new species and a new subspecies of *Pintara* EVANS, 1932 from Vietnam, with notes on the genus. – Neue ent. Nachr. **41**: 295–301.

DEVYATKIN, A. L. (2000): Hesperiidae of Vietnam, 6. Two new species of the genera *Suada* DE NICEVILLE, 1895 and *Quedara* SWINHOE, 1907. – Atalanta **31** (1/2): 193–197.

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

DEVYATKIN, A. L. (2000): Hesperiidae of Vietnam, 8. Three new species of *Celaenorrhinus* HÜBNER, 1819, with notes on the *C. maculosa* (C. & R. FELDER, [1867])-*oscula* EVANS, 1949 group. – Atalanta **31** (1/2): 205–211.

DEVYATKIN, A. L. (2001): Hesperiidae of Vietnam, 9. Three new species and one new subspecies from the subfamily Pyrginae. – Atalanta **32** (3/4): 403–410.

DEVYATKIN, A. L. (2002): Hesperiidae of Vietnam, 10. A new species of *Coladenia* MOORE, [1881]. – Atalanta **33** (1/2): 123–125, ill.

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

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

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

DRAESEKE, J. (1925): Die Schmetterlinge der STÖTZNERschen Ausbeute. 2–4. – D. Ent. Zs. Iris **38**: 1–8; **39**: 48–57, 211–231.

ELIOT, J. N. (1959): New or little known butterflies from Malaya. – Bull. Brit. Mus. (Nat. Hist.), Entomology **7**: 382–391.

ELIOT, J. N. (1967): The *Sakra* MOORE, 1857, section of satyrid genus *Ypthima* HÜBNER. – Ent. **100**: 49–61, pl. 2.

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

ELIOT, J. N. (1973): The higher classification of the Lycaenidae: a tentative arrangement. – Bull. Br. Mus. Nat. Hist. (Ent.) **28** (6): 373–505, 6 pls.

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

ELIOT, J. N. (1992): In: CORBET, A. S. & H. M. PENDLEBURY, The butterflies of the Malay Peninsula 4th edition. – Kuala Lumpur.

ELIOT, J. N. & A. KAWAZOE (1983): Blue butterflies of the *Lycaenopsis* group. – British Museum, London.

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

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

EVANS, W. H. (1921): A note on the species of the genus *Mycalesis* occurring within Indian limits. – J. Bomb. Nat. Hist. Soc. **27**: 354–362.

EVANS, W. H. (1932): The identification of Indian butterflies. 2nd edition. – Madras.

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

FORSTER, W. (1940): Neue Lycaeniden-Formen aus China. 1. – Mitt. Mün. ent. Ges. **30**: 870–883, pls. 22–26.

FORSTER, W. (1941): Neue Lycaeniden-Formen aus China. 2. – Mitt. Mün. ent. Ges. **31**: 593–627, pls. 19–22.

Forster, W. (1948 (1944)): Beiträge zur Kenntnis der ostasiatischen *Ypthima*-Arten. – Mitt. Mün. ent. Ges. **34** (2): 472–492, pls. 30–33.

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

Hsu, Y.-F., Li, C.-L. & T.-H. Li (1990): On some *Potanthus* species from Taiwan. – Journal of Taiwan Museum **43** (1): 1–10.

Huang, H. (1998): Research on the butterflies of the Namjagbarwa region, S.E. Tibet. – Neue ent. Nachr. **41**: 207–263.

Huang, H. (2000): A list of butterflies collected from Tibet during 1993–1996, with new descriptions, revisional notes and discussion on zoogeography–1, part. 1. – Lambillionea **C**(1): 141–158.

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

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

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

Inoue, S. & A. Kawazoe (1964): Riodinidae, Curetidae and Lycaenidae from south Viet-Nam. – Nature life southeast Asia. **1964** (4): 317–394, 20 pls, 1 map.

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

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

Koiwaya, S. (1993): Study of Chinese butterflies. 2.

Koiwaya, S. (1996): Study of Chinese butterflies. 3.

Koiwaya, S. (1997): Confirmation of the status of *Parantica melaneus* and *Parantica swinhoei* (Danaidae). – Butterflies **18**: 56–65, ill.

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

Lee, C.-L. (1962b): Results of the Zoologico-Botanical Expedition to southwest China, 1955–1957. – Acta Ent. Sin. **11**, suppl.: 172–198.

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

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

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

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

Mell, R. (1935): Beiträge zur Fauna sinica 12, Die Euthaliini Süd- und Südostchinas. – D. Ent. Z. **1934**: 225–251, pl. 2.

Mell, R. (1935): Noch unbeschriebene chinesische Lepidopteren. 4. – Mitt. Dtsch. Ent. Ges. **6**: 36–38.

Mell, R. (1938): Beiträge zur Fauna Sinica, 17. Inventur und ökologisches Material zu einer Biologie der südchinesischen Lepidopteren. – D. Ent. Z. Iris **1938** (2): 197–345.

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

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

Mell, R. (1942): Beiträge zur Fauna Sinica, 22. – Arch Naturgesch. (N.F.) **11**: 222–289.

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

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

Murayama, S. (1995): Descriptions of 3 new species and 5 new races of Chinese butterflies from Yunnan Province. – Insect & Nature **30** (14): 32–35, 8 figs.

Osada, S., Uemura, Y. & J. Uehara (1999): An illustrated checklist of the butterflies of Laos P.D.R. – Mokuyo-sha, Tokyo, 240 pp. (143 pls.)

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

RILEY, N. D. (1929): Revisional notes on the genus *Heliophorus* with descriptions of new forms. – J. Bomb. Nat. Hist. Soc. **33** (2): 384–402.
SEITZ, A. et al. (1909): Macrolepidoptera of the world. Vol. **1**. The Palaearctic Butterflies. – Stuttgart.
SEITZ, A. (1927): Macrolepidoptera of the world. Vol. **9**. The Indo-Australian Butterflies. – Stuttgart.
SEITZ, A. (1929–1932): Macrolepidoptera of the world. Suppl. to Vol. **1**. The Palaearctic Butterflies. – Stuttgart.
SHIMA, H. (1988): Phylogenetic relationships of the genus *Ypthima* HÜBNER. – **Spec.** Bull. Lep. Soc. Jap. (6): 69–81.
SHIROZU, T. (1960): Butterflies of Formosa in colour. – Osaka.
SHIROZU, T. & T. SAIGUSA (1962): Butterflies collected by the Osaka City University Biological Expedition to Southeast Asia 1957–58 (Part I). – Nature & Life in S.E. Asia **2**: **25–94**, pls. 1–18.
SHIROZU, T. & H. SHIMA (1979): On the natural groups and their phylogenetic relationships of the genus *Ypthima* HÜBNER mainly from Asia. – Sieboldia **4**: 231–295, pls. **18–71**.
SHIZUYA, H., WATANABE, Y., SAITO, M. & T. SOE (2002): Basic information on butterflies of Kachin state, Myanmar [Part 1]. – Butterflies **33**: 18–42.
SOUTH, R. (1913): A list of butterflies collected by Captain F. M. BAILEY in western China, south-eastern Tibet, and the Mishimi hills, 1911. – J. Bomb. Nat. Hist. Soc. **22**: **345–365**, 598–615.
SUGIYAMA, H. (1992): New butterflies from West-China, including Hainan. – **Pallarge 1**.
SUGIYAMA, H. (1993–2004): New butterflies from western China 1–7. – Pallarge **2–8**.
TALBOT, G. (1939): The fauna of British India, including Ceylon and Burma. **vol. 1.** – Taylor & Francis. London.
TALBOT, G. (1947): The fauna of British India, including Ceylon and Burma. **vol. 2.** – Taylor & Francis. London.
TITE, G. E. (1963): A synonymic list of the genus *Nacaduba* and allied genera. – **Bull.** Br. Mus. Nat. Hist. (Ent.) **13**: 69–116.
TONG, X.-S. et al. (1993): Butterfly fauna of Zhejiang [in Chinese]. – Zhejiang **Science** & Technology.
TSUKIYAMA, H. (1976): On *Potanthus miyashitai* (1). – Gekkan Mushi **62**: 23–**31, ill.**
TSUKIYAMA, H. & H. CHIBA (1991): A new species and subspecies of skippers from Sulawesi, Indonesia. – Tyo to Ga **42** (4): 255–260, ill.
UEMURA, Y. (1984): A synonymic list of the Formosan species of the genus *Mycalesis* HÜBNER. – Trans. Shikoku Ent. Soc. vol. **16** (4): 45–51.
UEMURA, Y. & A. L. MONASTYRSKII (2000): Description of two new species of the genus *Ypthima* HÜBNER from North and Central Vietnam. – Trans. Lepid. Soc. Japan **51** (2): **150**–156.
WANG, M. & X.-L. FAN (2002): Butterflies Fauna Sinica: Lycaenidae. – Henan **Science** & Technology, Zhengzhou.
WANG, Z.-G., NIU, Y. & D.-H. CHEN (1998): Insect fauna of Henan Lepidoptera: **Butterflies** [in Chinese]. – Henan Science & Technology, Zhengzhou.
WATKINS, H. T. G. (1927): Butterflies from N.W. Yunnan. – Ann. Mag. Nat. **Hist. (9)19**: 313–344, 512.
WU, X.-F. (1988): Butterflies of the Ling Nan Oasis [in Chinese]. – Scientific **Periodical**, Beijing.
YOSHINO, K. (1995–1999): New butterflies from China 1–5. – Neo lepidoptera **1–4**.

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Colour plate XI

HUANG, H. & XUE, Y.-P.: A Contribution to the Butterfly Fauna of Southern Yunnan (Lepidoptera, Rhopalocera). – Neue Entomologische Nachrichten **57**: 135–154.

Fig. 1: *Pantoporia assamica* ♂ (Ye-xiang-gu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 2: *Pantoporia dindinga* ♂ (Meng-lun, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 3: *Mycalesis mineus subfasciata* ♂ (Ye-xiang-gu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside.
Fig. 4: *Mycalesis mineus subfasciata* ♂ (Ye-xiang-gu, Xi-shuang-ban-na, S. Yunnan, July 2003) underside.
Fig. 5: *Mycalesis intermedia* ♂ (Ye-xiang-gu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 6: *Ypthima savara savara* ♂ (Ye-xiang-gu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 7: *Ypthima similis similis* ♂ (Ye-xiang-gu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 8: *Mota massyla* ♀ (Wang-tian-shu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 9: *Tajuria yajna* ♂ (Ye-xiang-gu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 10: *Sinthusa menglaensis* ♀ (Wang-tian-shu, Xi-shuang-ban-na, S. Yunnan, July 2003) upperside (left half) and underside (right half).
Fig. 11: *Quedara flavens* ♂ (Wang-tian-shu, Xi-shuang-ban-na, S. Yunnan, June 2003) upperside (left half) and underside (right half).