

## A Brief Summary of Tribe Cochylini from China (Lepidoptera: Tortricidae: Tortricinae)

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### ABSTRACT

The status of the tribe Cochylini in China is briefly introduced. A list of the described Chinese Cochylini species is provided, along with a map to show the species richness in each province of China.

**Keywords:** Lepidoptera, Tortricidae, Cochylini, taxonomy, list, species richness, China

### INTRODUCTION

The tribe Cochylini belongs to the subfamily Tortricinae in the family Tortricidae. Cochylini was erected by Guenée in 1845 for the type genus *Cochylis* Treitschke, 1829. Currently, 79 genera are described worldwide, of which 11 genera are recorded in China. The vast majority of species in this tribe are significant pests of crops, fruit and forest trees, with important economic significance in agroforestry.

The aim of the present paper is to give a brief summary of the tribe Cochylini from China, and to list the described Chinese Cochylini species to show the distribution data.

### MATERIAL AND METHODS

This study is based on the examination of specimens deposited in the Insect Collection, College of Life Sciences, Nankai University (NKUM) and the related literature. The map was made using DIVA-GIS 7.5.0 software (Hijmans et al., 2011) and was subsequently modified in Photoshop CS5.

### DIAGNOSES

Adults are small to medium size. Sexual dimorphism in some genera is expressed in the forewing shape, which is narrower in male than in female. The forewing ground colour is mainly yellowish white, yellow, yellowish brown or ochreous yellow, mostly with obliquely inward median fascia and subapical fascia, with basal blotch or pretornal spot in some genera. The male genitalia are characterised by the uncus degenerated in the majority of genera, the socius developed, the gnathos degenerated, the slender or stout phallus bearing numerous cornuti. The female genitalia are characterised by the ductusbursae not conspicuously differentiated from the corpus bursae, the antrum almost always heavily sclerotised, the corpus bursae with numerous spines and different shapes of sclerites.

### TAXONOMIC SUMMARY

The tribe Cochylini is reviewed in China, with 11 genera and 101 valid species treated. Here, we give a brief introduction

to the 11 genera that have been recorded in China.

The genus *Aethes* Billberg, 1820 can be easily distinguished by the erect and slender socius. It consists of 127 species worldwide, distributed mainly in the Holarctic Region, 16 of which have been reported to occur in China. We have further identified three species new to science and one species new for China (to be published separately).

The genus *Cochylidia* Obraztsov, 1956 is characterised by the erect costal arm of the valva with tiny distal spines. It consists of 11 valid species divided into two groups, occurring in the Palearctic and Oriental regions. Ten species have been recorded in China.

The genus *Cochylimorpha* Razowski, 1959 can be easily distinguished by having a broad valva and a short median process of transtilla. Some 95 described species of *Cochylimorpha* are distributed worldwide, mainly in the Oriental and Palearctic regions. On the basis of 23 previously recorded species in China, we add one new species to the world fauna and three new records for the Chinese fauna (to be published in another paper).

The genus *Cochylis* Treitschke, 1829 currently consists of 72 species that are distributed in the Holarctic, Oriental and Neotropical regions, 11 of which are recorded in China. The typical characters of this genus are the slender median process of transtilla, the narrow valva, and the developed and heavily sclerotised antrum.

The genus *Eugnosta* Hübner, [1825]1816 is characterised by its erect and slender socius. It consists of 76 species worldwide, distributed mainly in the Palearctic, Nearctic and Neotropical regions. Besides the five previously recorded species in China, we have found one as yet undescribed species.

The genus *Eupoecilia* Stephens, 1829 can be easily distinguished by the drooped and crossed socius, the phallus bearing numerous spines, the ductusbursae with tiny spines and wrinkles, and the corpus bursae having spines and sclerites. It currently includes 37 described species, 29 of which are reported from the Oriental and Palearctic regions, and seven are recorded to occur in China. We have identified two species new to science and one newly recorded species for China (to be published separately).

The genus *Falseuncaria* Obraztsov & Swatschek, 1958 is characterised by the elongated tegumen, the cornutus composed of a bundle of spines, and the slender ductusbursae. Currently, seven described *Falseuncaria* species are distributed in the Holarctic and African regions, and five of them are distributed in China.

The genus *Gynnidomorpha* Turner, 1916 includes 16 species that are described from the Holarctic, Oriental, and Australian regions, with the highest species richness in the Palearctic Region. The main characters of this genus include the elongated tegumen curved orthogonally and the corpus bursae with an incomplete ring composed of spines. Nine species were recorded in China prior to this study. We have identified one new species to science and one newly recorded species from China (to be published separately).

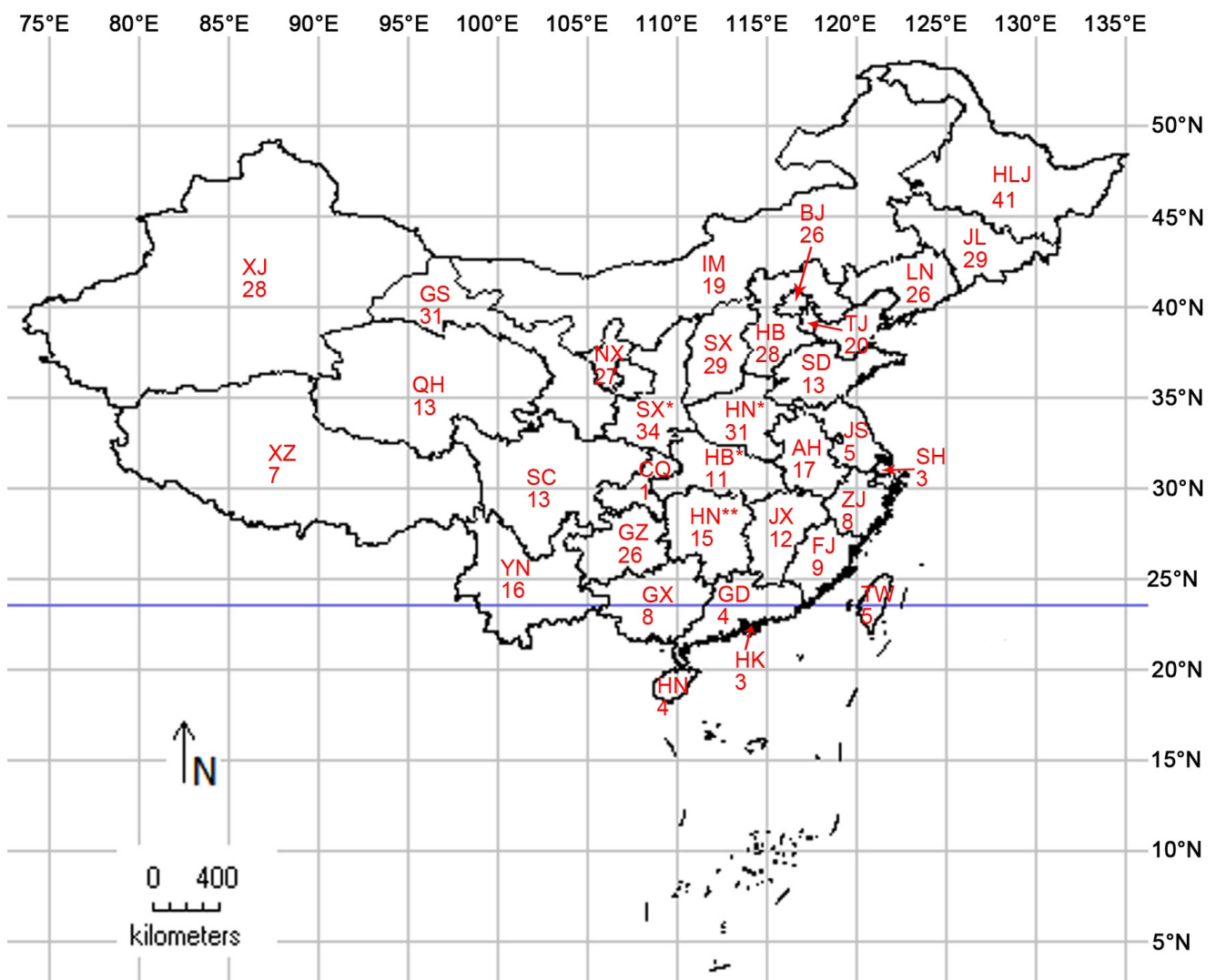
The genus *Phalonidia* Le Marchand, 1933 can be easily distinguished by the socius fused basally and separated distally, and the developed antrum. Some 103 species are described from the Holarctic and Neotropical regions, 12 of which are reported to occur in China. We have identified three new species to science and three new records for China (to be published separately).

The genus *Phtheochroa* Stephens, 1829 is characterised by the slender uncus. It contains 110 described species, distributed worldwide, with only two species reported in China. During our study, we have identified two new species for China (to be published separately).

The genus *Thyralia* Walsingham, 1897 can be easily distinguished by the presence of the uncus and the slender median process of the transtilla. *Thyralia* consists of seven species worldwide, distributed mainly in the Holarctic Region. One species has been recorded in China.

### SPECIES RICHNESS

Members of the tribe Cochyliini are distributed in every Chinese province. The abbreviations of each province are listed in Table 1. Figure 1 shows the Cochyliini species richness for each province (inclusive of the unpublished species). The distribution data of all the Cochyliini species in China are based on the specimens deposited in the Insect Collection, College of Life Sciences, Nankai University (NKUM) and the related literature (Razowski, 1970; Diakonoff, 1984; Bai et al., 1996; Liu and Li, 2002; Byun and Li, 2006; Razowski, 2006; Sun and Li 2012a, 2012b; Sun and Li, 2013). Species richness in China is relatively higher in the north than in the south. According to the specimens collected in recent years, we speculate that there are still some Cochyliini species awaiting to be identified in China.



**Figure 1.** The species number of tribe Cochyliini in each province of China

Provincial abbreviations		
AH – Anhui	HLJ – Heilongjiang	SC – Sichuan
BJ – Beijing	HN – Hainan	SD – Shandong
CQ – Chongqing	HN* – Henan	SH – Shanghai
FJ – Fujian	HN** – Hunan	SX – Shanxi
GD – Guangdong	IM – Inner Mongolia	SX* – Shaanxi
GS – Gansu	JL – Jilin	TJ – Tianjin
GX – Guangxi	JS – Jiangsu	TW – Taiwan
GZ – Guizhou	JX – Jiangxi	XJ – Xinjiang
HB – Hebei	LN – Liaoning	XZ – Xizang
HB* – Hubei	NX – Ningxia	YN – Yunnan
HK – Hongkong	QH – Qinghai	ZJ – Zhejiang

**Table 1.** Abbreviation of each province

#### LIST OF VALID COCHYLINI SPECIES IN CHINA

**1. *Aethes alata* (Danilevskij, 1962)**

Distribution: China (Beijing, Inner Mongolia, Ningxia, Qinghai, Shaanxi, Shanxi, Xinjiang), Russia.

**2. *Aethes amurensis* Razowski, 1964**

Distribution: China (Beijing, Gansu, Guizhou, Hebei, Heilongjiang, Henan, Jilin, Liaoning, Ningxia, Qinghai, Shaanxi, Shanxi), Korea, Russia.

**3. *Aethes cnicana* (Westwood, 1854)**

Distribution: China (Beijing, Heilongjiang, Inner Mongolia, Jilin, Liaoning, Tianjin), Japan, Korea, Russia, Europe.

**4. *Aethes delotypa* Razowski, 1970**

Distribution: China (Xizang, Yunnan), Europe.

**5. *Aethes hoenei* Razowski, 1964**

Distribution: China (Hunan, Jiangxi, Liaoning, Shaanxi, Zhejiang).

**6. *Aethes mesomelana* (Walker, 1863)**

Distribution: China (Heilongjiang, Hubei, Liaoning, Shanghai), Russia.

**7. *Aethes moribundana* (Staudinger, 1859)**

Distribution: China (Hebei, Inner Mongolia, Qinghai, Xinjiang), Afghanistan, Iran, Russia, Europe.

**8. *Aethes rectilineana* (Caradja, 1939)**

Distribution: China (Gansu, Heilongjiang, Henan, Hubei, Jiangsu, Shandong, Shanxi, Xinjiang, Zhejiang), Japan, Korea, Mongolia, Russia.

**9. *Aethes rubigana* (Treitschke, 1830)**

Distribution: China (Beijing, Hebei, Heilongjiang, Jilin, Liaoning, Ningxia), Japan, Russia, Europe.

**10. *Aethes triangulana excellentana* (Christoph, 1881)**

Distribution: China (Heilongjiang, Henan), Japan, Russia.

**11. *Aethes atmspila* (Meyrick, 1937)**

Distribution: China (Xinjiang, Yunnan).

**12. *Aethes cinereoviridana* (Kennel, 1899)**

Distribution: China (Xinjiang), central Asia.

**13. *Aethes citreoflava* Kuznetzov, 1966**

Distribution: China (Heilongjiang, Jilin), Japan, Korea, Russia, Mongolia.

**14. *Aethes pardaliana* (Kennel, 1899)**

Distribution: China (Xinjiang), Afghanistan, Russia.

**15. *Aethes furvescens* Bai, Guo & Guo, 1996**

Distribution: China (Shanxi).

**16. *Aethes bistigmatus* Byun & Li, 2006**

Distribution: China (Jilin), Korea.

**17. *Cochylidia altivaga* Diakonoff, 1976**

Distribution: China (Gansu, Sichuan, Taiwan), Nepal.

**18. *Cochylidia contumescens* (Meyrick, 1931)**

Distribution: China (Anhui, Guangxi, Henan, Tianjin), Japan, Korea, Russia.

**19. *Cochylidia oblonga* Liu & Ge, 2012**

Distribution: China (Anhui, Fujian, Gansu, Guangdong, Guangxi, Henan, Hubei, Hunan, Jiangxi, Liaoning, Tianjin).

**20. *Cochylidia heydeniana* (Herrich-Schäffer, 1851)**

Distribution: China (Xinjiang), Korea, Japan, Mongolia, Russia, Europe.

**21. *Cochylidia implicitana* (Wocke, 1856)**

Distribution: China (Xinjiang), Iran, Europe.

**22. *Cochylidiamoguntiana* (Rössler, 1864)**

Distribution: China (Anhui, Beijing, Fujian, Gansu, Guizhou, Hebei, Heilongjiang, Henan, Hunan, Inner Mongolia, Liaoning, Ningxia, Shaanxi, Shandong, Shanxi, Sichuan, Tianjin), Afghanistan, Iran, Korea, Russia, Europe.

**23. *Cochylidiamultispinalis* Sun & Li, 2012**

Distribution: China (Anhui, Gansu, Guangdong, Guangxi, Guizhou, Hebei, Heilongjiang, Hunan, Sichuan).

**24. *Cochylidia richteriana* (Fischer von Röslerstamm, 1837)**

Distribution: China (Beijing, Hebei, Heilongjiang, Hunan, Inner Mongolia, Liaoning, Ningxia, Qinghai, Shandong, Shanxi, Sichuan, Tianjin), Japan, Korea, Mongolia, Russia, Europe.

**25. *Cochylidia liui* Sun & Li, 2012**

Distribution: China (Guizhou).

**26. *Cochylidia subroseanaroseotincta* (Razowski, 1960)**

Distribution: China (Anhui, Hebei, Heilongjiang, Henan, Hunan, Jilin, Shanxi, Tianjin), Europe, Japan, Korea, Russia.

**27. *Cochylimorpha asiana* (Kennel, 1899)**

Distribution: China (Beijing, Gansu, Hebei, Heilongjiang, Ningxia, Qinghai, Shaanxi, Shandong), Afghanistan, Iran, Mongolia, Russia, Libya.

**28. *Cochylimorpha conankinensis* (Ge, 1992)**

Distribution: China (Gansu, Shaanxi, Sichuan).

**29. *Cochylimorpha cultana* (Lederer, 1855)**

Distribution: China (Gansu, Jilin, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi), Russia, Europe.

**30. *Cochylimorpha cuspidata* (Ge, 1992)**

Distribution: China (Anhui, Beijing, Gansu, Hebei, Heilongjiang, Henan, Hubei, Inner Mongolia, Liaoning, Ningxia, Shaanxi, Shanxi, Tianjin), Korea.

**31. *Cochylimorpha emiliana* (Kennel, 1919)**

Distribution: China (Heilongjiang, Qinghai), Mongolia, Russia.

**32. *Cochylimorpha fuscimacula* (Falkovitsh, 1963)**

Distribution: China (Shaanxi, Xinjiang), Russia.

**33. *Cochylimorpha hapala* (Diakonoff, 1984)**

Distribution: China (Hongkong), Borneo.

**34. *Cochylimorpha hedemanniana* (Snellen, 1883)**

Distribution: China (Anhui, Beijing, Hebei, Heilongjiang, Henan, Hubei, Jiangsu, Liaoning, Ningxia, Shaanxi, Shandong, Shanxi, Tianjin, Yunnan), Japan, Korea, Russia.

**35. *Cochylimorpha jaculana* (Snellen, 1883)**

Distribution: China (Anhui, Beijing, Hebei, Heilongjiang, Inner Mongolia, Jilin, Ningxia, Shaanxi, Shandong, Shanxi, Sichuan, Tianjin, Yunnan), Japan, Korea, Mongolia.

**36. *Cochylimorpha lungtangensis* (Razowski, 1964)**

Distribution: China (Gansu, Guizhou, Hebei, Henan, Jiangsu, Liaoning, Ningxia, Qinghai, Shaanxi, Shanxi, Sichuan, Tianjin).

**37. *Cochylimorpha maleropa* (Meyrick, 1937)**

Distribution: China (Shaanxi, Yunnan).

**38. *Cochylimorpha nankinensis* (Razowski, 1964)**

Distribution: China (Guangxi, Henan, Hongkong, Hubei, Jiangsu, Shaanxi, Tianjin, Zhejiang), Korea.

**39. *Cochylimorpha perturbatana* (Kennel, 1900)**

Distribution: China (Xinjiang), Russia.

**40. *Cochylimorpha razowskiana* Kuznetzov, 2005**

Distribution: China (Beijing, Gansu, Hebei, Henan, Ningxia, Qinghai, Shanxi, Shaanxi), Russia.

**41. *Cochylimorpha gracilens* (Ge, 1992)**

Distribution: China (Xizang).

**42. *Cochylimorpha nipponana* (Razowski, 1977)**

Distribution: China (Heilongjiang, Shaanxi), Japan.

**43. *Cochylimorpha nomadana* (Erschoff, 1874)**

Distribution: China (Xinjiang), Afghanistan, Iran, Russia.

**44. *Cochylimorphabipunctata* (BaiGuo&Guo, 1996)**

Distribution: China (Shanxi).

**45. *Cochylimorpha simplicis* (Bai Guo & Guo, 1996)**

Distribution: China (Shanxi).

**46. *Cochylimorpha amabilis* (Meyrick, 1931)**

Distribution: China (Xizang), Japan.

**47. *Cochylimorphaalticolana* (Razowski, 1964)**

Distribution: China (Xizang).

**48. *Cochylimorpha isocornutana* (Razowski, 1964)**

Distribution: China (Yunnan).

**49. *Cochylimorpha yangtseana* Razowski, 2006**

Distribution: China (Xizang).

**50. *Cochylis atricapitana* (Stephens, 1852)**

Distribution: China (Xinjiang), Europe.

**51. *Cochylis discerta* Razowski, 1970**

Distribution: China (Gansu, Inner Mongolia, Shanxi), Mongolia.

**52. *Cochylis defessana* Mann, 1861**

Distribution: China (Xinjiang), Iran, Turkey.

**53. *Cochylis dubitana* (Hübner, [1799])**

Distribution: China (Heilongjiang), Europe.

**54. *Cochylis faustana* (Kennel, 1919)**

Distribution: China (Inner Mongolia, Xinjiang), Russia.

**55. *Cochylis hybridella* (Hübner, [1813])**

Distribution: China (Gansu, Guizhou, Heilongjiang, Inner Mongolia, Jilin, Liaoning, Ningxia, Shaanxi, Shanxi, Xinjiang), Japan, Korea, Russia, Europe.

**56. *Cochylis piana* (Kennel, 1919)**

Distribution: China (Inner Mongolia, Liaoning, Shaanxi, Xinjiang), Afghanistan, Iran, Russia.

**57. *Cochylis roseana* (Haworth, [1811])**

Distribution: China (Gansu), Iran, Russia, Europe.

**58. *Cochylisposterana hyrcana* (Toll, 1948)**

Distribution: China (Gansu, Xinjiang), Iran.

**59. *Cochylis psychrasema* (Meyrick, 1937)**

Distribution: China (Yunnan).

**60. *Cochylistriangula* Sun & Li, 2013**

Distribution: China (Guizhou, Yunnan).

**61. *Eugnosta dives* (Butler, 1878)**

Distribution: China (Heilongjiang, Inner Mongolia, Jiangsu, Jilin, Liaoning, Ningxia, Shaanxi, Shandong), Japan, Russia.

**62. *Eugnosta fenestrana* Razowski, 1964**

Distribution: China (Beijing, Jilin, Qinghai), Mongolia, Russia.

**63. *Eugnosta hydrargyrana mongolica* Razowski, 1970**

Distribution: China (Beijing, Heilongjiang, Shaanxi, Shandong), Mongolia.

**64. *Eugnosta magnificana* (Rebel, 1914)**

Distribution: China (Inner Mongolia), Afghanistan, Iran, Russia, Europe.

**65. *Eugnosta romanovi* (Kennel, 1900)**

Distribution: China (Xinjiang), Russia.

**66. *Eupoecilia ambiguella* (Hübner, 1796)**

Distribution: China (Anhui, Beijing, Chongqing, Hainan, Hebei, Heilongjiang, Henan, Hubei, Hunan, Fujian, Gansu, Guangdong, Guizhou, Jiangxi, Liaoning, Ningxia, Shaanxi, Shanxi, Sichuan, Tianjin, Xinjiang, Yunnan, Zhejiang, Taiwan), India, Japan, Korea, Mongolia, Russia, Europe.

**67. *Eupoecilia angustana* (Hübner, 1799)**

Distribution: China (Anhui, Beijing, Gansu, Heilongjiang, Henan, Jilin, Ningxia, Shaanxi, Shandong, Shanxi), Japan, Korea, Russia, Europe.

**68. *Eupoecilia citrinana* Razowski, 1960**

Distribution: China (Beijing, Hebei, Heilongjiang, Henan, Hunan, Jilin, Shaanxi, Tianjin), Japan, Korea, Russia.

**69. *Eupoeciliainouei* Kawabe, 1972**

Distribution: China (Guizhou, Hebei, Henan, Hunan, Jiangxi, Jilin, Ningxia, Shaanxi, Shanxi), Japan, Korea, Russia.

**70. *Eupoecilia kobeana* Razowski, 1968**

Distribution: China (Guangxi, Guizhou, Henan, Hunan, Taiwan, Yunnan, Taiwan), Japan, Korea, Russia.

**71. *Eupoecilia quinaspinalis* Zhang & Li, 2008**

Distribution: China (Fujian, Hainan).

**72. *Eupoecilia sanguisorbana* (Herrich-Schäffer, 1856)**

Distribution: China (Hebei, Heilongjiang, Inner Mongolia), Europe.

**73. *Falseuncaria brunnescens* Bai, Guo & Guo, 1996**

Distribution: China (Shanxi).

**74. *Falseuncaria degreyana* (McLachlan, 1869)**

Distribution: China (Xinjiang), Mongolia, Russia, Europe.

**75. *Falseuncariakaszabi* Razowski, 1966**

Distribution: China (Gansu, Inner Mongolia, Ningxia, Qinghai, Shaanxi), Mongolia.

**76. *Falseuncarialechriotoma* Razowski, 1970**

Distribution: China (Hebei), Mongolia.

**77. *Falseuncariaruficiliana* (Haworth, [1811])**

Distribution: China (Xinjiang), Europe.

**78. *Gynnidomorpha alimana* (Ragonot, 1883)**

Distribution: China (Anhui, Fujian, Guangdong, Guizhou, Hebei, Heilongjiang, Hubei, Hunan, Inner Mongolia, Jiangxi, Jilin, Shaanxi, Yunnan), Korea, Europe.

**79. *Gynnidomorpha julianiensis* (Liu & Ge, 1991)**

Distribution: China (Guizhou, Hunan, Jiangxi).

**80. *Gynnidomorpha luridana* (Gregson, 1870)**

Distribution: China (Heilongjiang, Henan, Jilin, Liaoning), Japan, Korea, Turkey, Russia, Europe.

**81. *Gynnidomorpha mesotropa* (Rzaowski, 1970)**

Distribution: China (Guizhou, Jiangsu, Shaanxi, Shanghai), Japan.

**82. *Gynnidomorpha minimana* (Caradja, 1916)**

Distribution: China (Hebei, Heilongjiang, Jiangxi, Jilin, Yunnan, Taiwan), Japan, Korea, Russia, Europe.

**83. *Gynnidomorpha permixtana* [Denis & Schiffermüller, 1775]**

Distribution: China (Anhui, Beijing, Fujian, Gansu, Guizhou, Hainan, Hebei, Heilongjiang, Henan, Hubei, Liaoning, Ningxia, Shaanxi, Shandong, Shanghai, Shanxi, Sichuan, Tianjin, Xizang, Zhejiang), Afghanistan, Iran, Japan, Korea, Mongolia, Russia, Europe.

**84. *Gynnidomorpha pista* (Diakonoff, 1984)**

Distribution: China (Anhui, Beijing, Fujian, Guangxi, Guizhou, Hainan, Hongkong, Liaoning, Tianjin).

**85. *Gynnidomorpha vectisana* (Humphreys & Westwood, 1845)**

Distribution: China (Henan, Jiangxi, Jilin, Xinjiang), Japan, Korea, Europe.

**86. *Gynnidomorpha rubricana* (Peyerimhoff, 1877)**

Distribution: China (Jilin), Europe.

**87. *Phalonidiachlorolitha* (Meyrick, 1931)**

Distribution: China (Gansu, Hebei, Heilongjiang, Henan, Hubei, Jilin, Liaoning, Ningxia, Shanxi, Sichuan, Zhejiang), Japan, Korea, Russia.

**88. *Phalonidiacontractana* (Zeller, 1847)**

Distribution: China (Henan, Xinjiang), Afghanistan, Iran, Lebanon, Pakistan, Russia, Europe.

**89. *Phalonidia curvistrigana* (Stainton, 1859)**

Distribution: China (Anhui, Beijing, Gansu, Guizhou, Heilongjiang, Shaanxi), Japan, Korea, Russia, Europe.

**90. *Phalonidia fraterna* Razowski, 1970**

Distribution: China (Heilongjiang, Henan), Korea, Russia.

**91. *Phalonidialatifasciana* Razowski, 1970**

Distribution: China (Jilin, Sichuan), Japan, Korea, Russia, Europe.

**92. *Phalonidia lydiae* (Filipjev, 1940)**

Distribution: China (Anhui, Beijing, Gansu, Guizhou, Heilongjiang, Hunan, Jilin, Liaoning, Ningxia, Yunnan), Japan, Korea, Russia.

**93. *Phalonidiamelanothicta* (Meyrick, 1927)**

Distribution: China (Anhui, Fujian, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Ningxia, Sichuan, Yunnan, Zhejiang), Japan.

**94. *Phalonidianicotiana* Liu & Ge, 1991**

Distribution: China (Heilongjiang, Liaoning).

**95. *Phalonidiascabra* Liu & Ge, 1991**

Distribution: China (Gansu, Guizhou, Heilongjiang, Jiangxi, Liaoning, Shanxi, Yunnan, Zhejiang), Korea.

**96. *Phalonidiasilvestris* Kuznetzov, 1966**

Distribution: China (Gansu, Heilongjiang, Henan, Hunan, Liaoning, Ningxia), Korea, Russia.

**97. *Phalonidia zygota* Razowski, 1964**

Distribution: China (Beijing, Gansu, Hebei, Heilongjiang, Inner Mongolia, Jilin, Qinghai, Shandong, Tianjin), Japan, Korea, Mongolia, Russia.

**98. *Phalonidia dysodona* (Caradja, 1916)**

Distribution: China (Heilongjiang), Russia.

**99. *Phtheochroainopiana* (Haworth, [1811])**

Distribution: China (Beijing, Gansu, Hebei, Heilongjiang, Jilin), Iran, Japan, Mongolia, Russia, Europe.

**100. *Phtheochroa pistrinana* (Erschoff, 1877)**

Distribution: China (Beijing, Jiangxi, Xizang, Gansu), Japan, Korea, Mongolia.

**101. *Thyralia nana* (Haworth, [1811])**

Distribution: China (Hebei, Heilongjiang, Shanxi), Russia, Europe, North America.

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