

Plusiinae in Mt. Changbai (Lepidoptera, Noctuidae), with Six New Records from China

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中國 미기록 6종을 포함한 장백산의 Plusiinae 나방류(나비目, 밤나방과)

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ABSTRACT : Thirty-four species of the subfamily Plusiinae were recognized from the lepidopteran expeditions to Mt. Changbai during 2000-2004. Among them, six species (*Abrostola ussuriensis* Dufay, *Polychrysia aurata* (Staudinger), *P. splendida* (Butler), *Lamprotes mikadina* (Butler), *Autographa amurica* (Staudinger), and *A. v-minus* (Oberthür)) are reported for the first time from China. Three previously reported species *Antoculeora ornatissima* (Walker), *Autographa nigrisigna* (Walker), and *Syngrapha hochenwarthi* (Hochenwarth) were not found in this study. Photographic images of adults of the newly known species from China and their male or female genitalia are given, with a check list of the 37 known species of the subfamily in Mt Changbai.

KEY WORDS : New records, List, Moths, Mt. Changbai, China

초 록 : 2000-2004년에 걸쳐 수행된 장백산의 나방류 조사결과로 Plusiinae 아과 34종이 분류, 동정되었다. 그들 중 *Abrostola ussuriensis* Dufay, *Polychrysia aurata* (Staudinger), *P. splendida* (Butler), *Lamprotes mikadina* (Butler), *Autographa amurica* (Staudinger), *A. v-minus* (Oberthür) 등 6종이 중국 미기록 종으로 밝혀졌다. 과거에 보고되었던 *Antoculeora ornatissima* (Walker), *Autographa nigrisigna* (Walker), 그리고 *Syngrapha hochenwarthi* (Hochenwarth) 등 3종은 본 조사에서 발견되지 않았다. 새로 이 밝혀진 중국 미기록 6종에 대해 성충의 외부특징에 대한 간략한 기술과 그들의 암수생식기를 도해하였다. 장백산에서 보고된 총 37종의 목록을 제시하였다.

검색어 : 미기록 종, 목록, 나방류, 장백산, 중국

The moths of the subfamily Plusiinae are easily separable from others by the characteristic silvery markings on the forewings. The subfamily comprises more than 440 species in the world (Poole, 1989). In China, 96 species have been so far, according to recent authors (Chou and Lu, 1974, 1978, 1979a,b, 1982; Chen, 1982, 1985; Ronkay, 1986, 1987, 1989; Goater *et al.* (2003).

On the other hand, in the Mt. Changbai (China part), 20 species were reported (For. Dept. Jilin Prov., 1982; Ju *et al.*, 1997; Wu *et al.*, 1999).

During the expeditions in Mt. Changbai (2000-2004), 34 species of Plusiinae were recognized, including six species of new records from China, and 11 species from Mt. Changbai. However, three previously known species

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from Mt. Changbai; *Antoculeora ornatissima* (Walker), *Autographa nigrisigna* (Walker), and *Syngrapha hochenwarthi* (Hochenwarth) were not found during these surveys: 1), *A. ornatissima* was probably misidentified, because its distributional range is so far restricted to the Oriental and Southern Palaearctic Region; 2), *A. nigrisigna* has a possibility to be occurred in Mt. Changbai, according to its distributional range, even it was not found; 3), *S. hochenwarthi* is a montane species and it has been known in the northern China above Prov. Heilongjiang. This record was probably due to a misidentification of *S. ain* (Hochenwarth), which is distributed from the western Alps to Russian Far East including Japan, Korea.

Materials and Methods

Specimens examined were collected by K.T. Park, L.S. Lu, D.Y. Jin and H.L. Han during expeditions in 2000-2004, and deposited at the Center for Insect Systematics, Kangwon National University, Korea, and a part of them are at the College of Agriculture, Yanbian National University, China. The color standard for the description of adults follows Kornerup and Wanscher (1978).

Systematic Accounts

Newly reported species of Plusiinae from China

Abrostola ussuriensis Dufay, 1958 乌苏里隐金翅夜蛾 (新称) (Figs. 1, 17)
Abrostola ussuriensis Dufay, 1958, Bull. Soc. linn. Lyon 27: 157, pl. 2: 5, 6. 11 TL: RFE, Primorye terr., [NM, Vienna].

Diagnosis (Fig. 1). Wingspan 33-35 mm. The species is generally similar to *A. triplasia* (Linne), but it can be distinguished by followings: middle part of forewing darker, postmedian line more concave; hind wing with broader pale gray basal part. The male genitalia have easier separable characteristics with shorter valva and

absence of denticles in vesica.

Female genitalia (Fig. 17). Apophyses anteriores shorter than that of *A. triplasia*, and their basal lobes pocket-like sclerotized, elliptical. Antrum broad, cylindrical, heavily sclerotised. Ductus bursae membranous, forming a neck beyond antrum, coiled at middle. Corpus bursae dipper-shaped, anterior portion ovate and posterior 3/5 elongate.

Material examined. 2♀, Malugou 730 m, Changbai, 17 VII 2001; 1♀, Jiashan 510 m, Helong, 14 VIII 2003.

Distribution. China (new record), Korea (North, South), Japan, Russia (RFE).

Polychrysia aurata (Staudinger, 1888) 重印铜夜蛾 (新称) (Figs. 2, 7, 8)
Stett. ent. Zutr., 49: 260. [MNHU, Berlin].

Diagnosis (Fig. 2). Wingspan 33-36 mm. Forewing ground color light orange; costa almost straight before near apex; antemedian line slender, strongly convex medially; median line dark brown, strongly angled on M-vein; postmedian line thin; subterminal line serrated; dark brown fascia beyond subterminal line upper M1; claviform spot weakly presented; a dark small dot at upper corner of cell. Hind wing pale orange; median line weakly presented.

Male genitalia (Figs. 7-8). Uncus slender, curved, hooked at apex; valva narrow basally, slightly concave at 2/3 of costa; apex round; outer margin oblique, concave beyond middle with strong setae along margin; ventral margin almost straight; sacculus short, broader; clasper digitate, slender, longer than width of valva arising near middle. Aedeagus stout, as long as valva, with slender cornutus apically.

Female genitalia (Fig. 18). Similar to those of *P. esmeralda*. Antrum small, funnel-like; ductus bursae very short, about 1/6 length of corpus bursae. Corpus bursae large, kidney-shaped, without signum.

Material examined. 1♂, 1♀, Dixia Forest 1,700 m, Antu, 29 VII 2000; 1♀, Changbai Electric power Stn. 760 m, Erdaobaihe, Antu, 30 VII 2000; 1♀, Weidong 1,250 m, Fusong, 16 VII 2001; 1♂, same locality, 1,400 m, 5 VIII 2002.

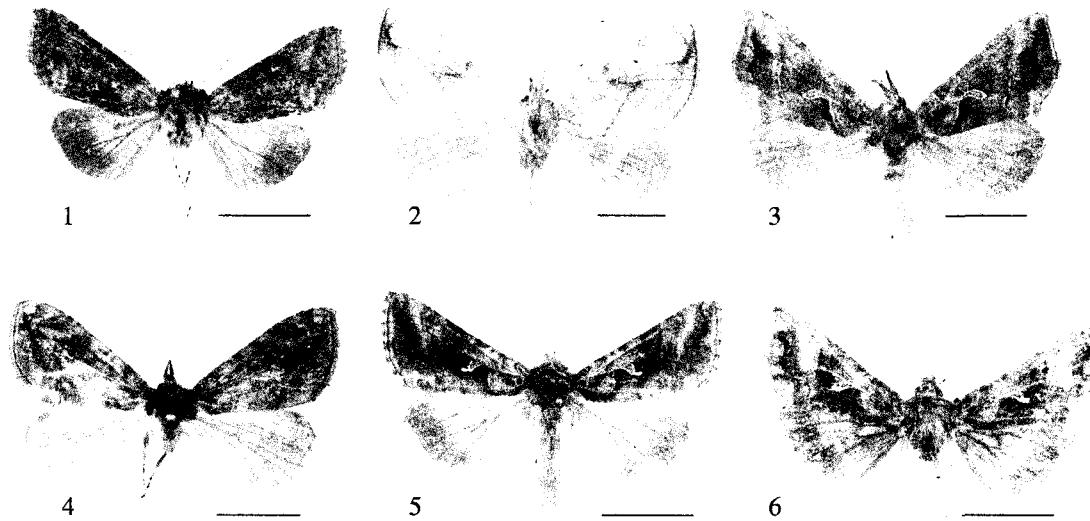


Fig. 1-6. Adults: 1, *Abrostola ussuriensis* Dufay; 2, *Polychrysia aurata* (Staudinger); 3, *P. splendida* (Butler); 4, *Lamprotes mikadina* (Butler); 5, *Autographa amurica* (Staudinger); 6, *A. v-minus* (Oberthür). (Scale: 1cm).

Distribution. China (new record), Japan, Russia (E Siberia, RFE).

***Polychrysia splendida* (Butler, 1878)** 暗印铜夜蛾 (新称) (Figs. 3, 7, 8)

Deua splendida Butler, 1878, Ann. Mag. nat. Hist. (5), 1: 203. TL: Japan, [BMNH, London].

Plusia intractata Staudinger, 1888, Stettin. ent. Ztg 49:

262 TL: RFE, Rrimorye, [MNHU, Berlin].

Phytometra sachalinensis (Matsumura, 1925), J. Coll.

Agric. Hokkaido Imp. Univ. 15: 150, pl. 8: 21. TL: RFE, [EIHU, Sapporo].

Diagnosis (Fig. 3). Wingspan 28-30 mm. Moths collected from Mt Changbai are much smaller than those in the Korean peninsular. The species can be separated by the sharply pointed apex of the forewing from its congeners. Forewing ground color dark brown; antemedian line silvery white; stigma with silvery outline suffusing with brownish scales. Hind wing gray; median line indistinct.

Male genitalia (Figs. 9-10). Similar to those of *P. aurata*, but differentiated by the narrow valva; ventral margin convex at middle, strongly angled at end; aedeagus shorter with strong horn-shaped cornuti.

Female genitalia (Fig. 19). Similar to those of *P.*

aurata, but ductus bursae broader and longer.

Material examined. 1 ♂, Datong 720 m, Chongshan, Helong, 3 VIII 2002; 1 ♂, Weidong 1,400 m, Fusong, 5 VIII 2002; 1 ♂, Jiashan 750 m, Helong, 9 VIII 2002; 2 ♂, Lushuihe For. Ctr. 770 m, Fusong, 13 VIII 2003; 1 ♀, Jiashan 510 m, Helong, 14 VIII 2003; 1 ♂, Renchuan 370 m, Longjing, 15 VIII 2002; 1 ♂, Yongxin 570 m, Longjing, 16 VIII 2002.

Distribution. China (new record), Korea (North, South), Japan (Hokkaido, Honshu, Shikoku), Russia (RFE, S. Siberia), N Mongolia.

***Lamprotes mikadina* (Butler, 1878)** 北方金翅夜蛾 (新称) (Figs. 4, 11, 12)

Plusia mikadina Butler, 1878, Ann. Mag. nat. Hist. (5), 1: 202. TL: Japan, Yokohama [BMNH, London].

Diagnosis (Fig. 4). Wingspan 33-35 mm. This species is distinguished from its congeners by the forewing with broad area of golden yellow metallic fascia between postmedian and terminal line; with smaller fascia of the same color at near base, at lower corner of cell, and beyond postmedian line on inner margin. The male genitalia can be easier separable characters.

Male genitalia (Figs. 11-12). Similar to those of *P. splendida*, but valva and clasper much shorter; aedeagus

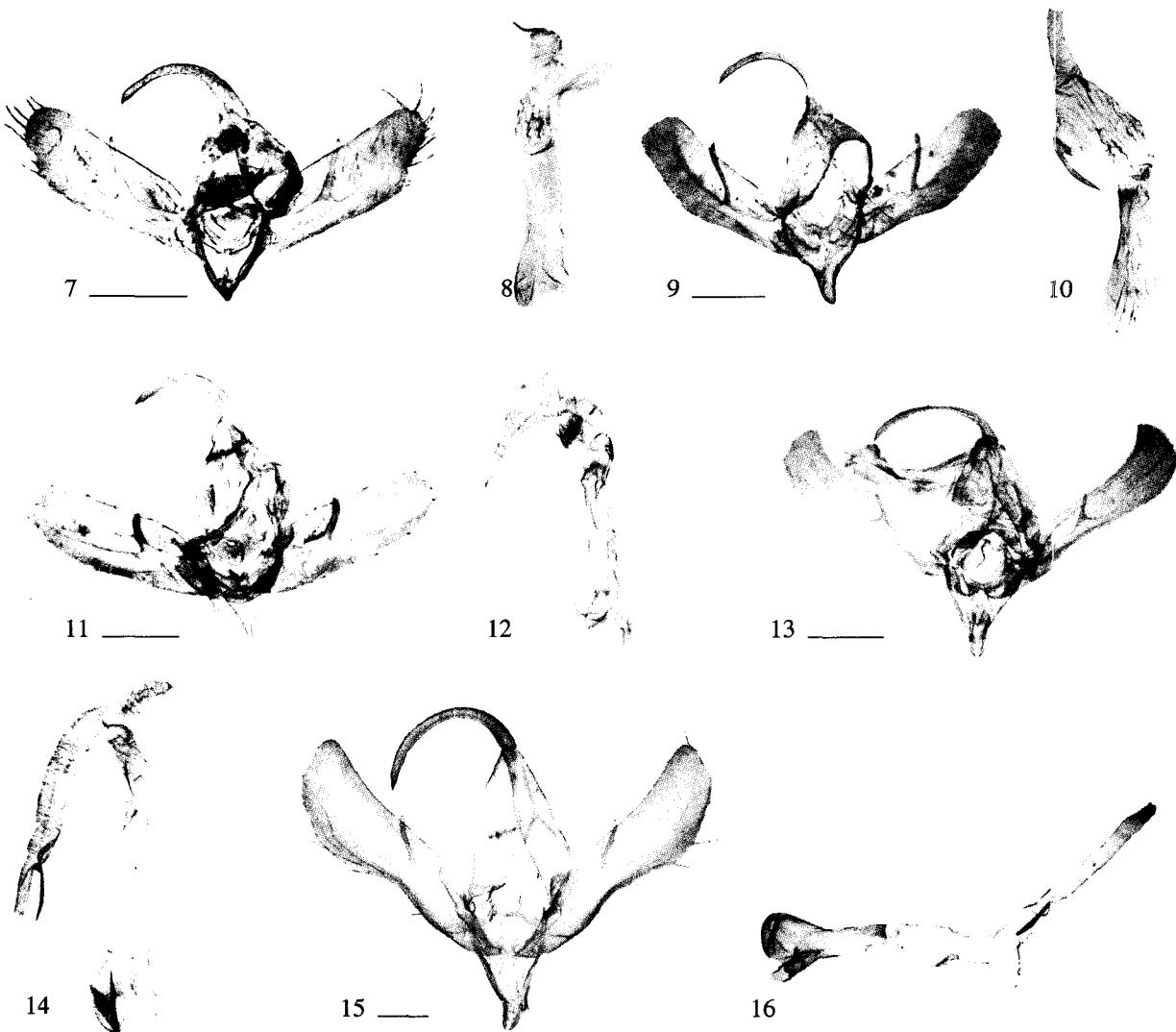


Fig. 7-16. Male genitalia: 7-8, *Polychrysia aurata* (Staudinger); 9-10, *P. splendida* (Butler); 11-12, *Lamprotes mikadina* (Butler); 13-14, *Autographa amurica* (Staudinger); 15-16, *A. v-minu* (Oberthür). (Scale: 1 mm).

shorter, more slender, cylindrical; cornutus small, thin; vesica with two series of spinules, larger one at middle and the other small one at base.

Female genitalia (Fig. 20). Ostium bursae very wide; weakly sclerotized; ductus bursae broad, weakly sclerotised at caudal 3/4, narrowed at anterior 1/4; corpus bursae ovate.

Material examined. 1♀, Jiashan 600 m, Helong, 20 VII 2001; 1♀, Jiashan 510 m, Helong, 14 VIII 2003; 1♀, Yongxin 570 m, Longjing, 16 VIII 2003.

Distribution. China (new record), Korea (North, South), Japan, Russia (RFE).

***Autographa amurica* (Staudinger, 1892) 北方金翅夜蛾
(新称) (Figs. 5, 13, 14)**

Plusia pulchrina var. *amurica* Staudinger, 1892, in Romannoff, Mem. Lepid. 6: 549. TL: RFE, Primorye, [MNHU, Berlin].

Diagnosis (Fig. 5). Wingspan 36-40 mm. This species is similar to *A. mandarina*, but can be distinguished by the following characters: Forewing ground color darker, longer; a small black dot on basal line medially; stigma Y-shaped with small silvery spot.

Male genitalia (Figs. 13-14). Vinculum medium-long, rather V-shaped. Valva elongate, broader towards end;

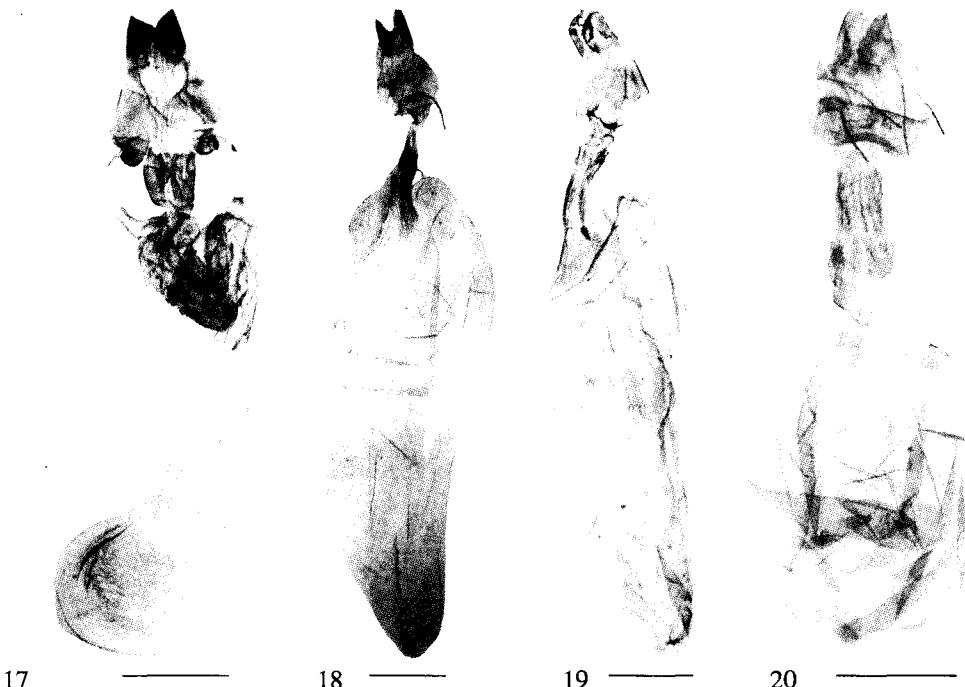


Fig. 17-20. Female genitalia: 17, *Abrostola ussuriensis* Dufay; 18, *Polychrysia aurata* (Staudinger); 19, *P. splendida* (Butler); 20, *Lamprotes mikadina* (Butler). (Scale: 3 mm).

costa concave at 3/4; ventral margin convex at 3/4; clasper shorter than width of valva; apex prodused. Aedeagus cylindrical, longer than valva, globular at base; vesica long with heavily sclerotized apical cornutus.

Material examined. 1 ♂, Nearby Dujuan Hotel 1,750 m, Antu, 28 VII 2000; 1 ♂, Weidong 1,250 m, Fusong, 16 VII 2001; 2 ♂, Changbai Electric power Stn. 760 m, Erdaobaihe, Antu, 18 VII 2001; 1 ♂, Yadong 730 m, Helong, 19 VII 2001; 2 ♂, Datong 720 m, Chongshan, Helong, 3 VIII 2002; 1 ♂, Malugou 730 m, Changbai, 7 VIII 2002.

Distribution. China (new record), Korea (North, South), Japan, Russia (RFE).

***Autographa v-minus* (Oberthür, 1884) V纹金翅夜蛾 (新称) (Figs. 6, 15, 16)**

Plusia v-minus Oberthür, 1884, Etudes d'Ent. 10: 27 (TL: RFE, Primorye terr., [BMNH, London]).

Diagnosis (Fig. 6). Wingspan 33-36 mm. This species is similar to the preceding species, but can be distinguished by the small Y-shaped stigma, submarginal line more

clearly developed on forewing; hind wing paler than the preceding species, median line bordered with paler shade.

Male genitalia (Figs. 15-16). Similar to those of *A. amurica*. Valva broader; costa slightly concave beyond middle; ventral margin strongly concave before half, then convex at 2/3; apex sharply produced. Aedeagus short, about 2/3 length of valva; vesica long with heavily sclerotised.

Material examined. 1 ♂, Datong 720 m, Chongshan, Helong, 3 VIII 2002; 1 ♂, Renchuan 370 m, Longjing, 15 VIII 2003; 1 ♂, Yongxin 570 m, Longjing, 16 VIII 2003.

Distribution. China (new record), Korea (North), Russia (RFE-Primorye territory).

New records from Mt. Changbai

***Abrostola triplasia* (Linnaeus, 1758) 隐金翅夜蛾**

Material examined. 1 ♂, 1 ♀, Chongshan 600 m, Helong, 14 VII 2001; 1 ♂, Weidong 1,250 m, Fusong, 16 VII 2001; 1 ♂, 2 ♀, Malugou 730 m, Changbai, 17 VII 2001; 1 ♂, Jiashan 600 m, Helong, 20 VII 2001.

Trichoplusia ni (Hübner, 1803) 粉斑夜蛾

Material examined. 1 ♂, Jiashan 640 m, Helong, 22 VII 2004.

Panchrysia ornata (Bremer, 1864) 艳银钩夜蛾

Material examined. 1 ♂, Xiao Tianchi 1,700 m, Antu, 4 VIII 2002; 3 ♂, Weidong 1,400 m, Fusong, 5 VIII 2002; 2 ♂, Malugou 730 m, Changbai, 6-7 VIII 2002.

Diachrysia leonina (Oberthür, 1884) 八纹夜蛾

Material examined. 1 ♂, 1 ♀, Heping For. Ctr., Antu, 27 VII 2000; 1 ♂, Dixia Forest 1,700 m, Antu, 29 VII 2000; 2 ♂, 1 ♀, Changbai Electric power Stn. 760 m, Erdaobaihe, Antu, 30 VII 2000; 1 ♀, Jiashan 600 m, Helong, 1 VIII 2000; 3 ♂, 2 ♀, Nearby Dujuan Hotel 1,750 m, Antu, 15 VII 2001; 1 ♂, Xiao Tianchi 1,700 m, Antu, 4 VIII 2002; 9 ♂, 1 ♀, Erdaobaihe 750 m, Antu, 11 VIII 2003; 5 ♂, 1 ♀, Weidong 970 m, Fusong, 12 VIII 2003; 6 ♂, 3 ♀, Lushuihe Forest centre 780 m, Fusong, 13 VIII 2003; 22 ♂, 1 ♀, Jiashan 510 m, Helong, 14 VIII 2003; 2 ♂, Yongxin 570 m, Longjing, 16 VIII 2003.

Diachrysia bieti (Oberthür, 1884) 比八纹夜蛾

Material examined. 1 ♂, Weidong 1,250 m, Fusong, 16 VII 2001; 1 ♂, Jiashan 600 m, Helong, 20 VII 2001; 1 ♂, Datong 720 m, Chongshan, Helong, 3 VIII 2002; 1 ♂, Malugou 730 m, Changbai, 7 VIII 2002; 1 ♂, Jiashan 760 m, Helong, 9 VIII 2002.

Anthoculeora locuples (Oberthür, 1881) 庐山鹿铁纹夜蛾

Material examined. 1 ♂, Changbai Electric power Stn. 760 m, Erdaobaihe, Antu, 30 VII 2000; 4 ♀, Weidong 1,250 m, Fusong, 16 VII 2001; 3 ♂, Malugou 730 m, Changbai, 6-7 VIII 2002; 1 ♀, Erdaobaihe 740 m, Antu, 8 VIII 2002; 2 ♂, 3 ♀, Erdaobaihe 750 m, Antu, 11 VIII 2003; 2 ♂, 1 ♀, Weidong 970 m, Fusong, 12 VIII 2003; 3 ♂, Lushuihe For. Ctr. 780 m, Fusong, 13 VIII 2003; 4 ♂, Jiashan 510 m, Helong, 14 VIII 2003; 1 ♀, Renchuan 370 m, Longjing, 15 VIII 2003; 3 ♂, Yongxin 570 m, Longjing, 16 VIII 2003.

Macdunnoughia hybrida (Ronkay, 1986) 拟瘦银锭夜蛾
(新称)

Material examined. 1 ♀, Yadong 730 m, Helong, 19 VII 2001; 1 ♂, Jiashan 600 m, Helong, 20 VII 2001; 1 ♂, Jiashan 760 m, Helong, 9 VIII 2002.

Remarks. This species was described by L. Ronkay (1986) from China. The Chinese name of this species is newly given.

Autographa bureatica (Staudinger, 1892) 淡折线金翅夜蛾 (新称)

Material examined. 1 ♂, Heping For. Ctr., Antu, 27 VII 2000; 1 ♂, Changbai Electric power Stn. 760 m, Erdaobaihe, Antu, 30 VII 2000; 1 ♂, Jiashan 600 m, Helong, 1 VIII 2000; 2 ♂, 1 ♀, Weidong 1,250 m, Fusong, 16 VII 2001; 1 ♂, Jiashan 600 m, Helong, 20 VII 2001; 2 ♂, 1 ♀, Malugou 730 m, Changbai, 6-7 VIII 2002; 1 ♂, Jiashan 510 m, Helong, 14 VIII 2003; 4 ♂, Renchuan 370 m, Longjing, 15 VIII 2003; 3 ♂, Yongxin 570 m, Longjing, 16 VIII 2003.

Remarks. Ronkay (2003) reported this species from the northern China. The Chinese name of this species is newly given in this study.

Autographa excelsa (Kretschmar, 1862) 栋纹夜蛾

Material examined. 1 ♀, Jiashan 600 m, Helong, 1 VIII 2000; 2 ♂, Malugou 730 m, Changbai, 6-7 VIII 2002; 1 ♂, Weidong 970 m, Fusong, 12 VIII 2003; 1 ♂, 1 ♀, Jiashan 510 m, Helong, 14 VIII 2003; 1 ♂, 1 ♀, Renchuan 370 m, Longjing, 15 VIII 2003; 3 ♂, Yongxin 570 m, Longjing, 16 VIII 2003.

Syngrapha interrogationis (Linnaeus, 1758) 伏锌纹夜蛾

Material examined. 3 ♂, 2 ♀, Nearby Dujuan Hotel 1,750 m, Antu, 15 VII 2001; 5 ♂, Weidong 1,250 m, Fusong, 16 VII 2001.

Syngrapha ain (Hochenwarth, 1785) 北方美金翅夜蛾
(新称)

Material examined. 1 ♂, Changbai Electric power Stn. 760 m, Erdaobaihe, Antu, 8 VIII 1999; 1 ♀, same locality, 30 VII 2000; 1 ♂, Heping For. Ctr., Antu, 27 VII 2000; 1 ♂, Jiashan 680 m, Helong, 13 VII 2001; 1 ♂, 1 ♀, Chongshan 600 m, Helong, 14 VII 2001; 1 ♂, 3 ♀, Weidong 1,250 m, Fusong, 16 VII 2001; 2 ♂, Erdaobaihe

760 m, Antu, 11 VIII 2003; 1 ♂, Jiashan 510 m, Helong, 14 VIII 2003; 2 ♂, Yongxin 570 m, Longjing, 16 VIII 2003.

Remarks. This species was recorded by Hu (1938) from Mt. Altai. The species Chinese name of this species is newly given.

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Table 1. Check list of the known species of the Plusiinae in Mt. Changbai

Species	First records	Distribution			
		C	K	J	R
<i>Abrostola ussuriensis</i> Dufay, 1958 乌苏里隐金翅夜蛾	New to China	●	●	●	●
<i>Abrostola triplasia</i> (Linnaeus, 1758) 隐金翅夜蛾	New to Mt. Changbai	●	●	-	●
<i>Anadevidia peponis</i> (Fabricius, 1775) 葫芦夜蛾	For. Dept. Jilin Prov. (1982)	●	●	●	●
<i>Ctenoplusia albostriata</i> (Brem. & Grey, 1853) 白条夜蛾	Ju et. al. (1997)	●	●	●	●
<i>Ctenoplusia agnata</i> (Staudinger, 1892) 银纹夜蛾	Ju et. al. (1982)	●	●	●	●
<i>Trichoplusia ni</i> (Hübner, 1803) 粉斑夜蛾	New to Mt. Changbai	●	●	●	●
<i>Polychrysia aurata</i> (Staudinger, 1888) 重印铜夜蛾	New to China	●	-	●	●
<i>Polychrysia esmeralda</i> (Oberthür, 1880) 印铜夜蛾	Wu et. al. (1999)	●	●	-	●
<i>Polychrysia splendida</i> (Butler, 1878) 暗印铜夜蛾	New to China	●	●	●	●
<i>Panchrysia ornata</i> (Bremer, 1864) 艳银钩夜蛾	New to Mt. Changbai	●	●	-	●
<i>Plusidia cheiranthi</i> (Tauscher, 1809) 闪金夜蛾	Ju et. al. (1997)	●	●	●	●
<i>Lamprotes mikadina</i> (Butler, 1878) 镶边金翅夜蛾	New to China	●	●	●	●
<i>Diachrysia chryson</i> (Esper, 1789) 紫金翅夜蛾	For. Dept. Jilin Prov. (1982)	●	●	●	●
<i>Diachrysia leonina</i> (Oberthür, 1884) 八纹夜蛾	New to Mt. Changbai	●	●	●	●
<i>Diachrysia bieti</i> (Oberthür, 1884) 比八纹夜蛾	New to Mt. Changbai	●	●	●	●
<i>Diachrysia zosimi</i> (Hübner, [1822]) 绿金翅夜蛾	For. Dept. Jilin Prov. (1982)	●	●	●	●
<i>Diachrysia nadeja</i> (Oberther, 1880) 碧金翅夜蛾	For. Dept. Jilin Prov. (1982)	●	●	●	●
<i>Diachrysia chrysitis</i> (Linnaeus, 1758) 金翅夜蛾	Ju et. al. (1997)	●	●	●	●
<i>Diachrysia stenochrysis</i> (Warren, 1913) 青金翅夜蛾	For. Dept. Jilin Prov. (1982)	●	●	●	●
<i>Erythroplusia rutilifrons</i> (Walker, 1858) 珠纹夜蛾	For. Dept. Jilin Prov. (1982)	●	-	●	●
<i>Anthoculeora locuples</i> (Oberthür, 1881) 庐山鹿铗纹夜蛾	New to Mt. Changbai	●	●	●	●
* <i>Anthoculeora ornatissima</i> (Walker, 1858) 饰银纹夜蛾	Ju et. al. (1997)	●	-	-	-
<i>Macdunnoughia confusa</i> (Stephens, 1850) 瘦银锭夜蛾	Ju et. al. (1997)	●	●	●	●
<i>Macdunnoughia hybrida</i> Ronkay, 1986 拟瘦银锭夜蛾	New to Mt. Changbai	●	●	●	●
<i>Macdunnoughia crassisigna</i> (Warren, 1913) 银锭夜蛾	For. Dept. Jilin Prov. (1982)	●	●	●	●
<i>Macdunnoughia purissima</i> (Butler, 1878) 淡银锭夜蛾	Wu et. al. (1999)	●	●	●	●
<i>Autographa buraetica</i> (Staudinger, 1892) 淡折线金翅夜蛾	New to Mt. Changbai	●	●	●	●
<i>Autographa mandarina</i> (Freyer, 1846) 满丫夜蛾	For. Dept. Jilin Prov. (1982)	●	●	●	●
* <i>Autographa nigrisigna</i> (Walker, 1857) 黑点丫纹夜蛾	Ju et. al. (1997)	●	●	●	●
<i>Autographa amurica</i> (Staudinger, 1892) 北方金翅夜蛾	New to China	●	●	●	●
<i>Autographa v-minus</i> (Oberthür, 1884) V纹金翅夜蛾	New to China	●	-	●	●
<i>Autographa excelsa</i> (Kretschmar, 1862) 栋纹夜蛾	New to Mt. Changbai	●	●	●	●
<i>Plusia festucae</i> (Linnaeus, 1758) 金斑夜蛾	Wu et. al. (1999)	●	●	●	●
<i>Plusia putnami</i> Grote, 1873 稻金斑夜蛾	Wu et. al. (1999)	●	●	●	●
<i>Syngrapha interrogationis</i> (Linnaeus, 1758) 伏锌纹夜蛾	New to Mt. Changbai	●	●	●	●
<i>Syngrapha ain</i> (Hochenwarth, 1785) 北方美金翅夜蛾	New to Mt. Changbai	●	●	●	●
* <i>Syngrapha hochenvarthi</i> (Hoch., 1785) 美金翅夜蛾	For. Dept. Jilin Prov. (1982)	●	-	-	-

C -China, K- Korean peninsula, J- Japan, R- Russian Far East.

* The species not found from Mt. Changbai-shan during this study

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