韓應昆誌 35(4) : 287~296 (1996)
Korean J. Appl. Entomol.

Newly recorded and rarely known species of Noctuidae (Lepidoptera) from the Korean Peninsula

韓國産 밤나방科의 未記錄種을 포함한 몇몇 種들에 대한 報告

Sung-Bok AHN[1], Vladimir S. KONONENKO[2], Kap-Jae WEON[3]
안성복[1] · V. S. 코노넨코[2] · 원갑재[3]

ABSTRACT Twenty four newly recorded and rarely known noctuid species from the Korean peninsula, which are preserved in domestic and foreign museums, are discussed in this article. Eleven species; *Hypenodes curvilinea* Sugi, *Polydesma boarmoides* (Guenee), *Catocala bokhaica* (Kononenko), *Xanthomantis contaminata* (Draudt), *Craniophora harmandi* (Poujade), *Amphipyra acheron* Draudt, *Orthogonia tapaishana* (Draudt), *Chasminodes ussurica* Kononenko, *Oncocnemis campicola* Lederer, *Protomiselia bilinea* (Hampson) and *Xestia* (*Anomogyna*) *albonigra* (Kononenko) are newly reported from the Korean peninsula. Among them, *P. bilinea* (Hampson), which has been known in Japan, is reported for the first time from the Continental Asia. The occurrence of *Athetis pallidipennis* Sugi, *Pseudocosmia maculata* Kononenko, *Callopistria miracula* Herz and *Lacanobia dentata* Kononenko are reconfirmed in Korea. *Eudocyma salamina* (Cramer) and *Polydesma boarmoides* Guenee are considered to be tropical migrating species. A previously misidentified species, *Hypenodes rectifascia* Sugi is corrected as *H. curvilinea* Sugi.

KEY WORDS Systematics, Lepidoptera, Noctuidae, Korean Peninsula

초 록 국내와 외국의 박물관에 보관되어 있는 밤나방과의 한국미기록종 및 비교적 덜 알려져 있는 24종을 보고한다. 한국미기록종은 *Hypenodes curvilinea* Sugi, *Polydesma boarmoides* (Guenee), *Catocala bokhaica* (Kononenko), *Xanthomantis contaminata* (Draudt), *Craniophora harmandi* (Poujade), *Amphipyra acheron* Draudt, *Orthogonia tapaishana* (Draudt), *Chasminodes ussurica* Kononenko, *Oncocnemis campicola* Lederer, *Protomiselia bilinea* (Hampson)과 *Xestia* (*Anomogyna*) *albonigra* (Kononenko) 등 11종이며, 그 중 일본에서만 기록되었던 *P. bilinea* (Hampson)은 아시아의 대륙에서는 처음 기록된다. 또한 *Athetis pallidipennis* Sugi, *Pseudocosmia maculata* Kononenko, *Callopistria miracula* Herz와 *Lacanobia dentata* Kononenko는 한국에 분포하는 종임이 재확인되었다. *Eudocyma salamina* (Cramer)와 *Polydesma boarmoides* Guenee는 열대지방에 분포하는 종으로서 비래한 것으로 생각된다. 오동정되었던 종 *H. rectifascia* Sugi는 *Hypenodes curvilinea* Sugi로 바로 잡는다.

검색어 분류, 나비목, 밤나방, 한국

INTRODUCTION

Present paper is a result of the serial faunistic research on the family Noctuidae from the Korean Peninsula (Ahn *et al.*, 1994a, b). In the course of the revisional study of Korean Noctuidae, we found 24 species as newly recorded and rarely known noctuid moths, which have been preserved in domestic and foreign museums. Among them, 11 species; *Hypenodes curvilinea* Sugi, *Polydesma boarmoides* (Guenee), *Catocala bokhaica* (Kononenko), *Xanthomantis contaminata* (Draudt), *Craniophora harmandi*

[1]National Institute of Agricultural Sciences and Technology, Rural Development Administration, Suwon, 441-707, Korea
(농촌진흥청 농업과학기술원, 작물보호부)
[2]Institute of Biology and Pedology, Far Eastern Branch of Russian Academy of Science, RF-690022 Vladivostok, Russia
(러시아과학원 극동생물토양연구소)
[3]Forestry Museum, Div. of Aboretum, Chungbu Forestry Experimental Station of Forestry Research Institute, Gwangleung, Korea
(임업연구원 중부시험장 임업박물관)
농업과학기술원 승인번호: 96-3-4-012

(Poujade), *Amphipyra acheron* Draudt, *Orthogonia tapaishana* (Draudt), *Chasminodes ussurica* Kononenko, *Oncocnemis campicola* Lederer, *Protomiselia bilinea* (Hampson) and *Xestia* (*Anomogyna*) *albonigra* (Kononenko) were previously unknown from the Korean peninsula, and eight species including *Schrankia kogii* Inoue, *Anomis longipennis* Sugi, *Anathata misae* Sugi, *Araeopteron amoena* Inoue, *Xanthomantis cornelia* (Staudinger), *Cryphia minutissima* (Draudt), *Cryphia mitsuhashi* (Marumo) and *Apamea brunnescens* Kononenko are first reported from northern part of Korea. Four rarely known species, *Athetis pallidipennis* Sugi, *Pseudocosmia maculata* Kononenko, *Callopistria miracula* Herz and *Lacanobia dentata* Kononenko are reconfirmed on their distribution in the Korean peninsula and two migrating species, *Eudocyma salamina* (Cramer) and *Polydesma boarmoides* Guenee are recognized. New discovery of these species considerably extends our knowledge about geographical distribution and migrating ability of some noctuid species. Also a previously misidentified species, *Hypenodes rectifascia* Sugi is corrected as *H. curvilinea* Sugi. The following informations for each species are given here: reference of the original description, synonymy, reference for the source of identification, material examined, distribution and taxonomic or biological notes where necessary. And photographs of adults, drawings of male and female genitalia of some species are provided to help identification. Material examined are based on the collections of National Institute of Agricultural Sciences and Technology [NIAST], RDA Suwon; Center for Insect Systematics, [CIS], Kangwon National University, Chunchon; Forestry Research Institute [FRI], Seoul, Korea; Zoological Institute and Museum Alexander Koenig [ZFMK], Bonn, Germany; Institute of Entomology Czhechian Academy of Sciences [IECAS], Cheske Budejovice, Czhech Republic; private collection of Mr. H. Thony, Ingalstadt, Germany [HT]; National Science Museum Tokyo [NSMT], and National Institute of Agro-Enviromental Sciences [NIAES], Tsukuba, Japan.

For the distribution range in the Korean Peninsula, three categories are used as follows; **North-** North Korea (DPRK); **Central-** Gyeonggi Prov., Kangwon Prov. and Chungchung Prov. of Ripublic of Korea (ROK); **South-** Jeolla Prov. and Kyeongsang Prov. of ROK.

LIST OF SPECIES

Hypenodinae 꼬마짤름나방亞科

Hypenodes curvilinea Sugi, 1982

흰줄꼬마짤름나방 (신칭)

Moths of Japan, I: 899, II: 403, Pl. 379: 10, 380: 11.

Material examined. See Ahn *et al.*, 1994: 52, *Hypenodes rectifascia.*

Distribution. Korea (Central), Japan (Hokkaido).

Note. This species was misidentified as *Hypenodes rectifascia* in our previous paper (Ahn *et al.*, 1994b). Judging from photographs of male genitalia in the original description (Sugi, 1982) and the specimens examined, *H. curvilinea* differs from *H. rectifascia* in the presence of short finger-like extension at the basal part of sacculus. It is considered that there is a possibility to be occurred in Korea, but materials have not been found.

Schrankia kogii Inoue, 1979 등근점꼬마짤름나방

Tinea 10: 304, figs 5, 11.

Material examined. [IECAS] 1♀, Okryu valley, Mt. Kumgangsan, 200 m, Kangwon Prov., N Korea, 19. VII. 1989 (K. Spitzer).

Distribution. Korea (Central, North), Japan (Hokkaido, Honshu).

Note. This is the first record from North Korea. The species was recently reported from the central part of Korea (Ahn *et al.*, 1994b).

Ophiderinae 짤름나방亞科

Eudocyma salamina (Cramer, 1777) 앞노랑으름나방

Uitlandsche Kapellen 2, 117, pl. 174: A (*Phalaena*).

Material examined. [FRI] 1♀, Gwangleung, Gyeonggi Prov., 19. VIII. 1986 (K.J. Weon)

Distribution. Korea (South Central), Japan (from Honshu to Okinawa), India, Australia.

Note. The species was reported by Kim *et al.* (1991a: 95) from Mt. Chiri-san, southern part of the Korea. Present record is the confirmation of the occurrence of

this tropical species in the central part of Korea, but it seems to be migrated.

Polydesma boarmoides Guenee, 1852
잔물결무늬밤나방(신칭) Fig. 1.

Hist. Nat. Insectes (Lepid.) 6: 441.

Material examined. [FRI] 1♂, Cheongryangri, Seoul, 29. VIII. 1985 (K.J. Weon).

Distribution. Korea (Central), Japan (from Honshu to Kyushu), Taiwan, S. China, India, Hawaii Is.

Note. This tropical species is reported here for the first time from the central part of Korea, and it is probably migrated.

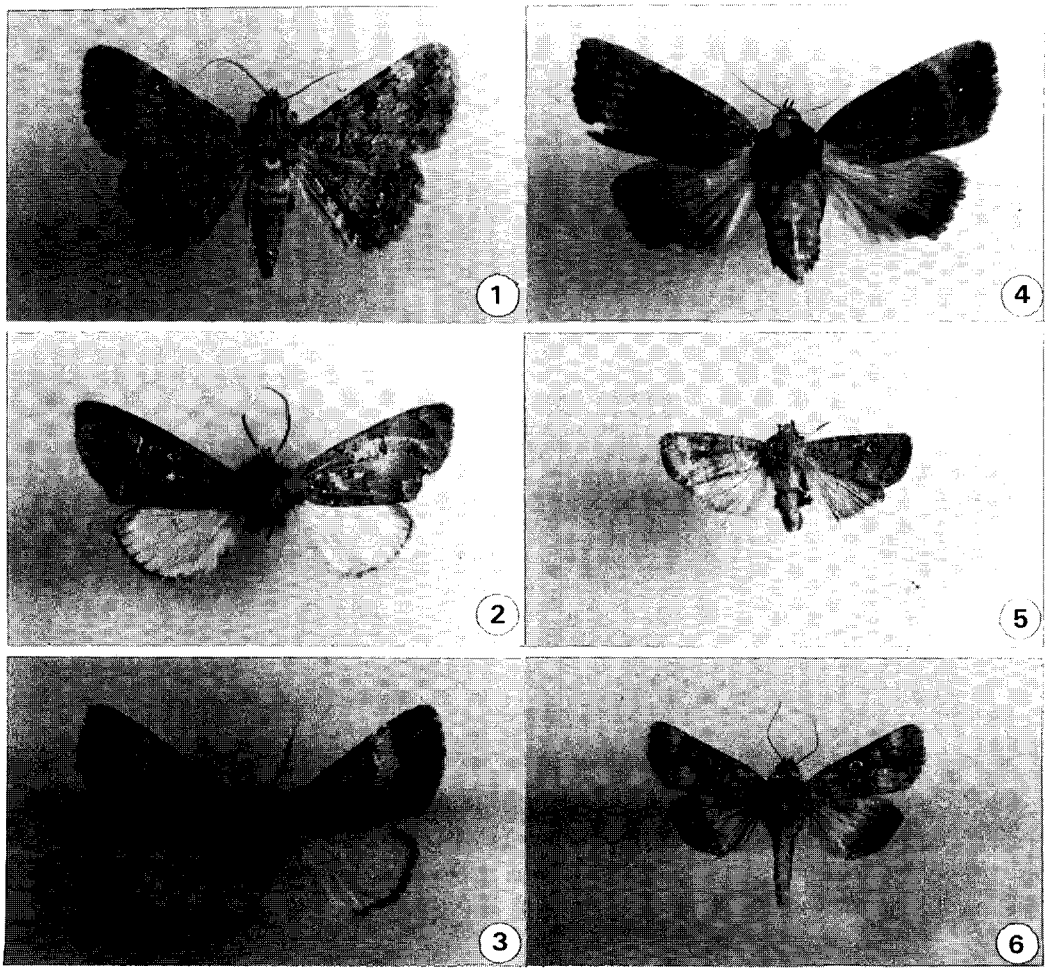
Anomis longipennis Sugi, 1982 붉은잎밤나방

Moth of Japan I: 853, II: 393, pl. 211: 12-14, pl. 367: 10, 15, 19.

Material examined. [IECAS] 1♂, 1♀, Hyangsan, Mt. Myohyangsan, 400 m, Pyongan Prov., N. Korea, 15, 17. VII. 1990 (K. Spitzer).

Distribution. Korea (South, Central, North), Japan (from Hokkaido to Kyushu).

Note. This species is reported for the first time from North Korea. The species was recently reported from



Figs. 1~6. Adult
1. *Polydesma boarmoides* (Guenee); 2. *Xanthomantis cornelia* (Staudinger); 3. *Xanthomantis contaminata* (Draudt); 4. *Amphipyra acheron* Draudt; 5. *Athetis pallidipennis* Sugi; 6. *Oncocnemis campicola* Lederer

the central and southern parts of the Korean Peninsula (Ahn *et al*, 1994b). Larvae feed on Hybiscus tree in Japan (Sugi, 1995, pers. comm).

Anathata misae Sugi, 1982 수레바퀴짤름나방

Moths of Japan, I: 882, II: 399, pl. 218: 40, 377: 9.

Material examined. [IECAS] 2♂, 2♀, Mt. Kumgangsan, 200m, Kangwon Prov., N. Korea, 10. VI. 1987 (J. Jaros); [NIAST] 2♀, Suwon, Gyeonggi Prov., 22. VI. 1976, 23. VII. 1974 (K.T. Park); 1♀, Suwon, 1. VIII. 1965; 1♂, Hongcheon, Kangwon Prov., 6. VII. 1987 (K.S. Lee).

Distribution. Korea (Central, North), Japan (Hokkaido).

Note. First record for North Korea. This species was previously reported from the Korean peninsula by ESK and KSAE (1994: 378).

Catocalinae 뒷날개밤나방亞科

Catocala bokhaica (Kononenko, 1979)

평양뒷날개나방 (신칭) Fig. 7, 13.

Trudy Vsesojusn. Entomol. Obschch., 61: 125 (*Koraia*).

Material examined. [IECAS] 1♀, Mt. Ryongsan, 200m, Pyongyang, N. Korea, 28. VII. 1990 (K. Spitzer).

Distribution. Korea (North), Russian Far East (Primorye Territory), N. China (Kononenko, in litt.).

Note. This is the first record for the the Korean peninsula. The species was previously known only from the Russian Far East.

Acontiinae 꼬마밤나방亞科

Araeopteron amoena Inoue, 1958 비단꼬마밤나방

Tinea 4, 230, pl. 32: 2.

Material examined. [IECAS] 1♂, Mt. Kumgangsan, 200m, Kangwon Prov., N. Korea, 10. VI. 1987 (J. Jaros).

Distribution. Korea (South, Central, North), Japan (Hokkaido, Honshu), Russian Far East (Primorye, Khabarovsk, Sakhalin).

Note. First record for North Korea.

Pantheinae 버짐나방亞科

Xanthomantis cornelia (Staudinger, 1888)

노랑날개버짐나방 Fig. 3.

Stett. Entomol. Zeit. 49: 246 (*Acronycta*).

Material examined. [IECAS] 3♂, Okryu valley, Mt. Kumgangsan, 200m, Kangwon Prov., N. Korea, 10. VI 1987 (J. Jaros); 21♂, Hyangsan, Mt. Myohyangsan, 300m, Pyongan Prov., N. Korea, 27. VI 1987 (J. Jaros); [FRI] 3♂, Gwangleung, Gyeonggi Prov., 23. V, 20. VI, 11. VII 1986 (K.J. Weon); [CIS] 1♂, Chiamri, 12km N. Chunchon, Kangwon Prov., 4. VI. 1993 (S.J. Bang).

Distribution. Korea (Central, North), Russian Far East (Primorye territory)

Note. We treat this and the next one as two distinct, congeneric species in the genus *Xanthomantis* Warren, 1909 (type species: *cornelia*). We restore the generic status of this species because it is considered as a synonym of the genus *Trisuloides* Butler, 1881 (type species: *sericea* Butler, 1881). *X. cornelia* is not congeneric with *T. sericea*. A revision of this group will be published separately in near future by the second author. This species was previously reported from South Korea (Mt. Sobaeg, Kangwon Prov.) by Shin (1987) and North Korea (Mt. Myohyang-san; Mt. Kumgang-san) by Jaros *et al.*(1992).

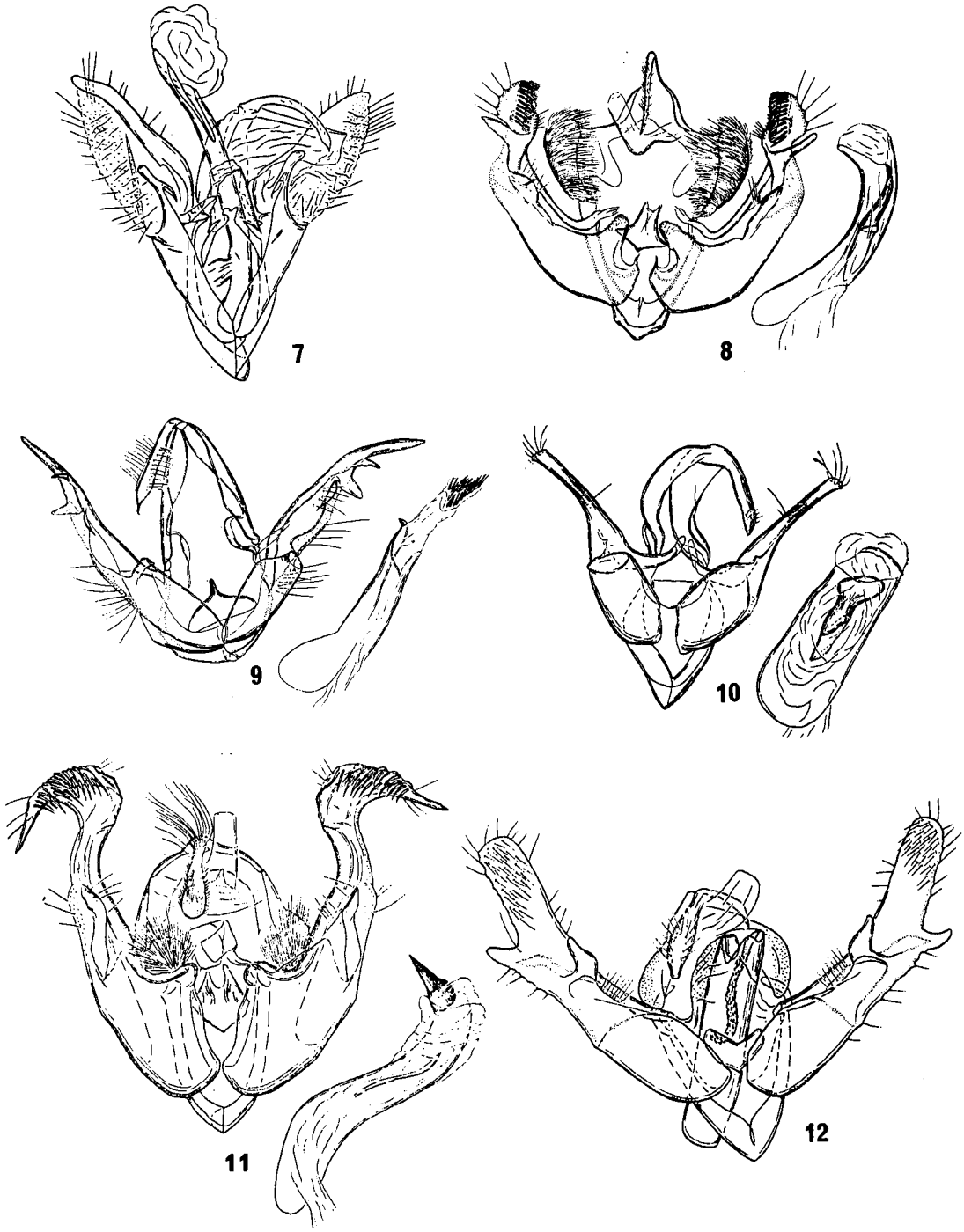
Xanthomantis contaminata (Draudt, 1937), comb. n.

탐시버짐밤나방 Fig. 4.

Entomol. Rundscau, 54: 399, pl. 4, 2f (*Trisuloides*).

Trisuloides tamsi Park & Lee, 1977, Kor. J. Entomol. 7: 1, fig. 1, 2, syn. n.

Material examined. [IECAS] 3♂, 1♀, Okryu valley, Mt. Kumgansan, 200m, Kangwon Prov. N. Korea, 5. VI. 1986, 12, 19. VI. 1988 (J. Jaros); [FRI] 23♂, Gwangleung, Gyeonggi Prov., 20. VI - 12. VII 1985 - 1987 (K.J. Weon); [NIAST] Holotype of *Trisuloides tamsi*, ♂, Mt. Namsan, Seoul, Korea; Paratypes: 1♂, Suigen (=Suwon), Gyeonggi Prov., 9. VII 1923 (H. Okamoto); 2♂, Mt. Chiak-san, Kangwon Prov., 23. V. 1977 (J.C. Paik). Syntypes of *Trisuloides contaminata* [ZFMK]: China: 129♂, 1♀ West Tien-mu-shan, Prov. Chekiang [Prov. Zhejiang], 25. V - 26 VI. 1932 (H.



Figs. 7-12. Male genitalia.
7. *Catocala bokhaica* (Kononenko); 8. *Apamea brunnescens* Kononenko; 9. *Pseudocosmia maculata* Kononenko; 10. *Chasminodes ussurica* Kononenko; 11. *Lacanobia dentata* Kononenko; 12. *Xestia* (*Anomogyna*) *albonigra* (Kononenko)

Hone); 2♂, Hoengshan [Prov. Hunan], 14. V, 31. VII. 1932.

Distribution. Korea (South, Central, North), Russian Far East (Primorye territory), Northern and East China.

Note. First report for Korea with a new synonym, *Trisuloides tamsi* Park & Lee (1977). We treat here *X. cornelia* and *X. contaminata* as two distinct species. Both are sympatrically distributed in Korea and Russian Far East. *X. contaminata* is only known from China. Chen (1982) misidentified and illustrated this species as "*Trisuloides cornelia*", and Shin (1987: 401) placed *T. tamsi* as a jounior synonym of *Xanthomantis cornelia*. However, we think that *T. tamsi* is conspecific with *T. contaminata*. from the result of the examination of the holotype of *T. tamsi* in NIAST (Suwon) and syntypes of *T. contaminata* in ZMFK (Bonn).

Acronictinae 저녁나방亞科

Craniophora harmandi (Poujade, 1898)

약수산저녁나방(신칭)

Bull. Soc. Entomol. France, 1898: 229, text fig. (Acronycta)

Craniophora picata Wileman, 1914. Entomol. 47: 164.

Material examined. [NIAES] 1♂, Kuryongryong, Mt. Yaksusan, Hongcheon-gun, Kangwon Prov., South Korea, 28. VII. 1994 (S. Yoshimatsu).

Distribution. Korea (Central), Japan, Taiwan, China, India

Note. First report for Korea.

Cryphia minutissima (Draudt, 1950) 검은줄이끼밤나방

Mitt. Münch. ent. Ges. 40: 15, pl. 3: 5 (*Bryophila*).

Material examined. [IECAS] 3♂, Okryu valley, Mt. Kumgangsan, 200 m, Kangwon Prov., N. Korea, 27. VII 1990 (K. Spitzer).

Distribution. Korea (Central, North), Japan (Honshu, Kyushu), East China.

Note. First record for North Korea. The species was recently reported from South Korea (Ahn *et al*, 1994a).

Cryphia mitsuhashi (Marumo, 1917) 띠이끼밤나방

Colln. Essay Mr. Y. Nawa Comm. sixtieth Birthday: English text 27, fig. 4 (*Bryophila*).

Metachrostis obscura Warren, 1909, in Seitz, Macrolepid. World 3: 22, pl. 4h

Material examined. [IECAS] 7♂, Hyangsan, Mt. Myohyangsan, 300 m, North Pyongan Prov. N. Korea, 27. VI. 1987 (J. Jaros).

Distribution. Korea (South, North), Japan, China.

Note. First record from North Korea. This species was reported from Is. Keoje, Kyeongsang Prov. of South Korea by Pak (1969: 122; 1970: 38) and recorded by Park and O(1988: 67) from Chinju, Kyeongnam Prov. as *Cryphia obscura* (Warren, 1909). However, *Metachrostis obscura* Warren, 1909, is a junior primary homonym of *Metachrostis obscura* Hampson, 1894. Poole (1989: 287) replaced the name as *C. mitsuhashi*.

Amphipyrinae 흰무늬밤나방亞科

Apamea brunnescens Kononenko, 1985

연해주갈색밤나방 Figs. 8, 14.

Tinea, 11, 28 : 221, figs 1, 2.

Material examined. [IECAS] 1♂, Hyangsan, Mt. Myohyangsan, 300 m, North Pyongan Prov., N. Korea, 27. VI. 1987 (J. Jaros).

Distribution. Korea (Central, North), Russian Far East (Primorye Territory)

Note. First record for North Korea. The species was recently reported from the central part of the Korean Peninsula (Ahn *et al*., 1994a).

Amphipyra acheron Draudt, 1950

뒷검은까마귀밤나방(신칭) Fig. 4.

Mitt. Mun. ent. Ges. 40: 84; pl. VI: 5.

Material examined. [ZFMK, Bonn] Syntypes of *A. acheron* ♂, indicated as "Holotype", [China] with label: "Tapaishan im Tsiling Sued Shansi [Prov. Shaanxsi] ca 3000 m, 12. VIII 1936 (H. Hone)/ Holotype *Amphopyra acheron* Draudt ♂/ *Amphipyra acheron* Draudt"; ♀ with same data, indicated as "Allotype", 2♂, with same data, 17. VIII, 24. IX 1935; 1♂, same data, 1700 m, 24. VIII 1936. Taiwan: [NSMT] 5♂, 1♀, Taiwan, Hualien Hsien Tayuling 2600 m, 23-26.

VII. 1981 (A. Seino); 1♂, same locality, 2560 m, 2-3. VIII. 1981 (S. Sugi); 1♂, Taiwan, Chai Hsen, Alishan 2270 m 8-10. VIII 1983 (S. Sugi); 2♂, Taiwan, Taichung, Mt. Shueshan, Shika-Shangchuang, 2460 m 13. VIII 1990 (M. Owada). Allotype in Types box. There are 2♂ in *Amphipyra* box: Tapaishan, 17. VIII, 24. IX. 1935; [NSMT] 1♂, Korea, Mt. Seolang(=Seolak), Ganeweondo(=Kangwon Prov.), 13. VIII. 1977; [FRI] 1♂, Mt. Odae-san, Kangwon Prov., 8. VIII. 1982 (K.J. Weon); [CIS] 1♂, 1♀, Chuncheon-dam, Kangwon Prov., 26. VIII. 1992 (K.T. Park, K.G. Lee); 1♀, Gwangleung, Gyeonggi Prov., 19. VIII. 1986 (K.J. Weon); 1♀, Kwanumsa, Cheju Prov., 24. VIII. 1992 (K.T. Park, B.K. Byon); 1♂, Ipo-ri, Ichon, Gyeonggi Prov., 37*23'N, 127*32'E, 20. VIII. 1990 (D.S. Park, Y. Joo); 1♀, Mt, Myongji-san, Gyeonggi Prov., 28. VII. 1992; 1♂, Chiamri, 12km N Chuncon, Kangwon Prov., 27. VII. 1995; [NIAST] 2♂, 1♀, Suwon, Gyeonggi Prov., 16. IX. 1975 (K.T. Park); 1♀, Muju, Jeolla Prov., 12, 13. VIII. 1975, (J.Y. Shim; 1♂, Yangpyong, Gyeonggi Prov., 10. IX. 1983 (S.B. Ahn).

Distribution. Korea (North, South), China (Middle and North), Taiwan.

Notes. First record for Korea. *A. acheron* can be separated from the related species, *A. pyramidea* (Linnaeus, 1758) and *A. monolitha* Guenee, 1852 by darker and uniform coloration of forewings, brown hindwings, and lacking copper-reddish coloration. *A. acheron* is close to *A. pyramidea* in the genitalia structure, but differ from the latter by two separate cornuti in the apical part of vesica. Females also differ from the latter by having extension in left side on the bottom part of bursae copulatrix. A revision for Asian *Amphipyra* species is needed.

Orthogonia tapaishana (Draudt, 1939)

금강산모진밤나방(신칭)

Entomol. Runschau 56: 146, pl. 1: 2, pl. 2: 7 (*Orthogonica*).

Material examined. [ZFMK] 2♀, "Utikongo (500 m) im Kongosan (Mittel Korea) [= Mt. Kumgangsan (Kangwon-do), central Korea], 1. VIII. 1940 (H. Hone)"

Distribution. Korea (North), Northern China (Prov. Shensi).

Note. First record for Korea. Two female specimens from Korea are contained in the large series of the specimens identified as O. *tapaishana*. in ZMFK. They look superficially identical with syntypes of *O. tapaishana*, but we did not compare the female genitalia of this species with allied *O. cera* Butler.

Athetis pallidipennis Sugi, 1982

노랑날개흰점밤나방 Fig. 5.

Moths of Japan, I: 767, II: 370, Pl. 188: 42, 43, 368: 4, 5, 10 .

Material examined. [NIAST] 5♂, Daegwanryoung, Kangwon Prov., 24. VII. 1974 (K.S. Woo); 1♂, Mt. Solak, Kangwon Prov., 21. VI. 1993 (K.T. Park);, 3 male were dissected.

Distribution. Korea (Central), Japan (Hokkaido, Honshu), Russian Far East (Primorye territory).

Note. The species was included in "Check List of Insects from Korea" (ESK & KSAE, 1994: 371) without specimen data. This species belongs to a difficult group of *Athetis* spp. in the identification. The exact identification of this species, seperating from related species, are possible only with the examination of male genitalia. Here we confirm the distribution of *A. pallidipennis* in Korea. The record of *Athetis striolata* (Butler, 1886) in "Check List of Insects from Korea" (ESK & KSAE, 1994: 371) seems to be doubtful, because this species is distributed in Old World tropical area and has less possibility to be occurred in Korea. Even in Japan, this tropical species is known only from the south islands (Ryukyus) as a few, probably migrating specimens (Sugi, 1995, pers. comm.). The species *A. dissimilis* Hampson, 1909 could be easily misidentified as *A. striolata*, because *A. striolata* is very similar to *A. dissimilis* in the external appearance.

Pseudocosmia maculata Kononenko, 1985

연해주점박이밤나방 Fig. 9

Tinea, 11, 27: 218, fig., 3.

Material examined. [IECAS] 2♂, Mt. Myohyangsan, Pyongan Prov., N. Korea, 25. VI. 1987 (J. Jaros)

Distribution. Korea (North), China, Russian Far East (Primorye territory).

Note. This species was reported for Korea by Ahn *et al.*(1994a: 37) without specimen data. Now we include the data.

Chasminodes ussurica Kononenko, 1982
극동은빛밤나방(신칭) Figs. 10, 15.

Entomol. Obozr. 1982, 61, 3: 595.

Material examined. [HT] 1♂, Hyangsan, Mt. Myohyangsan, 400 m, N. Korea, 21-23. VII. 1986 (P. Saek).

Distribution. Korea (North), N. China, Russian Far East (Primorye, Amur district)

Note. First record for Korea. The species can be separated from the related species by the structure of male genitalia. The valvae is curved from the middle part to the tip. This character can be easily observed without dissection of the genitalia, only with brushing the end part of abdomen.

Callopistria miracula Herz, 1904
북방어린밤나방

Ann. Mus. Zool. Acad. Imp. Sci. St. Petersbourg, 9: 22, pl.1, fig. 10.

Material examined. [IECAS] 1♀, Mt. Ryongsan, 200 m, Hyangsan, Pyongan Prov., North Korea, 2. VII. 1988 (J. Jaros).

Distribution. Korea (North, Central)

Note. The species was described by Herz (1904) from the central part of Korea (Pung-Tun village). We reconfirmed the distribution of this species in Korea. The holotype of *C. miracula* Herz has been studied (Kononenko, in litt.). Herz (1905) placed the species to the genus *Callopistria*, however it does not congeneric with *Callopistria*. At present, its generic position is unclear.

Cuculliinae 곱추밤나방亞科

Oncocnemis campicola Lederer, 1853
흰목발톱밤나방(신칭) Fig. 6.

Verhz. zool.-bot. Ges. Wien 3: 369, pl. 4: 5.

Material examined. [FRI] 2♂, Mt. Odae, Kangwon Prov., 9, 11. IX. 1988 (K.J. Weon).

Distribution. Korea (Central), Japan (Honshu, Shikoku) Russian Far East (Primorye and South of Amur district), Mongolia, South Siberia, Kazakhstan, South Ural, South-western part of Russia.

Note. First record for Korea. This Euro-Asiatic species is distributed in the steppe zone. In Korea, probably it is connected with dry and rocky biotopes.

Hadeninae 줄무늬밤나방亞科

Lacanobia dentata Kononenko, 1981
가시무늬밤나방 Figs. 11, 16.

Proc. zool. Inst. Leiningr. 81: 95, figs 6, 8.

Material examined. [EICAS]. 1♂, 2♀, Hyesan, 700m, Ryanggang Prov., N. Korea, 27, VI., 11. V. 1987 (J. Jaros)

Distribution. Korea (North), Russian Far East (Primorye territory), West China (unpublished data).

Note. This species was first reported by Ahn *et al.* (1994a: 31) with a worn specimen collected from northern part of Korea (Sharei =Sariwon). Now were confirm the distribution of this species in Korea.

Protomiselia bilinea (Hampson, 1905)
일본두줄밤나방(신칭)

Cat. Lepid. Phalaena Br. Mus. 5: 603, Pl. 96: 11 (Polia).

Material examined. [CIS] 2♂, 2♀, Namhae, Kyeongsang Prov., 31. V, 1. VI. 1994 (B.K. Byun).

Distribution. Korea (South), Japan (Honshu, Shikoku).

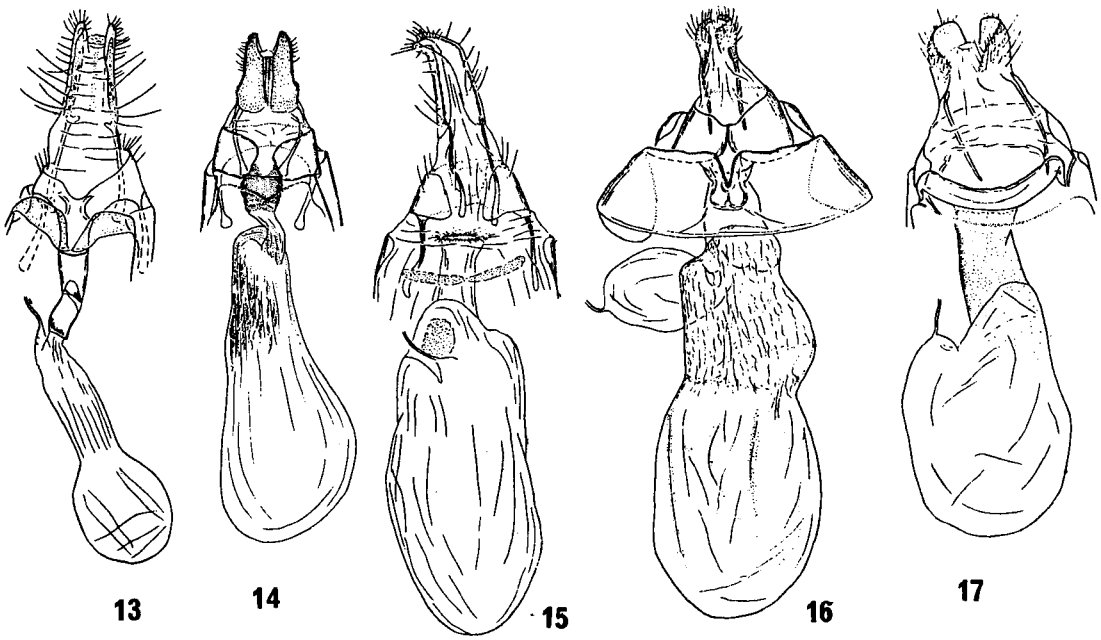
Note. First record for Korea and for the continental Asia. In Japan, larvae of this species feed on coniferous shrubs and trees (Sugi and Yamamoto, 1993). The genitalia of this unusual species of Hadeninae was recently illustrated by Sugi and Yamamoto (1993).

Noctuinae 밤나방亞科

Xestia (*Anomogyna*) *albonigra* (Kononenko, 1981)
송홍점밤나방(신칭) Figs. 12, 17

Proc. zool. Inst. Leiningr. 81: 93, figs 1, 4.

Material examined. [NSMT] 1♂, 3. VIII. 1934 Syookoo, Kannan [=Songhung, Hamgyongnamdo Prov.], North Korea.



Figs. 13-17. Female genitalia.
13. *Catocala bokhaica* (Kononenko); 14. *Apamea brunnescens* Kononenko; 15. *Chasminodes ussurica* Kononenko; 16. *Lacanobia dentata* Kononenko; 17. *Xestia* (*Anomogyna*) *albonigra* (Kononenko)

Distribution. Korea (North), Russian Far East (Primorye, south and central parts of Sikhote-Alin Range), South Siberia (south of Baikal area, unpublished data).

Note. The labeled data was cited as Songhung village in Hamgyongnamdo Province, North Korea under the help of Dr. S. Nomura. Dr. Nomura, a curator of the collection of NSMT explained that the water power station was constructed in that region and the specimen was collected by an unknown Japanese collector in the year 1934. In Sikhote-Alin Mts., this species inhabit in dark coniferous forest of *Picea-Abies*, together with other species of the subgenus *Anomogyna*. New discovery of this species in Korea considerably extends its distribution to southward.

ACKNOWLEDGEMENTS

We would like to express our cordial thanks to Prof. K. T. Park, Dr. B. K. Byon, Mr. S. Sugi, Dr. K. Spitzer, Dr. J. Jaros, Dr. D. Stuning, Mr. H. Thony, Dr. M. Owada and Dr. S. Yoshimatsu for their kind help during our study and admitting the examination of their collections.

REFERENCES

Ahn, S. B., V. S. Kononenko, K. T. Park. 1994a. New record of Noctuidae (Lepidoptera) from the Korean peninsula (I). Trifinae. Ins. Koreana **11**: 26-47.

Ahn, S. B., V. S. Kononenko, K. T. Park. 1994b. New record of Noctuidae (Lepidoptera from the Korean peninsula (II). Quadrifinae. Ins. Koreana **11**: 48-57.

Chen, Y. 1982. *Iconographia Heterocerorum Sinicorum* 3. pp. 324-334 Science Press, Beijing, China. [in Chinese].

ESK & KSAE (The Entomological Society of Korea & Korean Society of Applied Entomology). 1994. Check List of Insects from Korea pp. 364-382.

Hampson, G. F. 1894. The Fauna of British India including Ceylon and Burma. Moths. Vol. 2. 609pp. London. Taylor and Francis.

Herz, O. 1904. Lepidoptera von Korea. Noctuidae & Geometridae. Ann. Mus. Zool. Acad. Imp. Sci. St. Petersbourg **9**: 263-390, 1 pl.

Jaros, J., K. Spitzer, J. Havelka and K.-T. Park. 1992. Synecological and biogeographical outlines of Lepidoptera community in North Korea. Ins. Koreana **9**:

78-104.

Jeong, H. C., S. J. Kim and S. S. Kim. 1995. Moths collected at Mudeung, Kwangju-si in autumn, 1994. J. Lepid. Soc. Korea **8**: 13-20 [in Korean with English abstract].

김창효, 박중석, 최순학, 백운기, 하경삼(Kim *et al.*). 1991a. 지리산의 곤충상 학술조사 보고서 pp. 91-98 [in Korean].

Pak, S. W. 1969. Studies on the moths from Cheju and Koje Is. in Korea. 131pp. Dongmyeong Women's Junior high school and high school. [in Korean].

Pak, S. W. 1970. Moths from Koje Island, south side in Korea. Jpn Heterocerists' J. **63**: 37-41 [in Japanese with English abstract].

Park, J.-S. and T.-S. O. 1988. On the Moth Fauna of Sangbongdong-dong, Chinju-city, Gyongsangnam-do, Korea. J. Nat. Sci. **4**: 55-75. Gyongsang National University. [in Korean with English abstract].

Park, K. T. and S. M. Lee. 1977. Description of one New Species and Notes on Forty-three unrecorded Species of Noctuidae (Lepidoptera) from Korea. Korean J. Entomology **7**(2): 1-10 [in Korean with English abstract].

Poole, R. W. 1989. Noctuidae. Lepidopterorum Catalogues (New Series), Fascicle 118, 1314 pp. E.J. Brill, Leiden.

Shin, Y.-H. 1987. On the Moths of Mt. Sobaek Area. Thesis Collection, Kyung Hee Univ. Seoul, Korea **16**: 383-409 [in Korean with English abstract].

Sugi S., M. Yamamoto. 1993. *Protomiselia bilinea* (Hampson) (Noctuidae, Hadeninae), a conifer feeder. Jpn Heterocerists' J. **175**: 433-435.

(Received October 18, 1996)