

## **Taxonomic Notes of Tribe Phycitini (Lepidoptera: Pyralidae: Phycitinae) from Korea (II)**

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### **ABSTRACT**

Six species of Phycitini, *Acrobasis flavifasciella* Yamanaka, *A. birgitella* (Roesler), *Conobathra frankella* Roesler, *C. rufizonella* (Ragonot), *Euzopherodes oberleae* Roesler, and *Phycitodes subcretacellus* (Ragonot) are reported for the first time from Korea. Descriptions with illustrations of adults and genitalia of both sexes are given. Known host plants are also listed.

Key words: Lepidoptera, Pyralidae, Phycitinae, Phycitini, newly recorded, Korea

### **INTRODUCTION**

Tribe Phycitini is the largest group of subfamily Phycitinae and has a worldwide distribution containing about 4,000 described species in over 600 genera (Whalley, 1970). The moths are so uniform in the coloring and markings of the forewing that they are often very difficult to separate on the basis of external characters. The tribe include many species which are agricultural pests attacking conifers, fruits and stored crops. In the Korean peninsula, Leech (1901) first reported three species of the tribe Phycitini, and 46 species were added by Okamoto (1924), Shibuya (1927), Okamoto and Nagayama (1940), Park and Lee (1958), Park (1976, 1983, 1993), Shin and Jun (1980), Inoue (1982), Byun *et al.* (1997), and Choi *et al.* (1998). However, the species of the tribe Phycitini from Korean peninsula have not been fully described in many cases. In the present paper as the second part of the revisional studies of Korean tribe Phycitini, further six species were newly recognized from Korea, *i.e.*, *Acrobasis flavifasciella* Yamanaka, *A. birgitella*

(Roesler), *Conobathra frankella* Roesler, *C. rufizonella* (Ragonot), *Euzopherodes oberleae* Roesler, and *Phycitodes subcretacellus* (Ragonot). Among them, one genus, *Euzopherodes* Hampson are newly recognized from Korea. New larval host plants of one species, *Conobathra frankella* is recorded from Korea. Redescriptions of them are given, with illustrations of the genitalia.

Abbreviations used in this study are as follows: NIAST: National Institute of Agricultural Science and Technology, Suwon, Korea; FRI: Forestry Research Institute, Seoul, Korea; CIS: Center for Insect Systematics, Kangwon Natural University, Chunchon, Korea; UIB: Department of Biology, University of Incheon, Incheon, Korea; GW: Gangwon Prov.; GG: Gyunggi Prov.; CB: Chungbuk Prov.; JN: Jeonnam Prov.; JB: Jeonbug Prov.; GN: Gyungnam Prov.; CJ: Cheju Prov.

## SYSTEMATICS

Genus *Acrobasis* Zeller, 1839

Type species: *Tinea consociella* Hübner, 1813, p. 1796.

***Acrobasis flavifasciella* Yamanaka** 황색띠알락명나방 (新稱) (Figs. 1, 7, 13, 19, 25)

*Acrobasis flavifasciella* Yamanaka, 1990, p. 233. TL: Japan.

**Description.** Wing expanse, 16-18 mm. Head dark grayish brown. Labial palpus covered with fuscous scales. Thorax fuscous brown. Ground color of forewing above brownish fuscous; costal area between antemedian and submarginal line irregularly suffused with white; antemedian line broad, pale brownish yellow, moderated curved, running oblique from costa at about 1/3 to hind margin at 1/2; two small discal dots on discocellulars; submarginal line dirty white, rather obscure, almost straight. Hindwing ochreous brown; basal half rather paler than distal half.

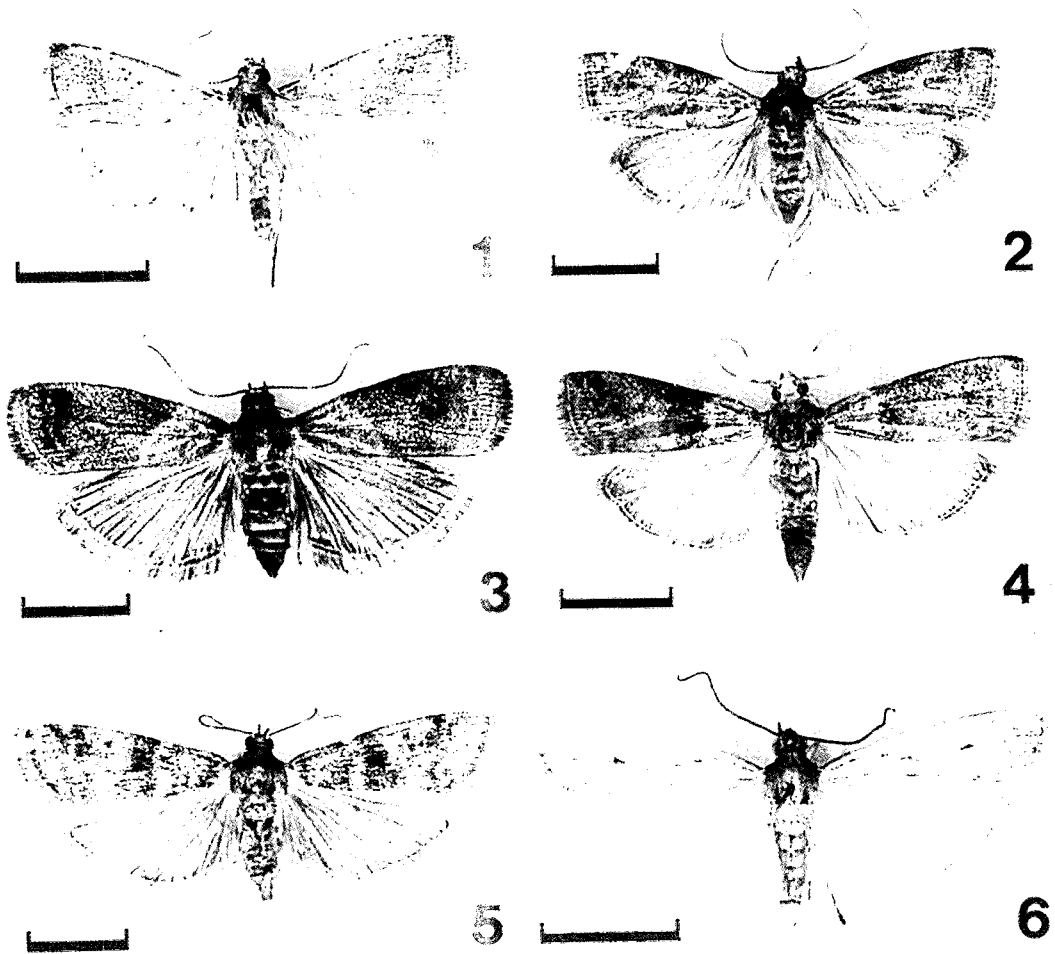
Male genitalia (Fig. 7). Uncus shortly triangulated, roundly protruded at apex, dorsally covered with weak hairs. Apical process of gnathos narrow, hooked, blunt at apex. Juxta V-shaped, with slender lateral arm. Valva broadened sickle-shaped, medially concave; harpe semiquadrate; saccus narrow, weakly developed. Vinculum sclerotized, broad, quadrately developed, about 0.7 times as long as valva. Aedeagus broad, almost of same length as valva one. Structure of 8th abdomen shown in fig. 13.

Female genitalia (Fig. 19). Apophysis posterioris straight, about same times as long as apophysis anterioris. Ostium bursae simple, wide cup-shaped, weakly sclerotized. Ductus bursae rather narrow, membranous. Ductus seminalis membranous, slender, originating from near posterior part of corpus bursae. Corpus bursae oblong, with two series of thorn-like sclerotization; signum small, nipplelike inside corpus bursae, with regularly, minutely dentated as shown in fig. 25.

**Material examined.** GW 1 ♂, Bongmyon-ri, 30 June 1992, CIS; GG 3 ♂, Gwangneung, 22 July 1986, CIS; 1 ♀, 4 Aug. 1988, CIS; gen. sl. no. CIS-2334; 1 ♂, 17 June 1994, FRI; 1 ♀, Mt. Soyo, 7 July 1996, UIB; gen. sl. no. UIB-1768; 1 ♂, Yangso-myon, Mt. Cheongae, 25 July 1996, UIB; gen. sl. no. UIB-1769; GN 2 ♂, 1 ♀, Namhae, 25 July 1985, CIS; JN 3 ♂, Mt. Jiri, 23 July 1985, CIS; gen. sl. no. CIS-2358; 1 ♀, Isl. Sinsi, 26 July 1980, CIS.

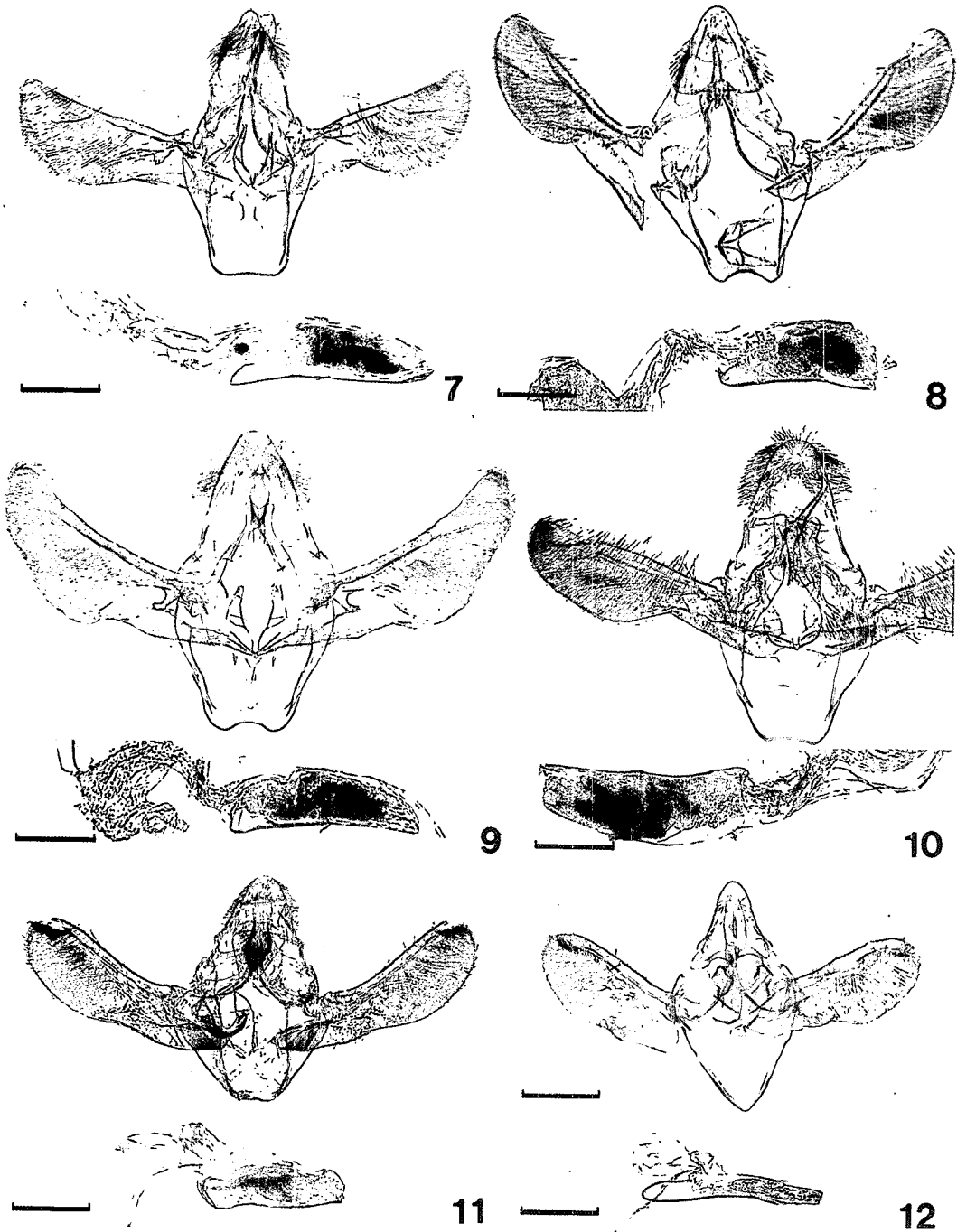
**Distribution.** Korea (GW, GG, GN, JN) and Japan (Honshu, Kyushu).

**Host plant.** Unknown.



**Figs. 1-6.** Adults of Phycitini spp. 1, *Acrobasis flavifasciella* Yamanaka, ♂; 2, *A. birgitella* (Roesler), ♀; 3, *Conobathra frankella* Roesler, ♀; 4, *C. rufizonella* (Ragonot), ♀; 5, *Euzopherodes oberleae* Roesler, ♀; 6, *Phycitodes subcretacellus* (Ragonot), ♂. Scales: 5.0 mm.

**Remarks.** This species is very similar to *A. injunctella* (Christoph) in the superficial appearance, but it can be distinguished from the latter by the coloration of antemedian line of forewing is pale brownish yellow, and ostium is larger, more strongly sclerotized. The species seems to be a wide spread species in Korea. Adults are collected from the late June to the early August. The genus *Acrobasis* Zeller are a worldwide distribution, and that is characterized by the following points: Scape in male antenna with large sclerotized denticle. Forewing with vein  $R_2$  from cell, veins  $M_2$  and  $M_3$  stalked for a short distance from cell. Hindwing with veins  $CuA_1$  and  $M_3$  present. Host plants of the genus have been known mainly Rosaceae, Ebenaceae, and Ulmaceae in the Palearctic Region.



**Figs. 7-12.** Male genitalia of Phycitini spp., caudal view. 7, *Acrobasis flavifasciella* Yamanaka; 8, *A. birgitella* (Roesler); 9, *Conobathra frankella* Roesler; 10, *C. rufizonella* (Ragonot); 11, *Euzopherodes oberleae* Roesler; 12, *Phycitodes subcretacellus* (Ragonot). Scales: 0.5 mm.

***Acrobasis birgitella* (Roesler) 짧은띠알락명나방 (新稱) (Figs. 2, 8, 14, 20, 26)**

*Conobatha birgitella* Roesler, 1975, p. 103; Inoue, 1982, 1: 401, 2: 253; Heppner and Inoue, 1992, p. 93. TL: China.

*Acrobasis birgitella*: Yamanaka, 1994, p. 35.

**Description.** Wing expanse, 19–22 mm. Head dark grayish brown. Labial palpus upturned, with scattered whitish scale at the inner surface. Thorax dark grayish brown. Ground color of forewing above purplish brown; antemedian line nearly straight, bluish white, running oblique from costa at hind margin, outside with blackish fuscous triangle like patch from costal margin; two small discal dots on discocellulars; submarginal line dirty white, obvious, slightly bented. Hindwing ochreous brown; basal half rather paler than distal half.

Male genitalia (Fig. 8). Uncus broad, rounded at apex, dorsally covered with weak hairs. Apical process of gnathos narrow, hooked. Juxta nearly V-shaped, with slender lateral arm. Valva broadened sickle-shaped, medially concave; harpe nipplelike, with minute short hairs; saccus narrow, weakly developed. Vinculum sclerotized, short, about 0.6 times as long as valva. Aedeagus broad, short, about 0.8 times as long as valva. Structure of 8th abdomen shown in fig. 14.

Female genitalia (Fig. 20). Apophysis posterioris rather longer, about 1.2 times as long as apophysis anterioris. Ostium bursae simple, wide bowl-shaped, weakly sclerotized. Ductus bursae membranous, anteriorly broadened. Ductus seminalis membranous, slender, originating from near posterior part of corpus bursae. Corpus bursae oval; signum small, nipplelike inside corpus bursae, with regularly, minutely dentated as shown in fig. 26.

**Material examined.** GW 1 ♀, Sogumgang, 9 Aug. 1988, CIS, gen. sl. no. CIS-2333; 3 ♀, Mt. Jeombong, 5 Aug. 1997, UIB, gen. sl. no. UIB-1778, 1 ♂, 12 Aug. 1997, UIB, gen. sl. no. UIB-1842; 1 ♂, Mt. Gyebang, 7 Aug. 1997, UIB; GG 1 ♀, Mt. Soyo, 5 Aug. 1996, UIB, gen. sl. no. UIB-1767.

**Distribution.** Korea (GW, GG), Japan (Hokkaido, Honshu, Kyushu), and China.

**Host plant.** Unknown.

**Remarks.** Yamanaka (1994) combined this species to the genus *Conobathra* Meyrick, 1886. The species is very similar to *A. curvella* (Ragonot) in the superficial appearance, but can be separated from the latter by the uncus broader, ductus bursae narrower, corpus bursae less spherical. Adults are collected from the August.

Genus *Conobathra* Meyrick, 1886

Type species: *Conobathra automorpha* Meyrick, 1886.

***Conobathra frankella* Roesler 느티나무알락명나방 (新稱) (Figs. 3, 9, 16, 21, 27)**

*Conobathra frankella* Roesler, 1975, p. 105; Inoue, 1982, p. 400, 253. TL: China.

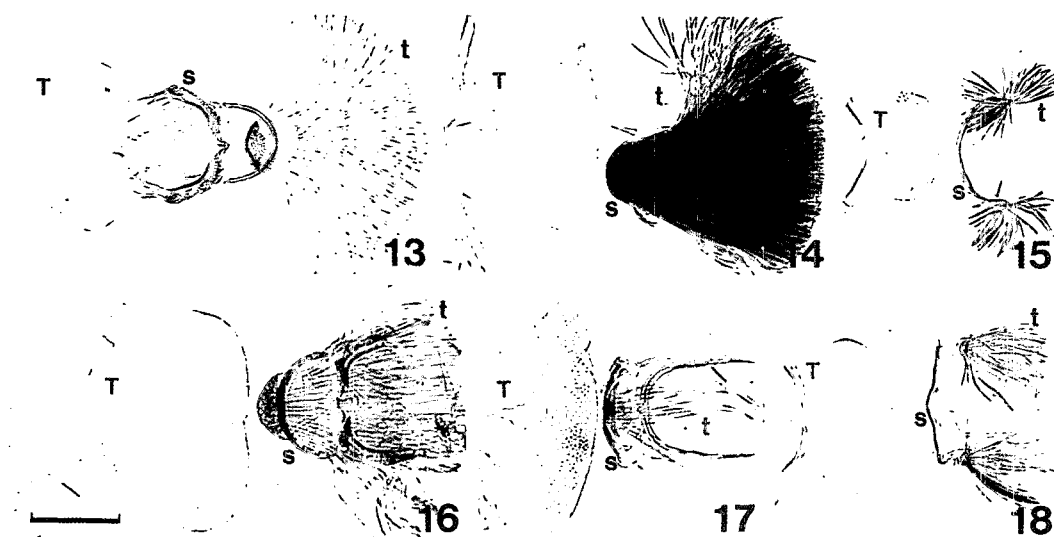
**Description.** Wing expanse, 20–22 mm. Labial palpus upturned, wholly blackish brown at the inner surface; outer surface of first and second segment purplish brown. Ground color of forewing purplish brown; antemedian line fuscous yellow, obvious, suffused with whitish gray on about apical 1/3; median area indistinctly suffused with whitish gray; two small discal dots on discocellulars; submarginal line dirty white, obvious, slightly bented. Hindwing dark ochreous brown; basal half rather paler than distal half.

Male genitalia (Fig. 9). Uncus broad, rounded at apex, covered with similar size, and dorsally

weak hairs. Apical process of gnathos hooked, very shortly bifid, sharply pointed at apex, stout at middle. Transtilla shallowly concave at terminal margin, with developed arm. Juxta nearly V-shaped, with slender lateral arm. Valva sock-shaped, medially convex; harpe fingerlike, broad at base, with minute short hairs; saccus narrow, weakly developed. Vinculum sclerotized, slightly narrow, about 0.7 times as long as valva, terminal margin convex. Aedeagus slightly broad, short, about 0.8 times as long as valva. Structure of 8th abdomen shown in fig. 16.

Female genitalia (Fig. 21). Apophysis posterioris almost of same length as anterioris one. Ostium bursae simple, wide bowl-shaped, weakly sclerotized. Ductus bursae membranous, slightly broad at base. Ductus seminalis membranous, slender, originating from near posterior part of corpus bursae. Corpus bursae oblong, with two series of half-moon-shaped sclerotization; signum small, nipplelike inside corpus bursae, with irregularly, minutely dentated as shown in fig. 27.

**Material examined.** GW 1 ♂, Chuncheon, 7 July 1987, CIS, gen. sl. no. CIS-2754, 1 ♀, 12 July 1988, CIS; 1 ♂, Chunsung, 20 July 1987, CIS; 2 ♀, Yangyang, 25 July 1987, CIS; 5 ♀, Hongcheon, 4 Aug. 1989, CIS; 5 ♀, Sogumgang, 9 Aug. 1988, CIS, gen. sl. no. CIS-2319; 2 ♀, Mt. Gyebang, 2 Aug. 1989, CIS, 4 ♀, 26 May 1996, UIB, 1 ♀, 7 Aug. 1997, UIB, 1 ♀, 15 Aug. 1997, UIB; 1 ♀, Mt. Samak, 19 July 1989, CIS; 16 ♀, Mt. Seolak, 10 Aug. 1989, CIS, 3 ♀, 25 Aug. 1989, CIS; 1 ♀, Mt. Jeombong, 13 July 1997, UIB, 1 ♂, 1 ♀, 12 Aug. 1997, UIB, 1 ♀, 5 Aug. 1997, UIB; 1 ♂, Mt. Weolak, 9 Aug. 1997, UIB. GG 1 ♀, Seoul, 21 July 1971, CIS; 1 ♀, Mt. Cheonggye, 19 Aug. 1976, CIS; 17 ♀, Yangso-myon, Mt. Cheongae, 25 July 1996, UIB, gen. sl. no. UIB-1797; 1 ♂, 1 ♀, Mt. Soyo, 7 July 1996, UIB, gen. sl. no. UIB-1798 (♂), 11 ♀, 5 Aug. 1996, UIB, 1 ♂, 8 ♀, em. 16-25 June 1997, *ex Zelkova serrata*, UIB, 1 ♀, em. 16 June 1997, *ex Ulmus davidiana* var. *japonica*, UIB; 1 ♀, Shihung, Mulwang-reser, 11 July 1996, UIB; 1 ♂, 1 ♀, Mt. Gwangdeok, 19 Aug. 1997, UIB; 1 ♀, Mt. Chonma, 13 July 1996, UIB.



**Figs. 13-18.** The 8th abdominal tergites (T), sternites (s) and tufts (t) of Phycitini spp. 13, *Acrobasis flavifasciella* Yamanaka; 14, *A. birgittelae* (Roesler); 15, *Phycitodes subcretacellus* (Ragonot) 16, *Conobathra frankella* Roesler; 17, *C. rufizonella* (Ragonot); 18, *Euzopherodes oberleae* Roesler. Scale: 0.5 mm.

**Distribution.** Korea (GW, GG), Japan (Hokkaido, Honshu), and China.

**Host plants.** *Ulmus davidiana* var. *japonica* Nak. (Ulmaceae) and *Zelkova serrata* Mak. (Ulmaceae) in Korea (new host plants).

**Remarks.** This species seems to be a common species in the central districts of Korea. Adults are collected from the early July to the mid August. Biology of this species is little known, but the larvae feed in the spun leaves of the hosts from late spring to early summer in the central Korea. The genus *Conobathra* Meyrick is morphologically similar to *Acrobasis* Zeller, but it can be distinguished by the forewing with  $M_1$  nearly straight,  $M_2$  and  $M_3$  separated at base, and the hindwing with  $M_2$  and  $M_3$  stalked for about  $1/5$  distance of the length.

***Conobathra rufizonella* (Ragonot) 녹슨빛알락명나방 (新稱) (Figs. 4, 10, 17, 22, 28)**

*Conobathra rufizonella* (Ragonot), 1887; Roesler, 1987; Sugi, 1994, p. 49.

*Conobathra rubiginella* Inoue, 1982, p. 400, 253.

**Description.** Wing expanse, 20–22 mm. Head and labial palpus grayish white. Ground color of forewing above brownish gray; middle of costal area with dark grayish brown patch; two small discal dots on discocellulars. Hindwing ochreous brown; fringe pale gray.

Male genitalia (Fig. 10). Uncus broad, rounded at apex, dorsally covered with numerous, similar sized hairs. Apical process of gnathos rather slender, hooked. Transtilla deeply concave at terminal margin, both side separate, with developed arm. Juxta nearly U-shaped, with club-like lateral arm. Valva broadened sickle-shaped; harpe well developed, triangle-like, with minute short hairs; saccus narrow, weakly developed. Vinculum sclerotized, broad, about 0.7 times as long as valva. Aedeagus broad, almost of same length as valva one. Structure of 8th abdomen shown in fig. 17.

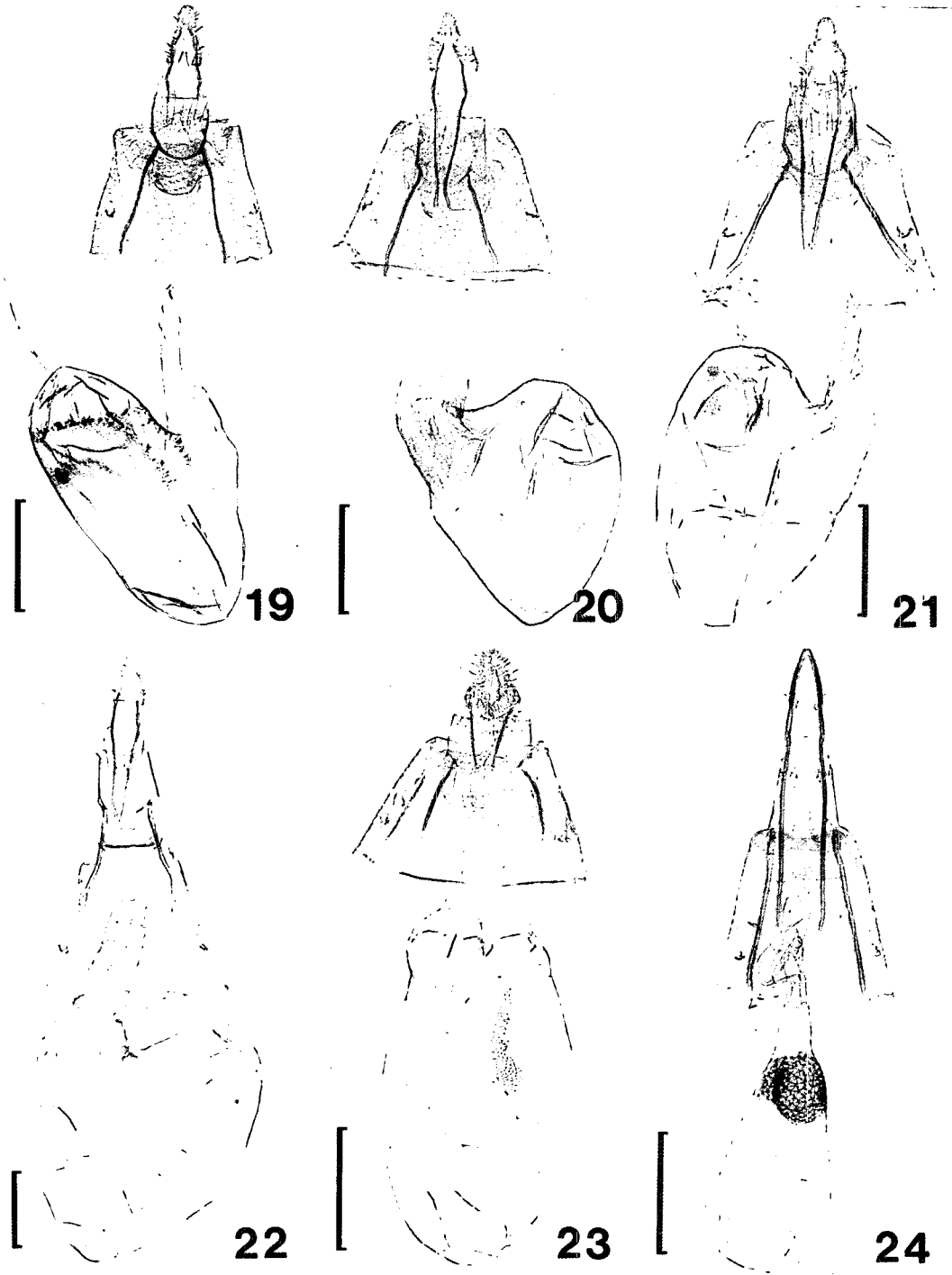
Female genitalia (Fig. 22). Apophysis posterioris almost of same length as anterioris one. Ostium bursae simple, wide bowl-shaped, rather strongly sclerotized. Ductus bursae membranous, with strong, rather long, numerous spines. Ductus seminalis membranous, slender, originating from near posterior part of corpus bursae. Corpus bursae oblong; signum small, nipplelike inside corpus bursae, with regularly, minutely dentated as shown in fig. 28.

**Material examined.** GW 1 ♀, Yangyang, 4 June 1987, CIS, gen. sl. no. UIB-1824, 1 ♀, 10 July 1987, 1 ♀, 25 July 1987, CIS; 1 ♀, Chugok, 30 July 1986, CIS; 1 ♀, Jungseon, Gyulamri, 23 July 1986, CIS; 1 ♀, Chuncheon, 21 July 1992, CIS; 1 ♀, Mt. Gyeong, 7 Aug. 1997, UIB. GG 2 ♀, Gwangneung, 22 July 1986, CIS, gen. sl. no. CIS-2313; 1 ♂, Gwacheon, Mt. Cheonggye, 11 May 1997, UIB, gen. sl. no. UIB-1777; 1 ♀, Mt. Soyo, 3 Sep. 1992, UIB, 1 ♂, 23 July 1996, UIB, gen. sl. no. UIB-1783, 1 ♀, 5 Aug. 1996, UIB; 1 ♀, Isl. Deokjeok, 31 July 1998, UIB; 1 ♀, Mt. Hwaak, 19 Aug. 1998, UIB.

**Distribution.** Korea (GW, GG) and Japan (Tsushima).

**Host plant.** Unknown.

**Remarks.** *C. rubiginella* Inoue were synonymized with this species by Roesler (1987). The species can be separated from the related species by the grayish white antemedian line, with black and rust color fascia in the outside. This species seems to be a common species in the central districts of Korea. Adults are collected from the mid May to the early September.



**Figs. 19-24.** Female genitalia of Phycitini spp., ventral view. 19, *Acrobasis flavifasciella* Yamanaka; 20, *A. birgitella* (Roesler); 21, *Conobathra frankella* Roesler; 22, *C. rufizonella* (Ragonot); 23, *Euzopherodes oberleae* Roesler; 24, *Phycitodes subcretacellus* (Ragonot). Scales: 1.0 mm.



Genus *Euzopherodes* Hampson, 1899

Type species: *Euzopherodes albicans* Hampson, 1899.

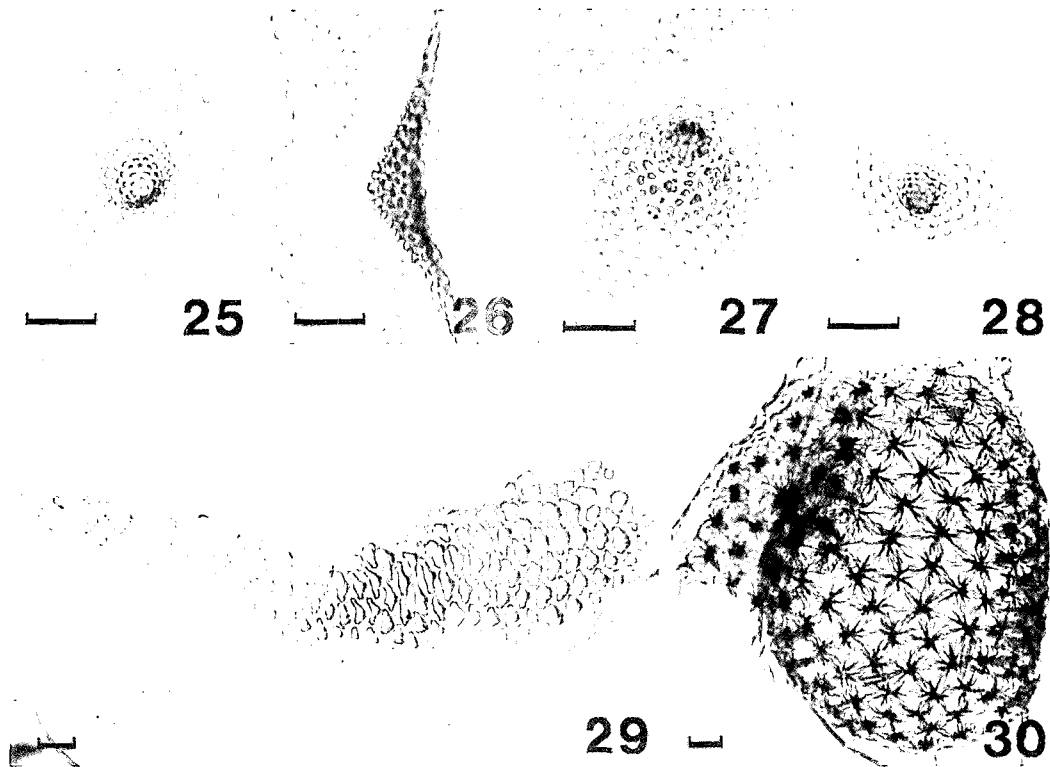
***Euzopherodes oberleae* Roesler** 흑백알락명나방 (新稱) (Figs. 5, 11, 18, 23, 29)

*Euzopherodes oberleae* Roesler, 1973, p. 275; Inoue, 1982, p. 389, 249. TL: Japan.

**Description.** Wing expanse, 21–23 mm. Labial palpus upturned, reaching to top of vertex; median segment mixed with whitish and dark brown; terminal segment wholly dark brown. Ground color of forewing whitish gray; submarginal line distinct, irregularly zigzagged; terminal margin with black dots. Hindwing ochereous brown; cilia whitish gray.

Male genitalia (Fig. 11). Uncus broad, rather rounded at apex, dorsally covered with numerous, weak hairs. Apical process of gnathos rather short, stout, hooked. Terminal margin of transtilla broad, shallowly concave, with developed arm. Juxta U-shaped, with 3–4 minute short hairs at apex of lateral arm. Valva broad, with short rounded projection at apex of costa; costa well sclerotized. Vinculum sclerotized, short, about 0.6 times as long as valva. Aedeagus rather broad, short, about 0.8 times as long as valva. Structure of 8th abdomen shown in fig. 18.

Female genitalia (Fig. 23). Apophysis posterioris almost of same length as anterioris one. Ostium bursae simple, wide bowl-shaped. Ductus bursae membranous, broad at base. Ductus seminalis



**Figs. 25–30.** Signum of Phycitini spp. 25, *Acrobasis flavifasciella* Yamanaka; 26, *A. birgitella* (Roesler); 27, *Conobathra frankella* Roesler; 28, *C. rufizonella* (Ragonot); 29, *Euzopherodes oberleae* Roesler; 30, *Phycitodes subcretacellus* (Ragonot). Scales: 0.05 mm.

membranous, slender, originating from near posterior part of corpus bursae. Corpus bursae ovate; signum sclerotized clublike, with numerous, irregular dents as shown in fig. 29.

**Material examined.** GW 1 ♀, Chuncheon, 1 May 1989, NIAST, gen. sl. no. UIB-1839; 1?, Mt. Odae, 8 July 1998, UIB. GG 1 ♀, Gwangneung, 7 Aug. 1986, CIS, gen. sl. no. CIS-2756, 1 ♀, 10 July 1990, CIS, gen. sl. no. CIS-2755, 1 ♂, 17 June 1994, FRI, gen. sl. no. UIB-1838.

**Distribution.** Korea (GW, GG) and Japan (Hokkaido, Honshu, Tsushima).

**Host plant.** Unknown.

**Remarks.** This species can be easily distinguished from the related species by the broad, nearly straight, whitish gray antemedian line, with blackish wide fascia in the outside of the forewing. Adults are collected from the early May to the early August. The genus *Euzopherodes* Hampson is known for the first time from Korea. The genus can be separated from the other genus by the following points: Forewing with ten veins, vein  $R_2$  from cell,  $M_3$  absent,  $M_3$  and  $CuA_1$  connate. Hindwing with veins  $CuA_1$  present,  $M_3$  absent,  $CuA_1$  and  $M_2$  stalked for about 1/4 of its length.

Genus *Phycitodes* Hampson, 1917

Type species: *Phycitodes albistriata* Hampson, 1917.

***Phycitodes subcretacellus* (Ragonot) 앞흰줄알락명나방 (新稱) (Figs. 6, 12, 15, 24, 30)**

*Homoeosoma subcretacellus* Ragonot, 1901, p. 246; Leech, 1901, p. 406. TL: Japan.

*Phycitodes subcretacellus*: Inoue, 1982, p. 389, 249.

**Description.** Wing expanse, 16-18 mm. Labial palpus upturned; ventral surface of basal and median segment creamy white. Ground color of forewing above ochreous white; costal area white about basal 2/3; two small discal dots on discocellulars. Hindwing grayish white, with whitish cilia.

Male genitalia (Fig. 12). Uncus subtriangular, rounded at apex, dorsally covered with short hairs. Apical process of gnathos stout, pointed. Juxta nearly V-shaped, with pointed lateral arm. Valva broad, rounded at apex; costa well sclerotized; saccus well developed. Vinculum triangularly developed. Aedeagus slender, about 1.4 times as long as valva. Structure of 8th abdomen shown in fig. 15.

Female genitalia (Fig. 24). Apophysis posterioris long, about 1.7 times as long as apophysis anterioris. Ostium bursae simple, cup-shaped, anteriorly narrow. Ductus bursae membranous, rather long. Ductus seminalis membranous, basally broad, originating from lobe of corpus bursae near junction of ductus bursae and corpus bursae. Corpus bursae elongate oblong; signa two plate, with minute, sclerotized spine, the ventral signum large, ovate, the lateral signum small, subtriangular as shown in fig. 30.

**Material examined.** GW 1 ♂, Chuncheon, 7 July 1987, CIS, 1 ♀, 30 July 1988, CIS; 1 ♀, Chunsung, 20 July 1987, CIS; 1 ♂, 5 ♀, Hongcheon, 5 Sep. 1986, CIS, 1 ♂, 5 ♀, 14 Aug. 1987, CIS, gen. sl. no. CIS-2723 (♂), 2 ♂, 3 ♀, 10 June 1988, CIS, 1 ♂, 30 June 1988, CIS, 3 ♀, 4 Aug. 1989, CIS; 1 ♂, 1 ♂, Yangyang, 30 June 1987, CIS, 1 ♀, 10 July 1987, CIS, 1 ♂, 7 ♀, 25 July 1987, CIS, 1 ♂, 1 ♀, 30 May 1987, CIS; 1 ♂, Sogumgang, 24 May 1988, CIS, 1 ♀, 6 July 1988, CIS, 2 ♂, 5 ♀, 9 Aug. 1988, CIS; 1 ♀, Mt. Gyebang, 21 June 1996, UIB, 1 ♂, 15 Aug. 1996, UIB; 1 ♂, Mt. Chiak, 12 July 1997, UIB; 1 ♂, Mt. Dukga, 24 July 1997, UIB; GG 1 ♀, Gwangneung, 7 July 1982, CIS, 1 ♀, 13 July 1986, CIS, 1 ♀, 17 May 1988, CIS, 1 ♂, 3 June 1988, CIS; 1 ♂, Isl. Sonkam, 4 June 1990, CIS; 2 ♀, Ipo-ri, 20 Aug. 1990, CIS; 1 ♀, Seoul,

Cheongryangri, 14 May 1985, CIS; 1 ♀, Mt. Yumyeong, 31 July 1990, CIS; 1 ♀, Mt. Gwangdeok, 9 July 1997, UIB, gen. sl. no. UIB-1845; 1 ♂, 19 Aug. 1997, UIB, gen. sl. no. UIB-1665; 1 ♀, Gwacheon, Mt. Cheonggye, 23 July 1996, UIB, 1 ♀, 11 May 1997, UIB; 3 ♂, 3 ♀, Isl. Yeongjong, 13 Aug. 1996, UIB. CB 2 ♂, Taean-gun, Sungweon-reser, 12 July 1996, 2 ♀, 16 July 1996, UIB; 1 ♂, Mt. Ingyeong, 23 Aug. 1997, UIB; 1 ♀, Mt. Weolak, 7 June 1997, UIB, gen. sl. no. UIB-1664. GN 3 ♀, Namhae, 25 July 1985, CIS. JB 7 ♂, Mt. Naejang, 2 May 1998, UIB, gen. sl. no. UIB-1846. JN 1?, Mt. Jiri, 23 July 1985, CIS. CJ 1 ♀, Mt. Hanra, 5 July 1986, CIS; 4 ♂, 3 ♀, Jeju N. Univ., 17-18 May 1991, CIS.

**Distribution.** Korea (GW, GG, CB, GN, JB, JN, CJ), Japan (Hokkaido, Honshu, shikoku, Kyushu, Tsushima), China, and S. E. Siberias.

**Host plant.** Unknown.

**Remarks.** This species appears to be one of the common and widely distributed species in Korea. Adults are collected from the early May to the early September in Korea. The genus *Phycitodes* Hampson are mainly distributed in the Palaearctic Region, and that is morphologically similar to *Homoeosoma* Curtis, 1833, but it can be distinguished by the forewing with  $R_3$  and  $R_4$  connate from  $R_2$ .

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韓國產 알락명나방 族 (나비 目: 명나방 科: 알락명나방 亞科)의 분류학적 研究 (II)

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요 약

알락명나방 族의 *Acrobasis flavifasciella* Yamanaka (황색띠알락명나방), *A. birgitella* (Roesler) (짧은띠알락명나방), *Conobathra frankella* Roesler (느티나무알락명나방), *C. rufizonella* (Ragonot) (녹슨빛알락명나방), *Euzopherodes oberleae* Roesler (흑백알락명나방) 및 *Phycitodes subcretacellus* (Ragonot) (앞흰줄알락명나방)의 6종을 한국미기록종으로 보고하며, 이들에 대한 성충, 생식기의 그림 및 기주식물의 기록을 정리하였다. 또한 느티나무알락명나방은 기주식물로서 느티나무와 느릅나무의 잎을 철하여 가해하는 것이 처음으로 확인되었다.