

Four Species of Tribe Cochylini (Lepidoptera: Tortricidae) New to Korea ¹⁾

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가는잎말이나방族(나비目: 잎말이나방 科)의 韓國末記錄 4種

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적 요

가는잎말이나방族의 백색가는잎말이나방 [*Stenodes hedemannina* (Snellen)], 얼룩무늬가는잎말이나방 [*Phalonidia chlorolitha* (Meyrick)], 왕줄가는잎말이나방 (*Phalonidia latifasciana* Razowski) 및 끝검은가는 잎말이나방 (*Eupoecilta inouei* Kawabe) 등 4種이 우리나라에서는 처음으로 報告된다.

Key words : Systematics, Cochylini, Tortricidae, Lepidoptera, Korea.

INTRODUCTION

The systematic status of tribe Cochylini has not been well defined, and previous authors treated it as a separate family such as Cochyliidae (Guenée, 1845), Lozoperidae (Stainton, 1858), Phalonidae (Meyrick, 1895), Commophilidae (Hampson, 1918), or Agapetidae (Obraztsov, 1950). Horak (1984) suggested that some main characters used to separate Cochylini from the other

1) This is a part of the study of Tortricidae in Korea which was conducted under the financial support by Center for Insect Systematics, KOSEF(1990-1992).

groups of Tortricidae were also found in other taxa of Tortricidae. The forewing of Cochylini with inwardly oblique transverse fasciae and a more distal origin of CuA_2 is not enough to be treated as a separate family (Horak and Brown, 1991).

Only two species of the tribe Cochylini had been listed in Korea until Park (1976) reported 10 unrecorded species from Korea, and later Park (1983) dealt with 15 species belonging to 6 genera in the family Cochyliidae in his review of Korean Microlepidoptera. In the present paper, morphological characteristics of four newly recorded species including their wing patterns and genitalic structures of male and female are briefly redescribed and illustrated with known distributional range. This study was based on the materials collected throughout this country, and all the materials are preserved in the Center for Insect Systematics, Department of Agrobiolgy, Kangweon National University, Chuncheon, Korea. Abbreviation for collecting districts are: GG for Gyeonggi province, and GW for Gangweon Province.

SYSTEMATIC ACCOUNT

1. *Stenodes hedemanniana* (Snellen) 백색가는잎말이나방 (新稱) (Fig. 1)

Cochylis hedemanniana Snellen, 1883 (p. 192, t. 11, f. 6, 6a).

Euxanthis rectifascia Filipjev, 1924 (p. 53).

Stenodes hedemannia: Razowski, 1970 (p. 169, fig. 88).

Wing expanse 12-15 mm in male, 13-16 mm in female. Ground colour of forewing white; basal patch pale yellowish brown, covering 1/5 of forewing; median fascia brown, arcuated inwardly, originated from middle of costa to 1/3 of dorsum; colouration rather weak in female; subapical streak on 4/5 of costa, pale brown; apex sharp; termen oblique. Hindwing pale gray.

Male genitalia (Figs. 5, 5a). Uncus atrophied. Median process of transtilla trapezoidal, broad medially. Valva broad at base, narrower beyond 1/3, with rounded apex; costa of valva well sclerotized to about 5/6. Aedeagus fairly long, very stout; coecum penis rounded basally with two different sized cornuti.

Female genitalia (Fig. 7). Apophysis anterioris two times longer than posterioris. Ostium bursae very broad, weakly sclerotized. Ductus bursae as long as corpus bursae; distal 1/3 twisted, membranous, then slightly sclerotized to corpus bursae. Corpus bursae very large, semioval; appendix bursae arising from middle of corpus bursae.

Material examined. GG: 1 ♂, Gapyoung, 15VII 1986 (K.T. Park et U. Park); 1 ♂, Mt. Myoungjisan, 23 V 1991 (B. K. Byun); 1 ♂, 27VI 1992 (K. T. Park) 1 ♀, 28VII 1992 (K. T. Park). GW: 1 ♂, Chuncheon, 29 V 1989 (K. T. Park); 1 ♀, 18 VII 1989 (K. T. Park); 1 ♀, 22VII 1991 (K. T. Park); 1 ♀, 29VII 1983 (K. T. Park); 1 ♂, Chugok, 30 VII 1986 (K. T. Park); 1 ♀, Seomyun, Yangyang, 30 VI 1987 (K. T. Park); 1 ♂, 25 VII 1987 (K. T. Park).

Distribution. Korea, China, Russia (Siberia, Amur).

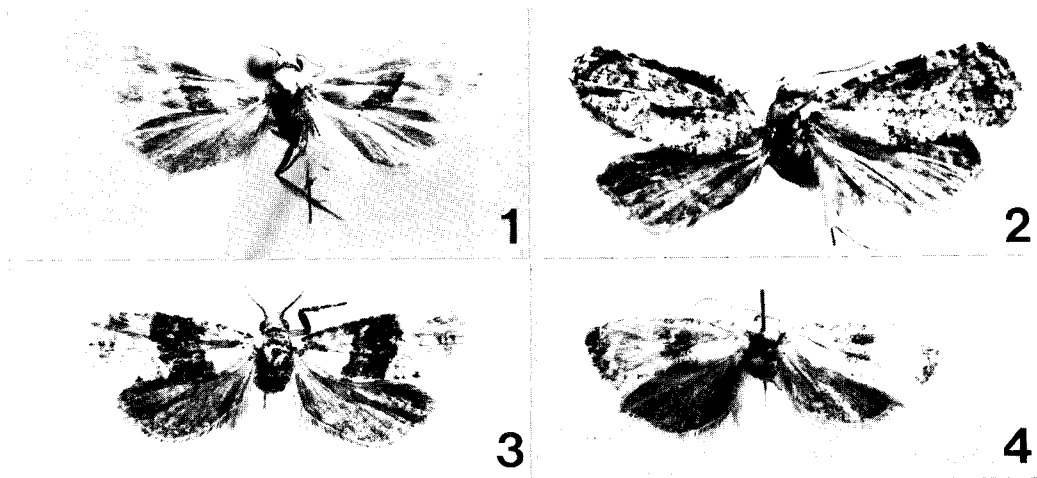
2. *Phalonidia chlorolitha* (Meyrick) 얼룩무늬가는잎말이나방 (新稱) (Fig. 2)

Phalonidia chlorolitha Meyrick, 1931 (p. 157); Razowski, 1970 (p. 218, fig. 129); Kawabe,

1982 (part 1: p. 154, part 2: p. 182, pl. 31:22).

Phalonidia azyga Meylick, 1935 (p. 47).

Wing expanse 16mm in male. Ground colour of forewing pale yellowish white, pattern of marking indistinct, convex with numerous tiny light brownish spots scattered; basal patch indistinct with a small brownish spot at middle; apex rounded, tinged with a narrow brownish streak along apical area. Hindwing pale gray.



Figs. 1-4. Adults of 1: *Stenodes hedemanntana* (Snellen), 2: *Phalonidia chlorolitha* (Meyrick), 3: *Phalonidia latifasciana* Razowski and 4: *Eupoecilia inouei* Kawabe.

Male genitalia (Figs. 6, 6a). Uncus weak membranous, semioval, densely setose. Socii long, surrounded with numerous short hairs laterally. Median process of transtilla slender, well sclerotized, fairly long, shortly bifurcated at apex. Valva elongate, narrower towards apex. apex round; costa strongly sclerotized; sacculus crescent, very short. Aedeagus thickened, very stout, as long as valva, with several cornuti; coecum penis rounded ventrally, very short apically.

Material examined. GW: 1 ♂, Mt. Yaksu-san, 9 VIII 1989 (K. T. Park).

Distribution. Korea, Japan, China (Manchuria), Russia (Ussuri).

3. *Phalonidia latifasciana* Razowski 왕줄가는잎말이나방 (新稱) (Fig. 3)

Phalonidia latifasciana Razowski, 1970 (p. 206, fig. 118); Kawabe, 1972 (p. 248, fig. 4, 21); Kawabe, 1982 (part 1: p. 154, part 2: 182, pl. 31: 18).

Wing expanse 14 mm in female. Ground colour pale yellowish white; basal patch not well developed, with a tiny spot on middle area; median fascia blackish brown, very broad, from 2/5 to 3/5 of costa; subapical streak weakly developed, pale grayish brown; apex rather rounded. Hindwing grayish brown.

Female genitalia (Fig. 8). Ostium bursae strongly sclerotized. Ductus bursae very short, directly connected to corpus bursae. Corpus bursae elongate, sack-shaped; signum long with numerous denticles.

Material examined. GW: 1♀, Naemyoun, Hongcheon, 14 VIII 1987 (K. T. Park).

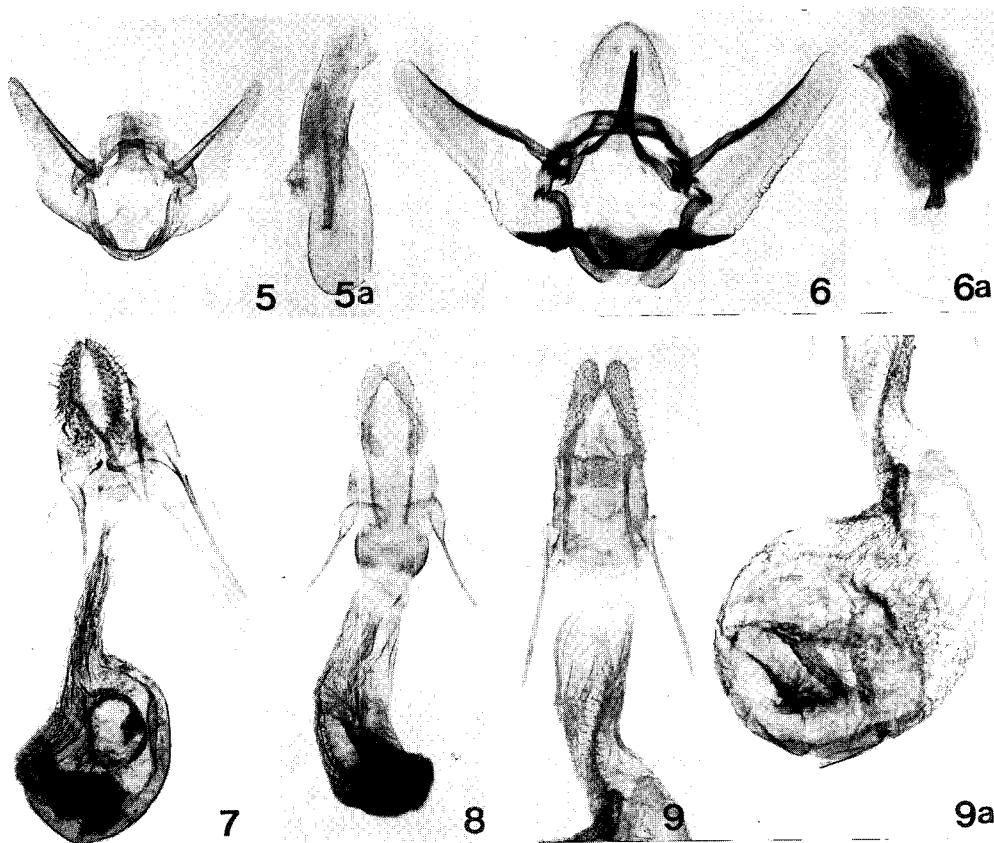
Distribution. Korea, Japan, Russia (Kemerowsk).

4. *Eupoecilia inouei* Kawabe 끝검은가는잎말이나방 (新稱) (Fig. 4)

Eupoecilia inouei Kawabe, 1972 (p. 250, figs. 9, 19, 25).

Wing expanse 16 mm in female. Ground colour of forewing whitish yellow; median fascia pale brown from middle of costa to dorsum; apex more or less round; termen oblique, tinged with dark brown. Hindwing pale gray.

Female genitalia (Fig. 9, 9a). Apophysis anterioris 1.5 times of posterioris in length. Ostium bursae weakly sclerotized, slightly concave medially. Ductus bursae short as same as corpus



Figs. 5-9. Male and female genitalia. 5, male genitalia of *Stenodes hedemanniana* (Snellen); 5a, ditto, aedeagus; 6, male genitalia of *Phalonidia chlorolitha* (Meyrick); 6a, ditto, aedeagus; 7, female genitalia of *Stenodes hedemanniana* (Snellen); 8, female genitalia of *Phalonidia latifasciana* Razowski; 9, female genitalia of *Eupoecilia inouei* Kawabe; 9a, ditto, corpus bursae.

bursae in length. Corpus bursae ovate, very large, spinose on surface.

Material examined. GW: 1 ♀, Seomyun, Yangyang, 10 VII 1987 (K. T. Park).

Distribution. Korea, Japan.

ABSTRACT

Four species of the tribe Cochylini [*Stenodes hedemanniana* (Snellen); *Phalonidia chlorolitha* (Meyrick); *P. latifasciana* Razowski; *Eupoecilia inouei* Kawabe] are reported for the first time from Korea.

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RECEIVED : 2 MARCH 1993

ACCEPTED : 19 MARCH 1993