

Description of Two New Species of Blastobasidae (Lepidoptera) from Korea

Kyu Tek Park

밀두리나방과의 新種 2種에 關하여

朴 奎 澤

ABSTRACT

Two new species belonging to the genus *Blastobasis* Zeller was found to be new to science and described newly, named as *Blastobasis biceratala* sp. nov. and *Blastobasis sprotundalis* sp. nov. These two new species are the first record for the species belonging to the family Blastobasidae from Korea.

INTRODUCTION

The Blastobasidae is a small family which has worldwide distribution and easily recognized by the pterostigma on the forewing, the position of R_2 in the forewing and the fusion of Sc and R in the hindwing. The family was previously introduced with an unidentified species; *Blastobasis* sp. to Korean fauna by writer(1983), but following two new species are certainly the first record of this family in Korea. The habitat of this family has not been well known; few larvae are borers in nuts, scavengers, and also no observation was made for these two new species to date.

I wish to express my sincere thanks to Dr. S. Moriuti, University of Osaka Pref., Japan for his valuable advice and Dr. Y.I. Lee, Inst. of Agricultural Sciences, Suweon, Korea for his help in collecting the materials.

Genus *Blastobasis* Zeller, 1855

The genus *Blastobasis* Zeller comprises over 80 species, extending throughout the range of the family in the world. The forewings of moth are elongate-lanceolate. The males often show good specific characters in the structure of palpus and antenna, which has broadly dilated scape, dense pecten and well developed notch above basal joint. Venation of forewing with M_3 , Cula and Culb approximated or connate; hindwing with M_2 short-stalked. Hitherto, in East-Asia area, only one species; *Blastobasis decolor* Meyrick has been known from Japan.

Blastobasis biceratala sp. nov.

쌍돌기 밀두리나방(新稱)

Male, 14~15mm. Head smooth with appressed scales, long and curving down over face, light ochreous. Antenna about four-fifths, with broadly dilated scape, dense pecten, and well developed notch above pedicel; basal part of notch slightly sloped with some

Dept. of Plant Protection, College of Agriculture, Kangweon National University, Chooncheon, Korea(강원대학교 농과대학 식물보호학과)

what rounded apex. Labial palpus ochreous, stout, smoothly scaled, closely recurved to face and beyond vertex; 3rd segment slightly shorter than 2nd, not sharply pointed. Forewing rather narrow, obtuse pointed, termen extremely oblique, grey with an angulated antemedian fascia of blackish suffusion, preceded by a fascia of white suffusion; two distinct blackish spots near end of cell and tornus. R_1 from middle; R_2 from upper angle of cell; R_4 and R_5 stalked; M_1 free; M_2 , M_3 , and Cula connate; Culb short, arising from lower angle of cell and running nearly straight across to inner margin. Hindwing narrower than forewing, rather dark grey, paler basally; Sc and R fused for a short distance at base; R and M_1 well separated, nearly parallel; M_2 and Cula stalked; M_3 and Cula united. Cilia grey.

Female, 14~16mm. Head dark grey, slightly sprinkled whitish. Antenna with no notch above pedicel.

Labial palpus slender, recurved, grey sprinkled dark fuscous scales; 3rd segment sharply pointed. Ground colour, marking and venation of wings as same as male.

Male genitalia(Fig. 1). Uncus club-shaped. Gnathos poorly developed. Tegumen moderately developed, strong laterally. Valva with rounded, somewhat ovate caudal portion and well developed, slender horn-like process at middle; sacculus weakly sclerotized, with well sclerotized tapering process terminally. Saccus semioval, strongly developed with rounded protrusion basally. Aedeagus small, slender with very long thread-like cornutus, accompanied by several small processes.

Female genitalia(Fig. 2). Papillae analis very small. Apophysis posterior very long, longer than three times of Apophysis anterior. Ostium bursae somewhat triangular, weakly developed. Ductus bursae thin, narrow, very long, much longer than length of abdomen. Bursa copulatrix semioval, with strongly developed, a thorn-like signum. Posterior margin of seventh segment with a pair of small, triangular pleural pits.

Material examined:

Holotype: male, Gwangrung, near Seoul, Korea, 10. VII 1982(K.T. Park), gen. slide Gel-1211

Paratypes: 1♀, Suweon, Korea, 7. VII 1976(K.T. Park), gen. slide Gel-1214; 1♀, Mt. Weolag, Korea,

13. VII 1983(S.B. Ahn), gen. slide Gel-1221; 1♀, Mt. Deogyu, near Muju, Korea, 13. VIII 1975(K.T. Park), gen. slide Gel-1215; 1♂, Suweon, Korea, 20. VI 1977(K.T. Park); 2♀♀, Suweon, Korea, 7. VII 1976(J.S. So & K.T. Park); 2♀♀, Mt. Chiag, near Weonju, Korea, 23. VI 1977(K.T. Park)-preserved in Dept. Plant Protection College of Agriculture, Kangweon National University, Chooncheon, Korea; 1♂, Chuncheon, Korea, 5. VIII 1983(K.T. Park), gen. slide Gel-1220-preserved in British Museum (Nat. Hist.), London, U.K.

Distribution, Korea

Blastobasis sprotundalis sp. nov.

흰띠밀두리나방

Male, 11~12mm. This new species is closely related to the preceding species externally. Head smooth with appressed scales, whitish ochreous. Antenna long with broadly dilated scape, dense pecten; basal part of notch strongly sloped with sharply produced apex. Forewing with nearly straight antemedian fascia, but other external characters not separable with preceding species.

Female, 12~13mm. Head dark grey. Antenna not distinguishable from preceding species. Labial palpus slender, recurved, grey sprinkled dark fuscous scale; 3rd segment shorter than 2nd, sharply pointed. Ground colour, marking and venation of wings as well as male.

Male genitalia(Fig. 4). Uncus rounded apex, well developed. Gnathos poorly developed. Tegumen forming triangular membrane dorsally. Valva with digitated long projection which extended from caudal margin, and somewhat tapering process which extended from ventral margin; a semicircular protrusion with numerous setae in middle part of valva; sacculus narrow, moderate. Saccus simply rounded. Aedeagus simple with long, thin cornutus.

Female genitalia(Fig. 5). Papillae analis very small. Apophysis posterior long, nearly two times than apophysis anterior. Ostium bursae moderate with narrow opening. Ductus bursae thin, very long, strongly chitinized and coiled before entrance of bursa copulatrix. Bursa copulatrix somewhat larger than the preceding species, but signum smaller. Seventh segment of abdomen posteriorly with broad triangular-shaped pleural pits containing chitinized

particles.

Material examined.

Holotype: male, Suweon, Korea, 17. VI 1983(Y.I. Lee), gen. slide Gel-1212

Paratypes: 1♀, Gwangreung, near Seoul, Korea, 10. VII 1982(K.T. Park), gen. slide Gel-1213; 1♀, Suweon, Korea, 23. VII 1974(K.T. Park), gen. slide Gel-675; 1♀, Mt. Deogyu, near Muju, Korea, 13. VIII 1975(K.T. Park); 1♂, Mt. Chiag, near Weonju, Korea, 23. VI 1977(K.R. Choe); 1♂, Suweon, Korea, 6. VIII 1983(Y.I. Lee)—preserved in Dept. of Plant Protection, College of Agriculture, Kangweon National University, Chooncheon, Korea; 1♂, Suweon, Korea, 20. VII 1976(K.B. Uhm), gen. slide Gel-1210—preserved in Dept. of Entomology, British Museum (Nat. Hist.), London, U.K.

Distribution, Korea

Remarks. This new species is closely related externally to *Blastobasis decolor* Meyrick which occurs in India, Sri Lanka and Japan, but it is easily separable from the male and female genitalic characters. In male genitalia, it is also closed to *Blastobasis spermologa* Meyrick which occurs in Sri Lanka, but it can be separable from the later, especially by the semicircular protrusion in middle part of valva.

Moths appear from June to August, but no other biological informations have been observed.

적 요

밀두리나방科(Blastobasidae)는 필자에 의해(1983) 우리나라에서 처음으로 소개되기는 하였으나 그 種名은 밝혀지지 않았었다.

이 科에 속하는 種으로 극동아시아 및 일본지역에서는 현재까지 일본에서 2種만이 보고되어 있을 뿐이다.

금번 필자의 조사결과 *Blastobasis* (屬)에 속하는 2種이 新種으로 확인되었기에 이들을 기재 보고한다. 이들 新種들은 *Blastobasis biceratala* sp. nov.(쌍돌기 밀두리나방), *Blastobasis sprotundalis* sp. nov.(흰머리밀두리나방)으로 명명한다.

REFERENCES

1. Forbes, W.T., 1923, Cornell Univ. Agr. Exp. Stn. Mem., 68:314-315.
2. Meyrick, E., 1907, Jour. Bombay Nat. Hist. Soc., 18:150.
3. Meyrick, E., 1916~1935, Exot. Microl., vol. 1:595-597(1916); vol. 2:158-159(1918) 463(1921). 538-540(1922); vol. 3:145(1925), 467(1928); vol. 4:177(1931), 316(1932), 567(1935).
4. Moriuti, S., 1983, in Moths of Japan, 1:265, 2:209.
5. Park, K.T., 1983, Insecta Koreana, ser. 3:92.

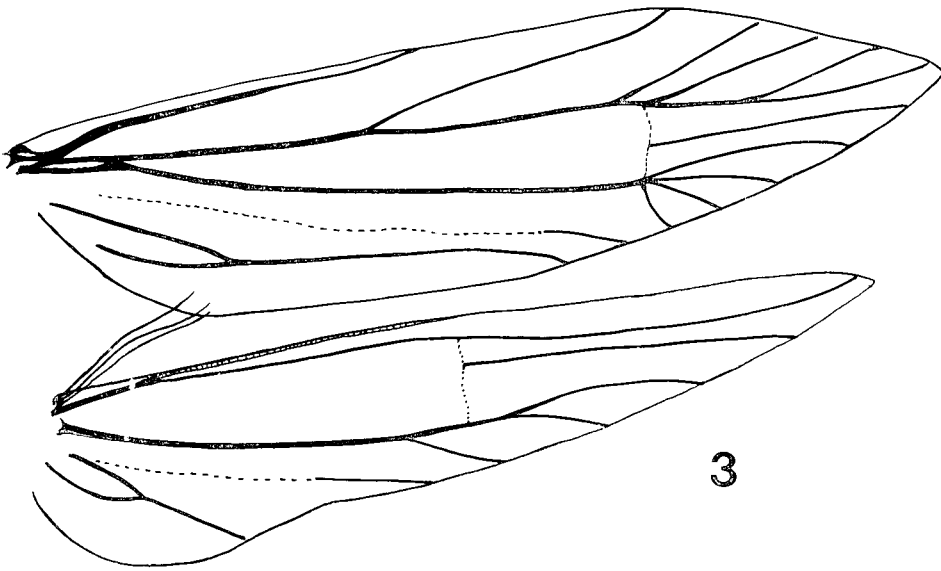
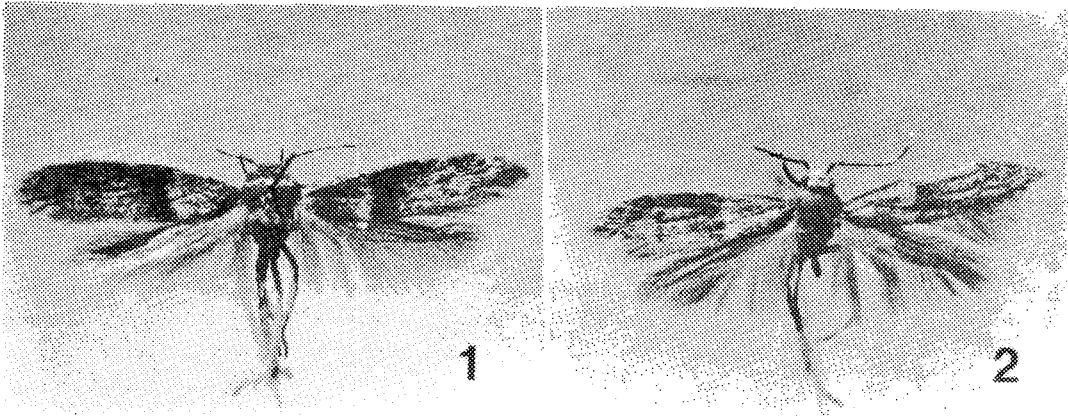


Plate 1. 1. *Blastobasis biceratala* sp. nov. (Paratype, Female, Mt. Weolag 13. VI 1983) 2. *Blastobasis sprotundalis* sp. nov. (Holotype, Suweon, 17. VI 1983) 3. Wing venation of *Blastobasis biceratala* sp. nov.

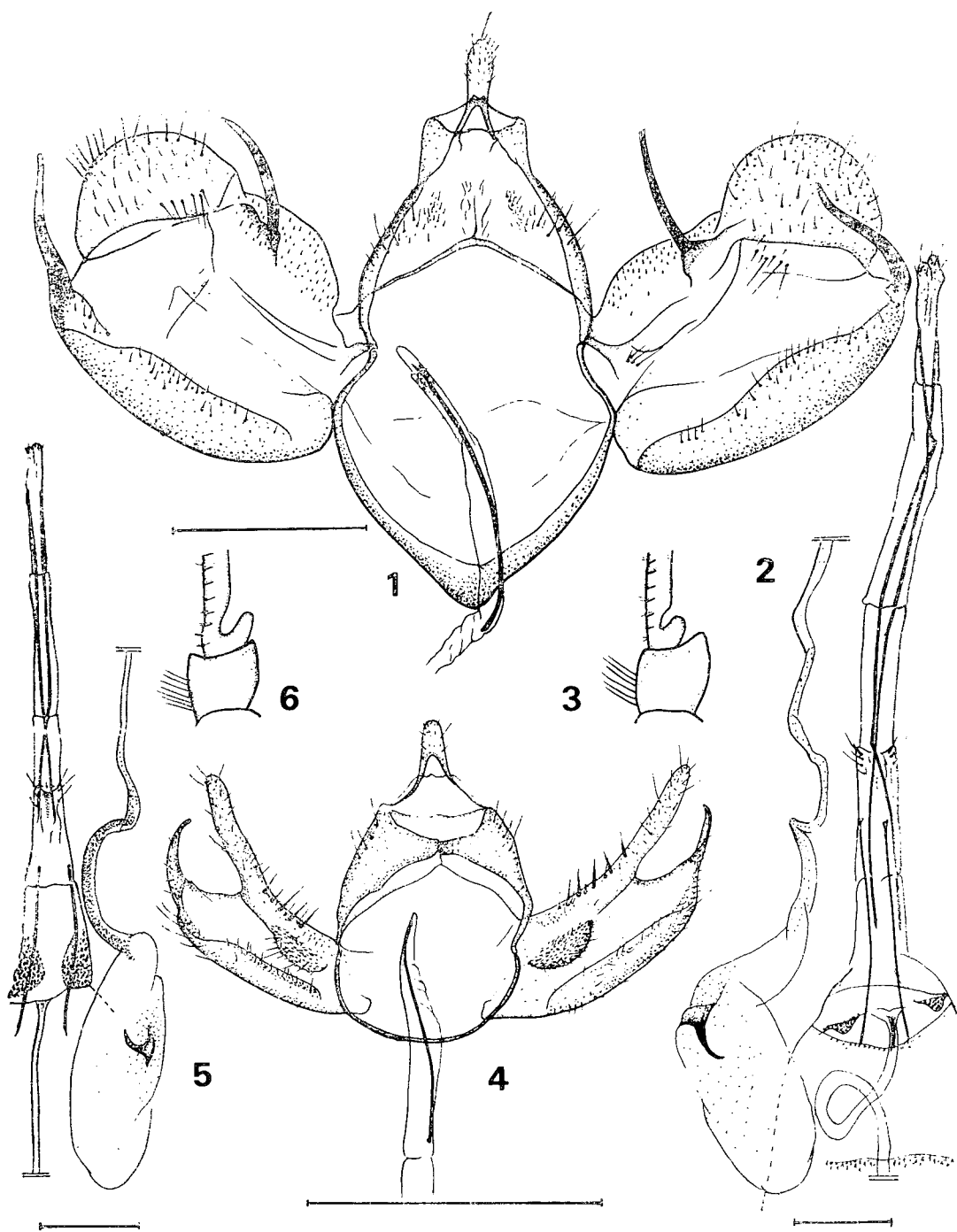


Plate 2. 1. Male genitalia and aedeagus of *B. biceraiala* sp. nov. 2. ditto; female genitalia 3. ditto; scape and basal segment of antenna (male) 4. Male genitalia and aedeagus of *B. sprotundalis* sp. nov. 5. ditto; female genitalia 6. ditto; scape and basal segment of antenna (male). Scale: 0.5mm