

A new species of *Parastenolechia* Kanazawa (Lepidoptera: Gelechiidae) from Korea, with a check list of the genus

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Abstract

Parastenolechia suriensis, **sp. nov.**, is described and illustrated, and *P. asymmetrica* Kanazawa is reported from Korea for the first time. A check list of the species of the genus is given.

Key words: Taxonomy, Lepidoptera, Gelechiidae, *Parastenolechia*, new species, new record, Korea

Introduction

Parastenolechia Kanazawa includes twelve described species; seven are known from eastern Asia, four are distributed in the Oriental Region, and one is reported from Europe. In Korea, four species previously have been reported: *P. issikiella* (Okada), *P. superba* (Omelko), *P. argobathra* (Meyrick), and *P. albicapitella* Park. To that list we add *P. asymmetrica* Kanazawa. We also describe a new species in the genus, bringing to 13 the total number of species in the world.

For descriptions, colors follow Kornerup and Wanscher (1978) and terminology of the male genitalia mainly follows Klots (1970) and Ponomarenko (2005). The holotype and paratypes of the new species are deposited in the collection of the Center for Insect Systematics (CIS), Chuncheon, Korea.

Description***Parastenolechia suriensis* sp. nov.**

(Figs. 1, 2, 2a–b, 3a–c, 4)

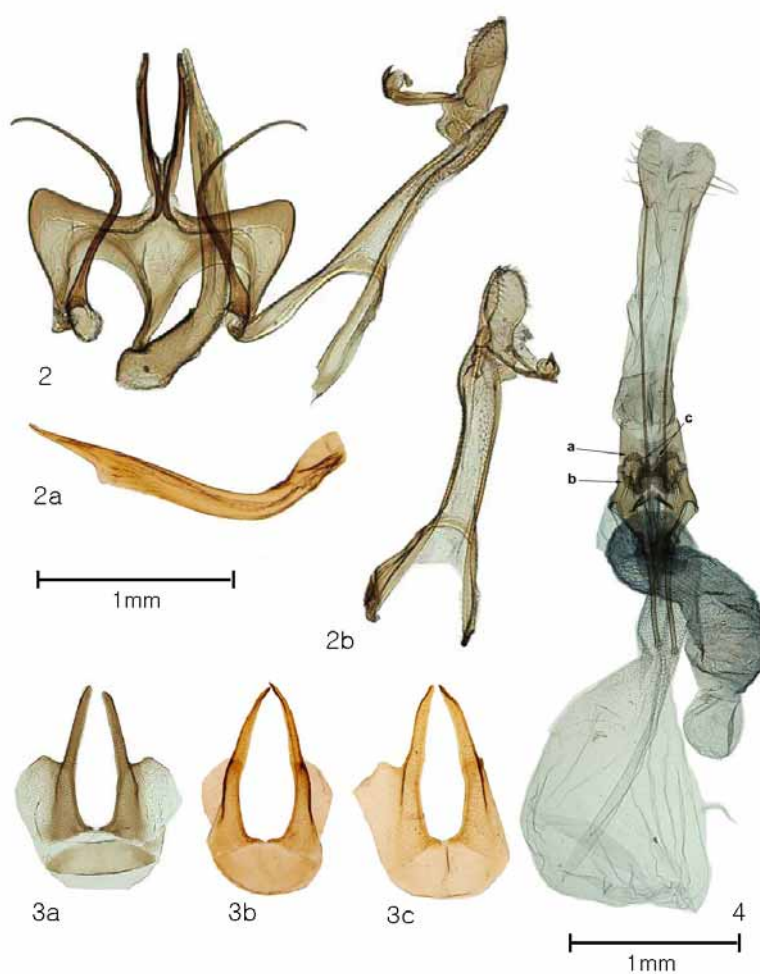
Diagnosis. The species is similar to *P. issikiella* (Okada), but the head is brown or dark brown dorso-distally rather than creamy white as in the latter; and the forewing is densely covered with greyish brown scales and has a larger, more distinct discal spot.

Description. Male and female. Wingspan 13–16 mm. Head with appressed creamy white scales anteriorly and often on vertex, brown or dark brown dorso-distally; creamy white erect scales surrounding eyes dorsally. Tegula brown or dark brown, many scales with ochreous white tips. Thorax dark brown to pale brown, with diamond-shaped, creamy white posterior part. Antenna about 3/5 length of forewing; pedicel slender, ochreous grey on dorsal surface, black on anterior and posterior surfaces; flagellum brownish in basal 1–10 segments, ochreous white beyond with dark annulations. Second segment of labial palpus thickened, expanded towards apex; dark brown on outer surface, with two ochreous white bands at basal 2/3 and at pre-apex; ochreous white bands broader on inner surface; 3rd segment dark brown with three white stripes near base, at middle, and before apex; apex acute. Hind tibia with long greyish hairs above. Ground colour of forewing creamy white, densely irrorated with fuscous scales throughout; dark brown trapezoidal patches overlaid with raised scales near base, at 2/5, and 3/4 length of costa; 4–5 small blackish patches beyond the last trapezoidal patch on costa; a large, ovate, blackish discal spot presented; antemedian fascia well developed, dark brown, bordered with creamy white scales outwardly; a dark fuscous patch before tornus; subterminal line visible, creamy white, strongly convex at middle outwardly; apex obtuse. Fringe with broad paler basal band and two visible brownish lines beyond, longer towards tornus. Venation with R_2 and R_3 nearly parallel; R_3 separate from R_{4+5} ; R_4 and R_5 stalked before middle; R_5 to costa; M_1 separate at base; M_2 and M_3 very close at base; distance between M_2 and M_3 about 1/2 of that between M_3 and CuA_1 at base; CuA_2 well developed. Hindwing grey; about 3/5 length of forewing; termen sinuate, concave just beyond M_1 vein. Fringe extremely long. Venation with Sc and Rs with a cross vein at about 1/4 of Sc; Rs and M_1 separate just beyond cell.

Male genitalia (Figs 2, 2a–b, 3a–c). Eighth sternite modified, with two long processes and basal plate; processes with lateral plates at basal half; basal plate flap-shaped, with round anterior margin, about three times wider than long. Uncus relatively short; apex rounded, setose. Gnathos with long medial hook bearing a strong horn at apex. Tegumen slender, elongate distally, with narrow antero-lateral parts and sclerotized fold on the dorsal side distally. Valva reduced. Glanductors whiplike, inflated at base, channel for ductus of gland distinctly visible. Vinculum with rounded lateral angles. Aedeagus curved at basal 1/3, ankylosed with saccus, with truncate apex. Juxta with two long narrow setose processes on the posterior margin of vinculum.



FIGURE 1. Adult of *Parastenolechia suriensis*, **sp. nov.** (Paratype).



FIGURES 2–4. Male and female genitalia of *Parastenolechia suriensis*, **sp. nov.** 2, male genitalia (holotype, gen. prep. no. 5147); 2a, lateral view of aedeagus (paratype, gen. prep. no. 5186); 2b, latero-dorsal view of tegumen, uncus, and gnathos (gen. prep. no. 5186); 3, variation of eighth sternite of abdomen (3a, gen. slide no. 5147; 3b, gen. slide no. 5186; 3c, gen. slide no. 5187); 4, female genitalia.

Female genitalia (Fig. 4). Ovipositor long, membrane between eighth and ninth segments 5 times as long as papillae anales. Apophyses posteriores almost three times as long as apophyses anteriores; apophyses anteriores widest at base. Sterigma complicated in shape, with rounded setose plates distally (Fig. 4a), anterior pockets weakly sclerotized (Fig. 4b), two median rounded lobes with a deep concavity between them (Fig. 4c). Ductus bursae relatively wide, with numerous fine spicules on inner surface, about 1/2 length of corpus bursae. Corpus bursae large, membranous, without signum, ductus seminalis arising from near base of bursae. Accessory bursae smaller and membranous, arising from proximal part of ductus bursae, with wrinkled proximal part and separated 1/5 distal part by narrowing.

Holotype, ♂, Mt. Suri-san, Gunpo, Gyunggi Prov., Korea, 28.IV.1998 (YM Park), gen. prep. no. CIS-5147/Ponomarenko. Paratypes: 2♂, 1♀, same data as the holotype; 1♂, same locality, 15.VI.1990 (SH Oh & HY Choi); 1♂, same locality, 7.X.2000 (Bae, Paek, Lee, & Kim); 2♂, 2♀, Mt. Chengwan-san, Jangheung, Jeonnam Prov., 13.V.2000 (Bae et al), gen. prep. no. CIS-5146/Ponomarenko (female); 3♂, 2♀, Mt. Gyeryong-san, Chungnam Prov., 15.V.1998 (SM Lee); 1♀, Mt. Gaya-san, Seosan, Chungnam Prov., 5.VI.1999 (JW Jung); 2♀, Isl. Youngjong, Temp. Yongkung, Gyeonggi Prov., 28.V.1995 (Bae & Paek); 1♀, Mt. Geumdan-san, Hanam, Gyeonggi Prov., 1.VIII.2000 (Lee *et al.*); 2♂, 4♀, Mt. Gubong-san, Chuncheon, Gangwon Prov., 31.V.1998 (SM Lee); 1♂, Gwangleung, Gyunggi Prov., 31.V.1986 (KT Park & U Park), gen. prep. no. CIS-1695/Park; 1♂, Gwangleung, 3.VI.1988 (KT Park), gen. prep. no. CIS-1686/Park; 1♀, KNU campus, Chuncheon, Gangwon Prov., 23.V.1996 (KT Park); 1♂, 1♀, Chuncheon, 24.V.1997 (YM Park); 1♀, Kajeungri, Chuncheon, 9.VI.1999 (JW Jung & SH Won).

Distribution. Korea (South, Central).

Etymology. The specific name is derived from the collecting locality of the holotype, "suri".

Remarks. Kanazawa (1985) stated in his description of the genus that *Parastenolechia* is characterized by forewing venation with CuA_1 absent and CuA_2 almost vestigial, but *P. suriensis* has a well developed CuA_1 and CuA_2 . However, there is no doubt that this species belongs to *Parastenolechia* Kanazawa because other external and genital characters agree well with members of the genus.

***Parastenolechia asymmetrica* Kanazawa, 1985**

Parastenolechia asymmetrica Kanazawa, 1985: 9.

Material examined. 1♂, Mt. Odae-san, Gangwon Prov., 26.VI.1989 (KT Park); 1♀, Mt. Gubong-san, Chuncheon, Gangwon Prov., 19.VI.1998 (SM Lee); 1♂, Mt. Seolak-san, Gangwon Prov., 15.VI.1993 (BK Byun).

Distribution. Korea (new record), Taiwan.

Remark. This species is reported from Korea for the first time.

Check list of the species of *Parastenolechia* Kanazawa

ZOOTAXA

1338

Genus *Parastenolechia* Kanazawa, 1985

Parastenolechia Kanazawa, 1985: 6. Type species: *Parastenolechia asymmetrica* Kanazawa, 1985.
= *Tutor* Omelko, 1988b: 131. Type species: *Tutor acclivis* Omelko, 1988.
= *Origo* Omelko, 1988a: 156. Type species: *Telphusa argobathra* Meyrick, 1935.

Distribution. Europe (central, southern), Russia (south of Far East), Korea, Japan, China (southern), Taiwan, Vietnam (northern).

***Parastenolechia acclivis* (Omelko, 1988)**

Tutor acclivis Omelko, 1988b: 131. Type locality (TL): Tamdao, N Vietnam.

Distribution. N Vietnam.

***Parastenolechia albicapitella* Park, 2000**

Parastenolechia albicapitella Park, 2000: 165, figs 13,14,16. TL: Gwangleung, Korea.

Distribution. Korea.

***Parastenolechia argobathra* (Meyrick, 1935)**

Telphusa argobathra Meyrick, 1935: 66. TL: Tienmushan, Zhejiang, China.
= *Laris (Origo) argobathra umbrosa* Omelko, 1988a: 158, figs 31, 33.

Distribution. Korea, Japan, China, Russian Far East (Primorskii krai).

***Parastenolechia asymmetrica* Kanazawa, 1985**

Parastenolechia asymmetrica Kanazawa, 1985: 9, figs 1A, 3, 4A-D. TL: Alishan, Chiai Hsien, Taiwan.

Distribution. Korea, Taiwan.

***Parastenolechia claustrifera* (Meyrick, 1935)**

Telphusa claustrifera Meyrick, 1935: 66. TL: Tienmushan, Zhejiang, China.

Distribution. China (Zhejiang), Taiwan.

***Parastenolechia formosana* Kanazawa, 1991**

Parastenolechia formosana Kanazawa, 1991: 28, figs 1A, 2, 3A-F, 4. TL: Lushan-wenchuan, Nantou Hsien, Taiwan.

Distribution. Taiwan.

***Parastenolechia gracilis* Kanazawa, 1991**

Parastenolechia gracilis Kanazawa, 1991: 30, figs 1B, 5A-E. TL: Lushan-wenchuan, Nantou Hsien, Taiwan.

Distribution. Taiwan.

***Parastenolechia issikiella* (Okada, 1961)**

Stenolechia issikiella Okada, 1961: 46. TL: Sakai, Osaka Pref., Japan.

= *Telphusa cornisignella* Moriuti, 1977: 120.

= *Telphusa cornisignella*: Kanazawa, 1985: 11, misspelling.

Distribution. Korea, Japan (Honshu, Kyushu, Tsushima Is., Yakushima Is.).

***Parastenolechia nigrinotella* (Zeller, 1847)**

Stenolechia nigrinotella Zeller, 1847: 856. TL: Europe.

[*Gelechia*] *nigralbella* Herrich-Schäffer, 1854, 5; f. 565.

Distribution. Europe (central, southern), Turkey.

***Parastenolechia superba* (Omelko, 1988)**

Laris (Origo) superba Omelko, 1988a: 157, figs 30, 32. TL: Gornotaezhnoe, Ussuriysk Distr., Russia.

Distribution. Korea, Russian Far East (Primorskii krai).

***Parastenolechia suriensis* Park et Ponomarenko, sp. nov.**

Distribution. Korea.

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