

Genera *Parastenolechia* Kanazawa and *Laris* Omelko(Lepidoptera: Gelechiidae)in Korea

한국産 *Parastenolechia*屬과 *Laris*屬(나비目: 빨나방科)의 분류학적정리

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ABSTRACT Genus *Origo* Omelko is synonymied as a junior synonym of *Parastenolechia* Kanazawa and the subspecies *umbrosa* Omelko as a junior synonym of *argobathra* Meyrick. *Laris superba* Omelko and *Telphusa claustrifera* Meyrick are removed to the genus *Parastenolechia*. Among the 5 species redescribed in this article, 4 species(*P. issikiella* (Okada), *P. superba* (Omelko), *P. claustrifera* (Meyrick) and *L. collucata* (Omelko)) are reported for the time from Korea.

KEY WORDS *Parastenolechia*, *Laris*, Gelechiidae, Lepidoptera, systematics, Korea

초 록 *Parastenolechia*屬의 분류학적 정리를 통하여 *Laris* Omelko의 亞屬으로 취급되어 왔던 *Origo* Omelko屬을 본屬의 動物異名(synonym)으로, 亞種名 *umbrosa* Omelko를 *argobathra* Meyrick의 動物異名으로 각각 정리하였다. 또한 *superba* Omelko 그리고 *claustrifera* Meyrick등 2種을 原 기재屬으로 부터 분리, *Parastenolechia*屬으로 재정리 하였다. 본 논문에 취급된 5種중 *argobathra* Meyrick을 제외한 4種을 우리 나라에서 처음으로 기록, 발표한다.

검색어 *Parastenolechia*, *Laris*, 빨나방科, 나비目, 분류, 한국

Genus *Parastenolechia* was described by Kanazawa (1985), differentiated from *Stenolechia* Meyrick, based on the type species *asymetrica* Kanazawa which was collected from Taiwan. The genus comprised only 3 species; *issikiella* Okada, *argobathra* Meyrick and the type species, from Taiwan and Japan. Recently Omelko (1988) described a new genus *Laris*, based on *collucata* Omelko as type species, dividing the new genus into two subgenera; the mononate subgenus based on *collucata*, and *Origo* based on *argobathra* Meyrick. The subgenus *Laris* Omelko is considered to be treated as a good

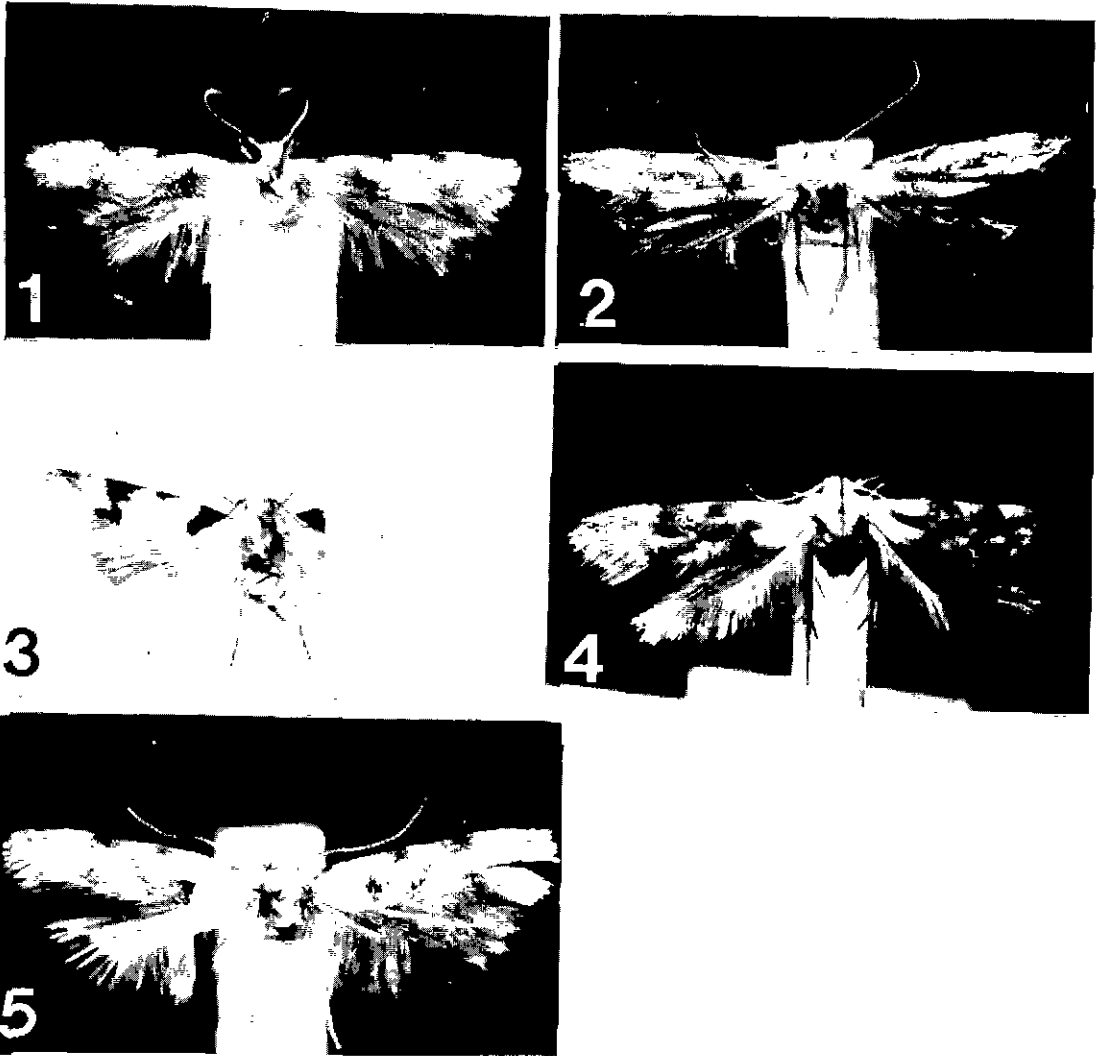
genus, but *Origo* Omelko is certainly congeneric to the genus *Parastenolechia* Kanazawa.

For this study author visited to the Zoological Institute, Russian Academy of Sciences, St. Petersburg and examined some type specimens concerned on these genera on April, 1992.

SYSTEMATICS

Parastenolechia Kanazawa, 1985
Bull. Osaka Mus. Nat. Hist., 1985: 6.
(Type species: *P. asymmetrica* Kanazawa, 1985)

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Figs. 1~5. Adults: 1, *Parastenolechia issikiella* (Okada); 2, *P. superba* (Omelko); 3, *P. claustrifera* (Meyrick); 4, *P. argobathra* (Meyrick); 5, *Laris collucata* Omelko.

Origo Omelko, 1988, Ent. Obozr. 67: 157, syn. nov.

Telphusa cornsigella Moriuti, 1977: 120.

Parastenolechia issikiella, Kanazawa, 1985: 11.

Parastenolechia issikiella (Okada, 1961)
(Fig. 1)

Stenolechia issikiella Okada, 1961, Trans. Shikoku ent. Soc. 7 (1~2): 46; Moriuti, 1982: 1~278, 2~213.

Adult. Wingspan, 11~14 mm. Head appressed with creamy white scales. Thorax whitish ochreous. Antennae whitish ochreous, about 3/4, annulated with dark grey; scape with 2 brown stripes outwardly. Second segment of labial palpi thickened, basal 1/3 brown on outer sur-

face, distal 2/3 white with pale brownish orange stripes; 3rd segment white with two broad brown stripes, with white acute apex. Ground colour of forewings creamy white, irrorated with whitish ochreous scales beyond basal area; 3 distinct dark markings overlaid with raised scales at base, near 1/3 and 2/3 of costa; 2 dark scale-tufts on antemedian fascia obliquely, beneath them large brown patches expanded to dorsum forming a triangle; other dark fuscous markings on tornus, often with a black spot between 3rd markings on costa; postmedian fascia strongly convex outwardly. Cilia with 2 rows of dark brown lines, long near tornus, Hindwings grey.

Male genitalia (Fig. 6~6). Uncus weakly indented at middle; median projection of gnathos strong with large lateral lobes. Cucullus taenoid, long, tapered; base globular ended in pointed tip. Valva broad at base, with clavate processes set with long hairlike setae at apex. Processes of aedeagal fulcrum rather stout and long, inflated lateral margin smoothly, with acute apex. Saccus moderate, strongly fused with aedeagus at base. Aedeagus rather slender, subzonal sheath at basal 1/4 weakly curved, ended in acute tip.

Female genitalia (Fig. 15). Apophysis posterioris almost 2.5 times as long as anterioris. Ostium bursae with two lateral flaps, weakly chitinized, at anterior portion of 7th sternite. Posterior margin of 8th segment somewhat round with setae. Antrum narrow, short, membranous. Ductus bursae more or less wide, long. Corpus bursae small, elongate-oval; signum large, semicircular plate with two sharp hornlike projection.

Material examined. [KOREA] Gwanglung, Gyunggi Prov., 2♂, 2♀, 31.V.1986 (K.T. Park et U. Park), 1♂, 27.VI.1986 (K.T. Park et M.

K. Ko), 2♀, 3.VI.1988; Chuncheon, Gangweon Prov., 1♂, 1♀, 29.V.1989 (K.T. Park), 1♀, 13.VI.1989 (K.T. Park et B.K. Byun), 1♀, 7.VI.1988 (K.T. Park), 15♂, 1♀, 15.VI.1992 (K.T. Park); Mt. Seolak-san, Gangweon prov., 1♂, 1♀, 9.VIII.1989 (K.T. Park); Mt. Jumbong-san, Gangweon Prov., 1♂, 21.VI.1992 (K.T. Park); Mt. Daedun-san, Jeonbug Prov., 1♂ 22-23.V.1992 (K.T. Park); Mt. Pekun-san, Jeonnam prov., 1♀, 19.VIII.1992 (K.T. Park et B.K. Byun); Mokseukweon, Aradong, Jeju Prov., 1♂, 30.V.1992 (K.T. Park).

Distribution. Korea, Japan.

Parastenolechia superba (Omelko), 1988

(Fig. 2)

Laris (Origo) superba Omelko, 1988, Ent. Obozr. 67: 157, **comb. nov.**

Adult. Wingspan, 14 mm. Superficially it is difficult to distinguish from *P. issikiella*. Female not collected.

Male genitalia (Fig. 8~10) Very similar to those of *P. issikiella*, but digitate processes of valva very short. Other characters are no separable from the latter.

Material examined. [KOREA]: Seomyun, Yangyang, Gangweon Prov., 1♂, 4.VI.1987 (K. T. Park), gen. prep. no. 1699. [RUSSIA]: Both sexes of paratypes, 24.VI.1984 (Omelko leg.), Gornotaezhnoe, Ussuriysk Distr. were dissected and examined.

Distribution. Korea, Russia (Maritime Province).

Remarks. Larvae feed on young shoots of *Quercus mongolicae* (Omelko, 1988).

Parastenolechia argobathra Meyrick, 1935

(Fig. 4)

Telphusa argobathra Meyrick, 1935, in Caradja and Meyrick, Mat. Microlep. Fauna Chines. Prov., Kiangsu, Chekiang & Hunan; Clarke, 1969: 428; Park, 1983: 86; Kanazawa, 1985: 15.

Laris(Origo) argobathra umbrosa Omelko, 1988: 157, **syn. nov.**

Adult. female, 14~15 mm. It is very similar to the preceding species in superficial characters, but costal patch and antemedian fascia are widely suffused with dark brown scales.

Female genitalia (Fig. 17). There is almost no difference in female genitalia, except the larger and stronger signum.

Material examined. [KOREA]: Gwanglung, Gyunggi Prov., 1 ♀ 8.VI.1977 (K.T. Park), gen. prep. no. 941; Mt. Chiag-san, Gangweon Prov., 1 ♀ 23.VI.1977 (J.C. Paik), gen. prep. no. 1064. [RUSSIA]: some paratypes of *umbrosa* Omelko; 1 ♀, 21.VIII.1985 (Omelko), Andreevka, Khasan Distr; 1 ♂, 12.VIII.1983 (Lvovsky et Pupylysis leg.), Ryazanovka, Khasan Distr.

Distribution. Korea, Japan, China, Far Eastern Russia.

Remarks. This species was described by Meyrick, based on a female specimen (slide no. BM-8254/Clarke) which was collected from Tien-Mu-Shan, China and originally placed in the genus *Telphusa*. The lectotype designated by Clarke (1969), is preserved in the Natural History Museum, London. Kanazawa (1985) discussed about the taxonomic status of this species, without any conclusion to define its taxonomic position because no further informations were available for this species. It is almost impossible to separate this species from *issikiella* in the structure of female genitalia. Omelko described *umbrosa* as a new subspecies of *argobathra* Meyrick, but it maybe not reasonable

to describe it as a different subspecies without no mention on the difference between the nominate subspecies because their female genitalia are almost identical and no male type specimen is available. Thus I propose to place this new species as a junior synonym of *argobathra* Meyrick. The general shape of male genitalia of *umbrosa* is very similar to *issikiella*, but it is larger with stout and rather short process of valva.

***Parastenolechia claustrifera* (Meyrick), 1935**
(Fig. 3)

Telphusa claustrifera Meyrick, 1935, in Caradja and Meyrick, Mat. Microlep. Fauna Chines. Prov., Kiangsu, Chekiang und Hunan, 66; Clarke, 1969: 431, **com. nov.**

Adult. Wingspan, about 12 mm. Head and thorax shiny white. Antennae brown with dark grey annulation; pedicel dark grey. Second segment of labial palpi brown at basal half, distal half white. 3rd segment white, basal stripe very weak, yellowish pale brown; preapical stripe dark brown, broad. Ground colour of forewings white, antemedian fascia subtriangular, dark grey, not reached to dorsum; median patch on costa small; preapical patch on costa triangular, large, connected to tornal patch, beyond them irrorated with yellowish scales; a black spot near apex. Hindwing grey.

Male genitalia (Fig. 13~14). Eighth sternite smoothly convex along distal margin, length about 3/4 of width. Uncus trapezoidal in dorsal view, without emargination on distal margin. Gnathos with well developed median sclerite, with lobes expanded laterally. Cucullus narrow, tapered, extended almost to distal end of uncus.

Arms of aedeagal fulcrum long, narrowed at basal half, club-shaped with acute apex. Aedeagus very slender, with inflated base, weakly curved near distal end.

Female genitalia (Fig. 16). Apophysis anterioris very strong, about 1/3 length of posterioris. Lateral flaps of ostium bursae leaf-like, with acute tip. Antrum with subtriangular sclerite which set with numerous denticles on inner surface. Ductus seminalis arising from near ostium. Signum rather large, semiovalate plate with strong lateral projection.

Material examined. [KOREA]: Suweon, Gyonggi Prov., 1♂, 13.VII.1975 (K.T. Park); Gwanglung, Gyonggi Prov., 2♂, 2♀, 10.VII.1990 (K.T. Park). [CHINA]: 1♀, (holotype), Tienmushan, was only observed externally.

Distribution. Korea, China.

Remarks. The type specimen, female from Tien-Mu-shan, Chin, which was designated by Clarke (1969) is preserving in the Natural History Museum, London, without its abdomen. Even I compared Korean specimens with the type specimen only in appearance, but I confirmed that it is undoubtedly conspecific.

Laris Omelko, 1988

Ent. Obozr. 67: 155

(Type-species: *L. collucata* Omelko, 1988)

Omelko described the genus *Laris*, based on *collucata* Omelko, differentiating from the member of his genus *Origo* as follow: fused cuculli, without median projection on gnathos and lobate processes of valve. However, the fused cucullus can not be a her own characteristic and also has a small median projection on gnathos. The main considerable characteristics of the genus differentiated from *Parastenolechia* are as follows: Forewing with CuA_2 whereas

absent in the latter; R_4 and R_5 on rather long stalk; processes of valva (referred to sacculus by Omelko) lobated at distal portion.

Laris collucata Omelko, 1988

(Fig. 5)

Laris collucata Omelko, 1988, Ent. Obozr. 67: 155. Figs. 25~28.

Adult. Wingspan, 14 mm. Only a male was collected in Korea. Externally it is very closed preceding species.

Male genitalia (Fig. 11, 12). Eighth sternite wide, about 2 times than those of length, smoothly concave at middle of distal margin. Uncus moderate, set with dense hairs ventrolaterally. Gnathos cupuliform with a small median sclerite ventrally. Cucullus taenioid, tapered, with globular base fused with tegumen. Processes of valva slender, rather club-shaped distally. Arms of aedeagal fulcrum short, curved downwardly beyond middle. Aedeagus broadened with sheath at base, rather slender, curved evenly.

Material examined. [Korea]: Seomyun, Yangyang, Gangweon Prov., 1♂, 4.VI.1987 (K. T. Park), gen prep. no. 1699. [RUSSIA]: some paratypes, 1♀, 27.V.1982 (Omelko), Gornotaezhonoe, Ussuri Distr.; 1♂, 15.VII.1984 (Omelko), same locality, were dissected and examined.

Distribution. Korea, Russia (Maritime Province).

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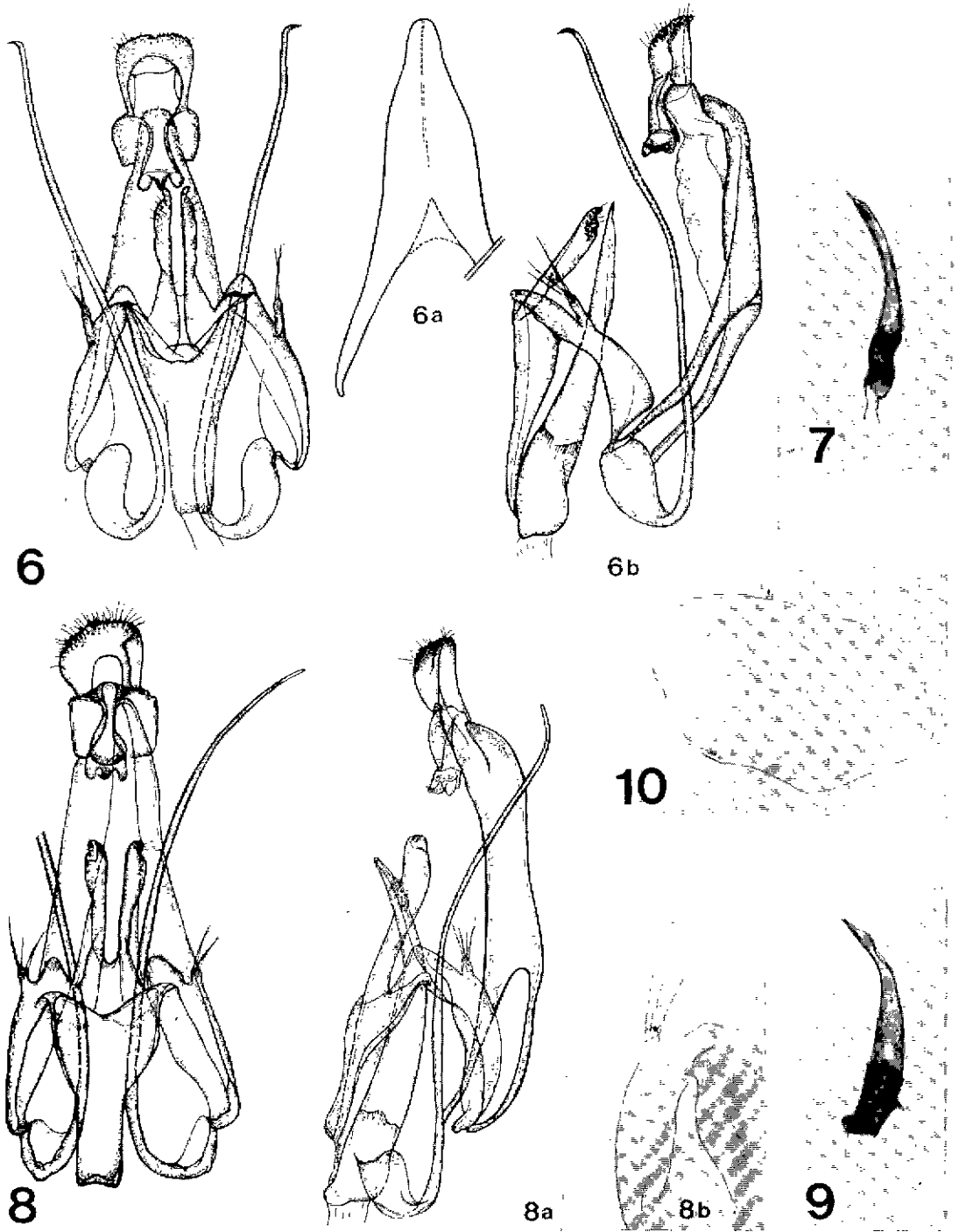
I wish to express my sincere thanks to Korea Research Foundation for her financial support (1988~1989) to conduct this study, which is a

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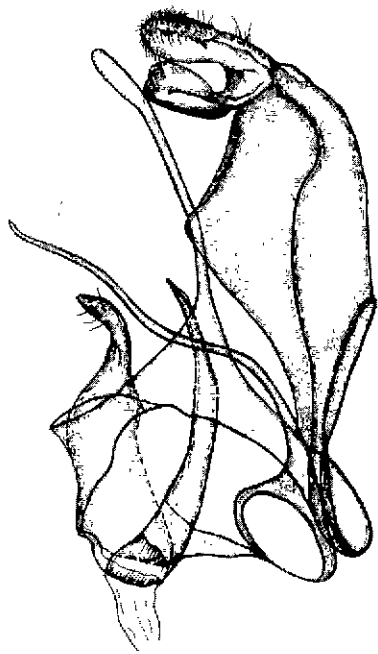
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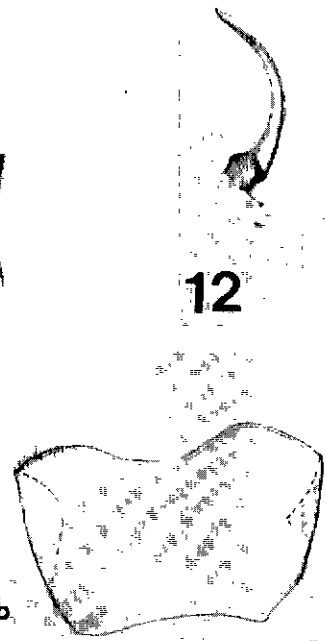
Figs. 6~10. Male genitalia: 6, *P. issiktella*; 6a, ditto, dorsal view of tegumen; 6b, ditto, lateral aspect; 7, ditto, aedeagus; 8, *P. superba*; 8a, lateral aspect; 8b, photo of process of valva; 9, ditto, aedeagus; 10, ditto, 8th sternite.



11

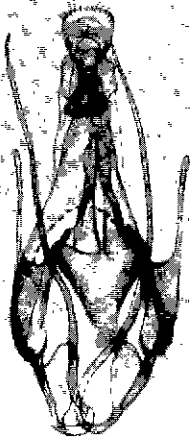


11a

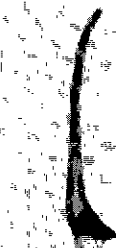


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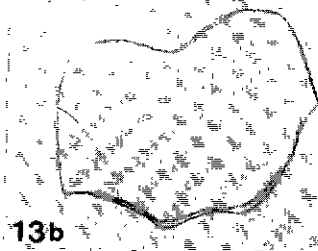
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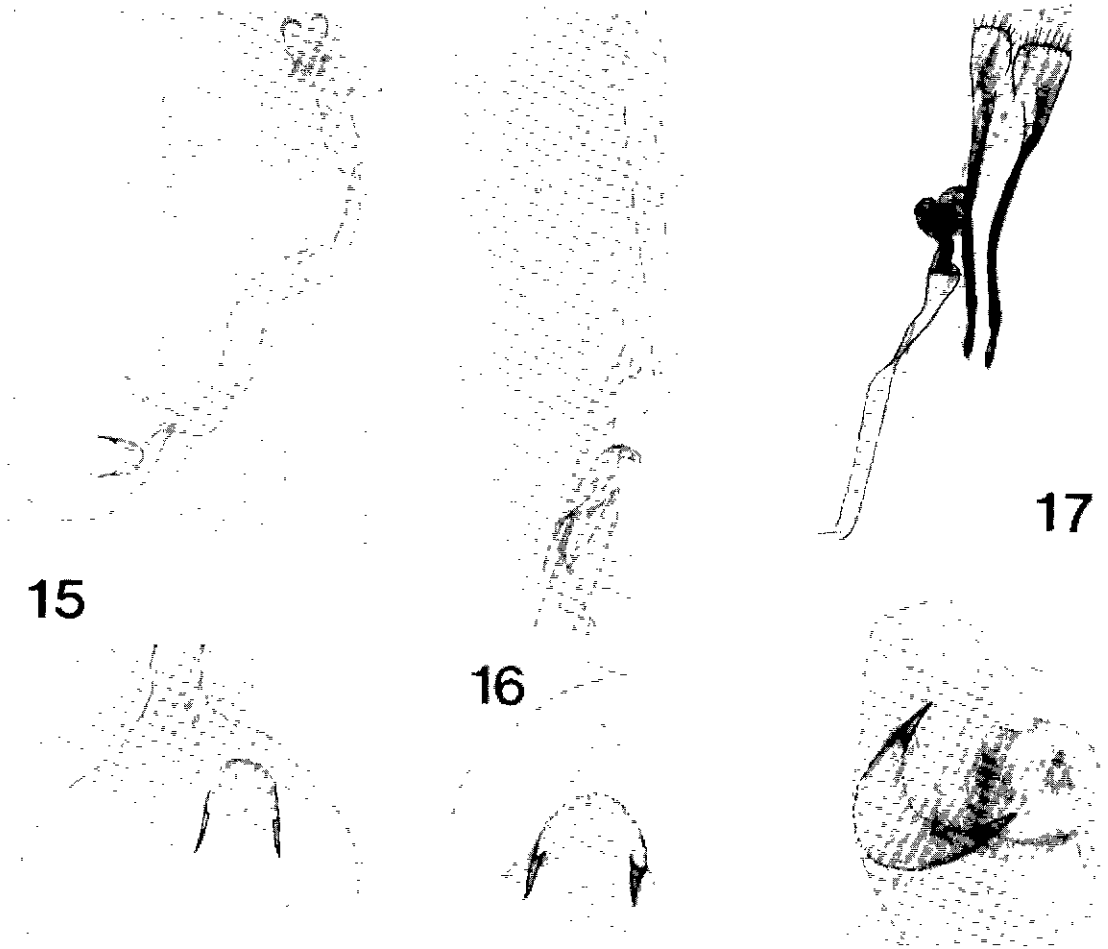


13b



13a

Figs. 11~14. Male genitalia: 11, *Laris collucata*; 11a, ditto, photo; 11b, ditto, 8th sternite; 12, ditto, aedeagus; 13, *Parastenolechia claustrifera*; 13a, ditto; magnification; 13b, ditto, 8th sternite; 14, ditto, aedeagus.



Figs. 15~17. Female genitalia with magnification of signa: 15, *Parastenolechia issikiella*; 16, *P. claustrifera*; 17; *P. argobathra*.