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# NOTES ON THE GENUS *STENOLOBA* STAUDINGER, WITH DESCRIPTION OF A NEW GENUS (Lepidoptera, Noctuidae, Cryphiinae)

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The genus *Stenoloba* Staudinger, 1892, was established for a sole species *Dichagyris jankowskii* Oberthür occuring in the Ussuri district and Japan. The moth has some odd appearance, so he placed it in the nycteoline group that he termed "Cymbidae". Hampson (1910), later in his extensive catalogue, enlarged the scope of the genus to include several additional species, mostly Japanese or North Indian. In his key to subfamily of the Noctuidae, the genus *Stenoloba* falls into "Erastriinae" [Eustrotiinae] due to the venation of hindwing, but the position seems much artificial. It has scacre relationship to any of genera referred by him to that subfamily.

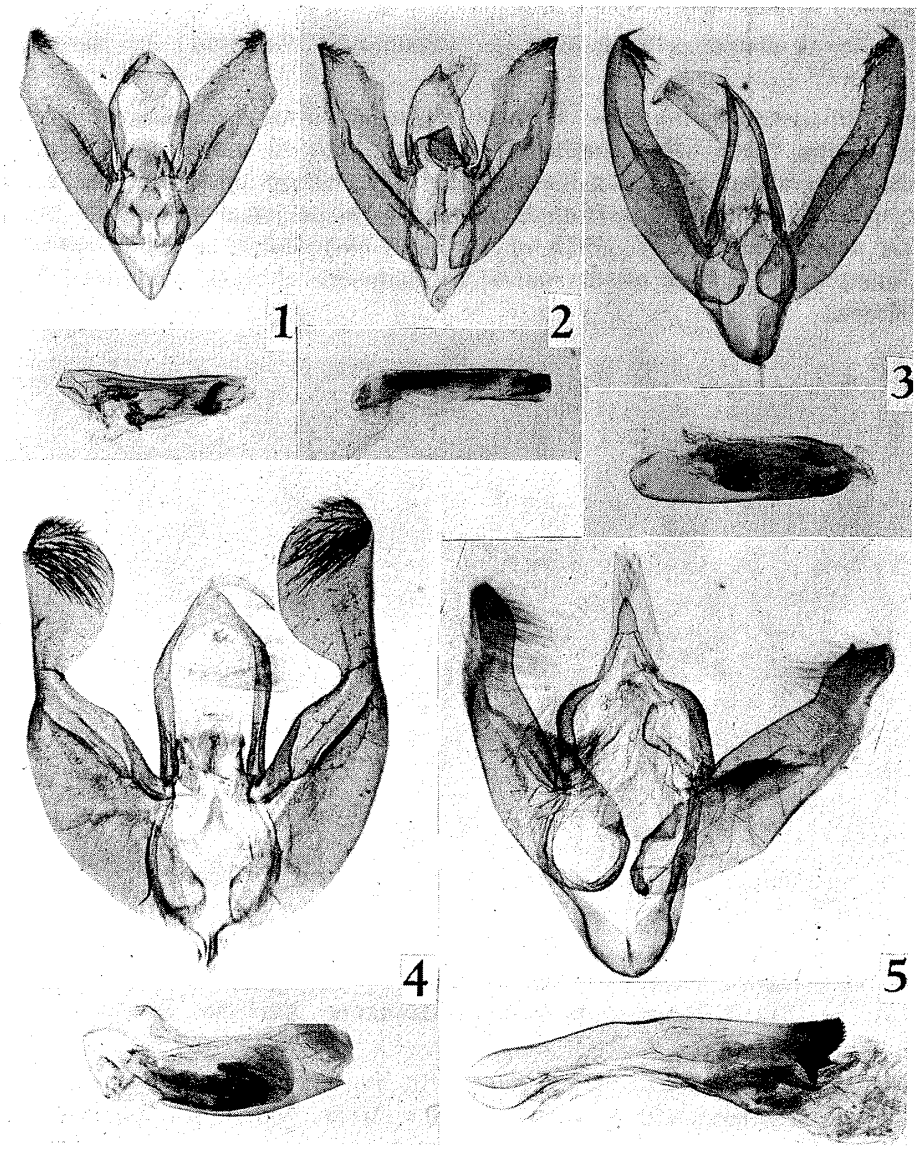
Yamamoto (1958) has published an important paper describing the detailed feature of the immature stages of *Stenoloba manleyi* (Leech). The larvae found by him on the trunk of *Elaeagnus* are seriously *Cryphia*-like and are similarly lichen feeder. In morphological and biological point of view, he has then reached a conclusion that it is essentially a close ally to species of the genus *Cryphia* Hübner. After a study of adults of *Stenoloba jankowskii* and some allies available to me, I have realized that *manleyi* is not a straggler from the *Cryphia* proper but a true element of the genus *Stenoloba*. I am now much inclined to warrant him in placing this genus in a position nearest to *Cryphia*. The genus *Cryphia* is usually associated with the Apatelinae by most recent authors, chiefly for the larval characters. It must be recalled that in Asiatic or Indo-Malayan region there are a few outliers of this subfamily having quadrifid venation and naked eyes. Such are the cases with *Belciana* Walker and *Cymatophoropsis* Hampson as discussed in my previous paper (Inoue & Sugi, 1957). Of a sole Japanese representative of the former genus, *Belciana virens* (Butler), the larva was discovered in past year and it shows truely apateline characters in having long single setae on the dorsal and subdorsal areas, seta L3 on abdominal segments associated with an additional one, and setal group SV on outer surface of abdominal prolegs multisetose. The genus *Stenoloba* will be of a similar case where moths have the quadrifid venation combined with the trifid caterpillar.

**Stenoloba** Staudinger, 1892

Type-species: *Dichagyris jankowskii* Oberthür, 1884.

Most related to *Cryphia*. Differs externally from it in the frons with slight conical prominence. the large prothoracic crest of rough raised scales, the

uncrested abdomen except a basal segment, and the vein M2 of hindwing fully developed and arising from about 1/3 above the lower angle of cell. The forewing is somewhat broader than in *Cryphia* and slightly arched at base of costa. Otherwise almost identical.




Male genitalia of:

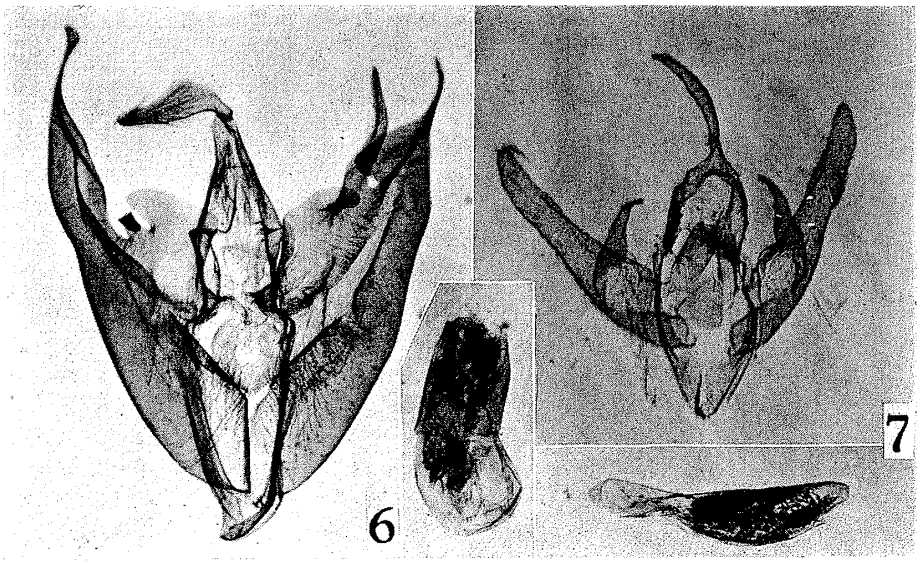
Fig. 1. *Stenoloba clara* (Leech). Slide No. SS-1288. Fig. 2. *Stenoloba oculata* Draudt. Slide No. SS-1308. Fig. 3. *Stenoloba assimilis* (Warren). Slide No. SS-1309. Fig. 4. *Stenoloba manleyi* (Leech). Slide No. SS-1297. Fig. 5. *Stenoloba jankowskii* (Oberthür). Slide No. SS-1287.

Male genitalia are characterized as follows:

Uncus rudimentary or reduced in size, slender. Tegumen very narrow. Valva generally simple, without inner armature; in typical species with corona of a few spinous setae at extremity; juxta weak, somewat triangular, widest at cephalic end and more or less extending caudad; sacculus moderate; aedoeagus moderate, usually with a sclerotized patch at apical end, vesica variously armed.

The larval characters as defined by Yamamoto (1958, 1961) are summarized as follows:

Body thick and cylindrical. Primary setae on thorax and abdomen generally long, arising from well sclerotized pinacula; SD1 on meso- and metathorax strongly developed and much longer than SD2; L2 on prothorax fine, situated just below L1, both arising from a common pinacula; setal group SV bisetose on A1 and trisetose on A2; SD1 on A8 nearly just above spiracle; spiracle on A8 about twice as high as that on A7 in diameter. Prolegs complete, equally developed.




Male genitalia of:

Fig. 6. *Lophonycta confusa* (Leech). Slide No. SS-1289.
Fig. 7. *Bryomoia melachlora* Staudinger. Slide No. SS-617.

The above features completely agree with the larva of *Cryphia*, and there is nothing in common with known Eustrotiine larvae, which are normally semi-loopers with anterior one or two pairs of prolegs rudimentary. The lengthening of SD1 on meso- and metathoracical segments appears to be most distinctive for the genus, as such character has never been known throughout the described larvae of the Noctuidae. However, the same specialization is also found in larvae of *Cryphia*. Of the two species examined by Yamamoto, the lengthening of SD1 occurs on the meso- and metathorax in one species (*obscura* Warren,

subgenus *Cryphia* s. str.), while in the other (*granitalis* Butler, subgenus *Bryoleuca*) it does on metathorax only. In the larva of European *Cryphia raptricula* (Schiffermüller), fully described by Beck (1960), it is exactly like as in *granitalis*. This feature is used as a good character to separate the subfamily Cryphiinae in a larval system proposed by him.

In the genus *Stenoloba* are included five Japanese species on which the above description is based.

*Stenoloba clara* (Leech, 1889). Proc. zool. Soc. Lond., **1889**: 479 [*Selepa*]. Japan and Korea.

A smaller species. Male genitalia (Fig. 1): Uncus intermediately developed for the genus. Valva relatively short and broad, costal margin obtusely angled at before middle, apex somewhat obliquely truncate; aedoeagus with a large lunate patch at apex, cornuti a mass of very fine spinules.

*Stenoloba oculata* Draudt, 1950. Mitt. münch. ent. Ges., **40**: 132. China and Japan.

A smaller species. Male genitalia (Fig. 2): Uncus most rudimentary. Valva rather short, with a slight swelling on costa at about apical two-fifths; juxta narrow, extending caudad. Otherwise much similar to the preceding species. Aedoeagus finely scobinate at apex, vesica densely asperite in part, without cornutus.

*Stenoloba assimilis* (Warren, 1909). In Seitz, Macrolep. World, **3**: 22 [*Metachrostis*]. **Comb. nov.** Japan.

This species has been treated as a genuine *Cryphia* by most authors. Boursin (1961) has thought that *assimilis* stands as a sole East Asiatic representative of the *algae*-group (subgenus *Euthales* Hübner), which is otherwise purely Mediterranean. He is aparently incorrect. Although in this species the prothorax has more flattened smooth scaling than typical, the frontal prominence and the venation of hindwing show doutlessly it to be placed in *Stenoloba*. A microphotograph of genitalia of the holotype male is illustrated by Boursin (1951).

Male genitalia (Fig. 3): Essentially typical for the genus. Uncus relatively well developed. Tegumen elongated. Valva long and narrow, with a thicker ventro-apical spine and some more diffused ones; sacculus well bulged dorsally. Aedoeagus finely asperite at apex, cornutus a single discal plate bearing obscure spine on it.

*Stenoloba manleyi* (Leech, 1889). Proc. zool. Soc. Lond., **1889**: 479 [*Selepa*]. Japan and Korea.

A larger species. Male genitalia (Fig. 4): Uncus intermediately developed. Tegumen moderately long. Valva rather ample, strongly restricted at near middle, the distal part being largely expanded somewhat like usual cucullus, covered with corona diffused at about apical half; ventral margin of sacculus well bulged. Aedoeagus with no modification at apex, cornutus a single small spine.

Larval characters as described for the genus.

*Stenoloba jankowskii* (Oberthür, 1884). Etude Ent., **10**: 28 [*Dichagyris*]; =

*nivilinea* (Leech, 1889), Proc. zool. Soc. Lond., **1888**: 638 [*Edema*]. Ussuri and Japan.

A largest species with somewhat narrower wing. Male genitalia (Fig. 5): Uncus most rudimentary. Tegumen short. Valva rather thicker, with a minute pollex on lateral surface at near dorsal margin just before apex, corona of a few fine setae at extremity. Aedoeagus rather thick, well sclerotized and scobinate dorso-apically; cornutus a stout thorn-like spine.

*"Moma" confusa* Leech, 1889, Proc. zool. Soc. Lond., **1889**: 480, inserted to *Stenoloba* by Hampson in the addenda of the same volume of his catalogue, must be removed, requiring a new genus.

**Lophonycta** gen. nov.

Type-species: *Moma confusa* Leech, 1889.

Externally nearly identical with *Stenoloba.* Body is much stouter built. Prothorax smoothly scaled, without raised crest. Abdomen with dorsal series of crests at basal six or more segments, those on 1st and 4th being largest.

Male genitalia (Fig. 6). Uncus well developed, highly elevated and ridged dorsally, the apex minutely hooked. Tegumen moderate. Valva highly asymmetrcal and much complicated, actually with no usual inner armature; costa at basal part largely expanded dorsad, its distal branch finger-like and highly elongated at right side but less developed at left; valva proper well sclerotized, tapered apically and ending in a dilated apex in left side, while it is in right slightly shorter, not markedly dilated at apex, but is heavily produced dorsad into a flattened expansion. Saccus short; juxta somewhat U-shaped. Aedoeagus short and thick, containing some thirty of slender spines and of small bulbed ones.

The genus contains a sole species. In the male genitalia *confusa* has nothing in common with species of *Stenoloba,* but exact position of this new genus is very obscure. Perhaps it will be solved by studying its immature stages in future.

The following genus is not directly concerned with the subject of this paper, but it is also an ally to the genus *Cryphia* in East Asia, standing unrevised by recent authors. On this occasion the genus will be redescribed to make its position clear.

**Bryomoia** Staudinger, 1892

Type-species: *Bryomoia melachlora* Staudinger, 1892.

Generally much slenderly built. Proboscis rudimentary. Palpus finely scaled, third segment being shorter than in *Cryphia*; antenna ciliated, the ciliation longer than in most of *Cryphia* (s. str.) but as equal as in *C.* (*Bryoleuca*) *granitalis*; head and thorax more smoothly scaled; abdomen with dorsal crests distinct, those on 3rd and 4th segments being larger. Forewing with apex slightly acuter than in *Cryphia.*

Male genitalia (Fig. 7). Uncus well developed. Tegumen moderate. Valva simple, narrow and smoothly tapered to apex, without corona ; harpe well developed, extending dorsad far beyond costal margin ; sacculus much reduced. Aedoeagus moderately long, containing a number of fine spinous setae.

The male genitalia are something more related to certain species of *Apatele* proper than *Cryphia*. The early stages are unknown. One species is included.

## Reference

Beck, H. 1960. Larvalsystematik der Eulen (Noctuidae), 72-73, 320-324.

Boursin, Ch. 1951. Eine neue *Cryphia* Hb. (*Bryophila* auct.) aus Ost-Asien. Zeit. wien. ent. Ges., **36**: 155-158.

—— 1961. Drei neue paläarktisches *Cryphia* Hb.-Arten. Zeit. wien. ent. Ges., **46**: 139-144.

Hampson, G. F. 1910. Catalogue of the Lepidoptera Phalaenae in the collection of British Museum, **10**: 366-370, 799-800.

Inoue, H. & S. Sugi, 1957. On the genera *Cymatophoropsis* Hampson and *Trispila* Houlbert (Lepidoptera, Noctuidae). Trans. lep. Soc. Japan, **8**: 19-22.

Staudinger, O. 1892. Die Macrolepidopteren des Amurgebiets. I Theil. Rhopalocera, Sphinges, Bombyces, Noctuae. In Romnoff, Mém. sur Lép., **6**: 381-382, 397-398.

Yamamoto, Y. 1958. Morphology on immature stages of fungivorous and lichenophagous Noctuidae from Japan. New Entom., **7** (2/3): 15-38.

—— 1965. Early stages of Japanese moths in colour, **1**: 68-71, pl. 23.

## 摘　　要

属 *Stenoloba* Staudinger の一種である *S. manleyi* (Leech) の幼虫は，山本義丸(1958)によつて発見記載され，幼生期の形態や生活様式などから，同種は疑いもなくいわゆるキノコヨトウのなかま *Cryphia* Hübner に近縁であることが指摘された．私は，手もとにある日本産の *Stenoloba* とその周辺群を調べ，Hampson の定義した属 *Stenoloba* は明かに自然群であること，従来 *Cryphia* とされていた *assimilis* Warren は *Stenoloba* に移さねばならないこと，属 *Stenoloba* はやはり *Cryphia* の近くに位置するものであることを本文で報告した．ただし，*confusa* Leech については新たに新属 *Lophonycta* を設定した．なお *Stenoloba* に属する4種の和名を次のとおり提唱したい．

*Stenoloba clara* (Leech)　ウスアオキノコヨトウ（改称）

*S.* *oculata* Draudt　ヘリボシキノコヨトウ（改称）

*S.* *manleyi* (Leech)　ウンモンキノコヨトウ（改称）

*S.* *jankowskii* (Oberthür)　シロスジキノコヨトウ（改称）