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A new West-Palaearctic genus and species, externally similar to *Stenolechia gemmella*, with taxonomical notes on related genera (Lepidoptera: Gelechiidae)

Nový západopalearktický rod a druh, habituelně podobný druhu *Stenolechia gemmella* a taxonomické poznámky k příbuzným rodům (Lepidoptera: Gelechiidae)

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Taxonomy, nomenclature, new synonymy, new combination, revision of types, Lepidoptera, Gelechiidae, *Stenolechiodes pseudogemmellus* gen. n., sp. n., Palaearctic region

Abstract. *Stenolechiodes pseudogemmellus* gen. n., sp. n. from Central and South Europe and Asia Minor is described and compared with externally similar and well known *Stenolechia gemmella* (Linnaeus, 1758). Specifical generic characters are stated and illustrated. Adults, wing venation and genitalia are described and illustrated together with other related palaearctic genera *Chorivalva* Omel'ko, 1988, *Parastenolechia* Kanazawa, 1985 and *Parachronistis* Meyrick, 1925. The subgenus *Origo* Omel'ko, 1988 is synonymized with *Parastenolechia* Kanazawa, 1985; a new combination, *Parastenolechia nigrinotella* (Zeller, 1847) is proposed. Lectotype of *Lita nigrovittella* Duponchel, [1839] is designated.

INTRODUCTION

In the second half of May 1982 I captured a female moth which I originally considered to be *Stenolechia gemmella*. The hindwing of this specimen differed from those I collected in August and September at several Czech and Slovak localities. The study of the genitalia and wing venation showed clearly that a different species is involved. Study of other material from the National Museum in Prague and from private collections revealed that all specimens taken in July - September belonged to the species usually identified as *Stenolechia gemmella* in contrast with specimens collected during the spring months representing an entirely different species.

Abbreviations of institutions:

BMNH - Natural History Museum, London.
MNHN - Muséum national d'Histoire naturelle, Paris.
NMPC - National Museum, Praha.
MIOJ - Osaka Museum of Natural History.
TLMF - Tiroler Landesmuseum Ferdinandeum, Innsbruck.
ZMUC - Zoologisk Museum, University of Copenhagen.

The terminology for the genitalia structures used in this paper follows Omel'ko (1988) excepting the term „cucullus" used by Omel'ko for costal process of valve in male genitalia.

ACKNOWLEDGEMENTS. I wish to express my thanks to Mr. Itaru Kanazawa, MIOJ for kindly sending me reprints of his papers. I am also indebted to Dr. Klaus Sattler, BMNH for his information on the type specimen of *S. gemmella* and *G. lepidella*. My cordial thanks are due to Dr. Gérard Christian Luquet, MNHN for kind loaning the lectotype of *Lita nigrovittella*. And I feel deeply indebted to Dr. František Krampl, CSc., NMPC for kindly loaning specimens for my study. Further specimens were offered to me by the following collectors: Doc. Dr. Jan Patočka, CSc., Mr. Milan Janovský, Mr. Vladimír Elsner, Ing. Jan Skyva, Ing. Miloslav Petrů and Dr. Ing. František Gregor, CSc. I am grateful to Dr. Peter Huemer, TLMF and Mr. Ole Karsholt, ZMUC for

the information on additional material. Prof. Dr. Ing. Dalibor Povolný, DrSc., offered me additional literature and versatile help. Important information on lectotype of *G. lepidella* were provided by Dr. M. Shaffer, BMNH. I am very thankful also to Dr. David J. Agassiz for the valuable literature data.

SYSTEMATIC PART

Stenolechiodes gen. n.

Type species. *Stenolechiodes pseudogemmellus* sp. n.

Derivato nominis. The name is derived from well known generic name *Stenolechia*, the type species of which is externally very similar. Gender masculine.

Description. Head and tegula covered with loosed scales. Mesoscutellum covered with raised scales. Ocellus absent. Proboscis well developed, squamose to 2/3. Antenna filiform, slightly serrate distally, about 3/5 length of forewing, dark brown and thick (0.074 mm in males) or distinctly ringed and slender (0.043 mm in females). Basal segment white. Labial palpus: The terminal segment slightly shorter than the medial one. The medial segment smoothly scaled, about twice thicker than the terminal one. Male abdomen: 8th tergite small, slightly sclerotized, covered by minute spines; 8th sternite of tegumen length, strongly sclerotized with a deep caudal emargination, laterobasally without hair brushes. Both sclerites fused laterodorsally and form the genitalia case (Fig. 13). The androconial hair-like scale-tuft situated between 2nd and 3rd tergite. Legs: Hind tibia dorsally with long hairs. In forewing (Fig. 7) R_1 arises from middle of costa, R_4 and R_5 are stalked, R_5 reaches costa. M_1 arises from common stalk of R_{4+5}. Cu_{1a} and Cu_{1b} present. Hindwing without short section of R_1, $Sc+R_1$, terminate at about 1/2 of costa. Rs parallel to $Sc+R_1$ and ending costally near apex. M_1 from Rs, M_2 basally indistinct, M_3 from Cu_1. Discal cell open, only anterior part of discocellular cross vein discernible. Forewing whitish with black pattern, length 3.3 - 5.8 mm. Hindwing elongate-trapezoidal, apex produced, pointed, termen emarginate.

Male genitalia. Tegumen slender, covered caudally with tiny spines, basal half emarginate. Uncus spatulate, in lateral view distinctly separated from tegumen (Fig. 16), with sparse lateral spines toward posterior margin. Gnathos straight, formed by two sclerotized ledges terminated by a densely spinose oval apical part. The costal processes of valves form strongly sclerotized straight rods , apically pointed. Their globate dilatations fused basally. The valvella slightly sclerotized, elongate, distal half covered by sparse setae, basally bulbous (Fig. 12). Vinculum laterally membranous, lateroventrally with a pair of rounded, plate-shaped, well developed saccular-processes. The outer margin of aedeagal fulcrum elongate, terminally setose. The digitate saccus strongly sclerotized (Figs 11, 16). Aedeagus without cornutus, long, slightly arcuate in lateral view, basally robust clavate, ventroproximal part of subzonal sheath fusing with anterior part of saccus (Fig. 16).

Female genitalia (Figs l8, 19). Generally very fine, poorly sclerotized. Ostium bursae funnel-shaped, membranous, thinly wrinkled, situated on posterior margin of 7th sternum; ductus bursae narrow, much longer than corpus bursae, distal fourth sclerotized, posteriorly, at one third ductus seminalis arises; corpus bursae oval, membranous without signum. 8th abdominal segment medially membranous, divided into lateral sclerites, each with several setae at posterior margin, sometimes with a small cavity at apophyse base. Apophysis posterior twice as long as apophysis anterior.

Differential diagnosis. *Stenolechiodes* gen. n. differs substantially from *Chorivalva* Omel'ko, 1988, *Parastenolechia* Kanazawa, 1985, and *Stenolechia* Meyrick, 1894 through wing venation, 8th abdominal segment in males and through genitalia of both sexes. Two latter genera distinguish in androconial organs. (See Tab. 1.). Moreover *Stenolechiodes* gen. n. also differs conspicuosly from *Parachronistis* Meyrick, 1925 through external characters and structure of male and female genitalia (Figs 17, 22, 23).

***Stenolechiodes pseudogemmellus* sp. n.**
(Figs 3, 4, 5, 7, 11, 12, 13, 16, 18, 19)

Stenolechia gemmella: Gozmány, 1958: p. 256, fig. 126 A.

Derivatio nominis. Due to the tiny differences in external characters compared with *Stenolechia gemmella*.

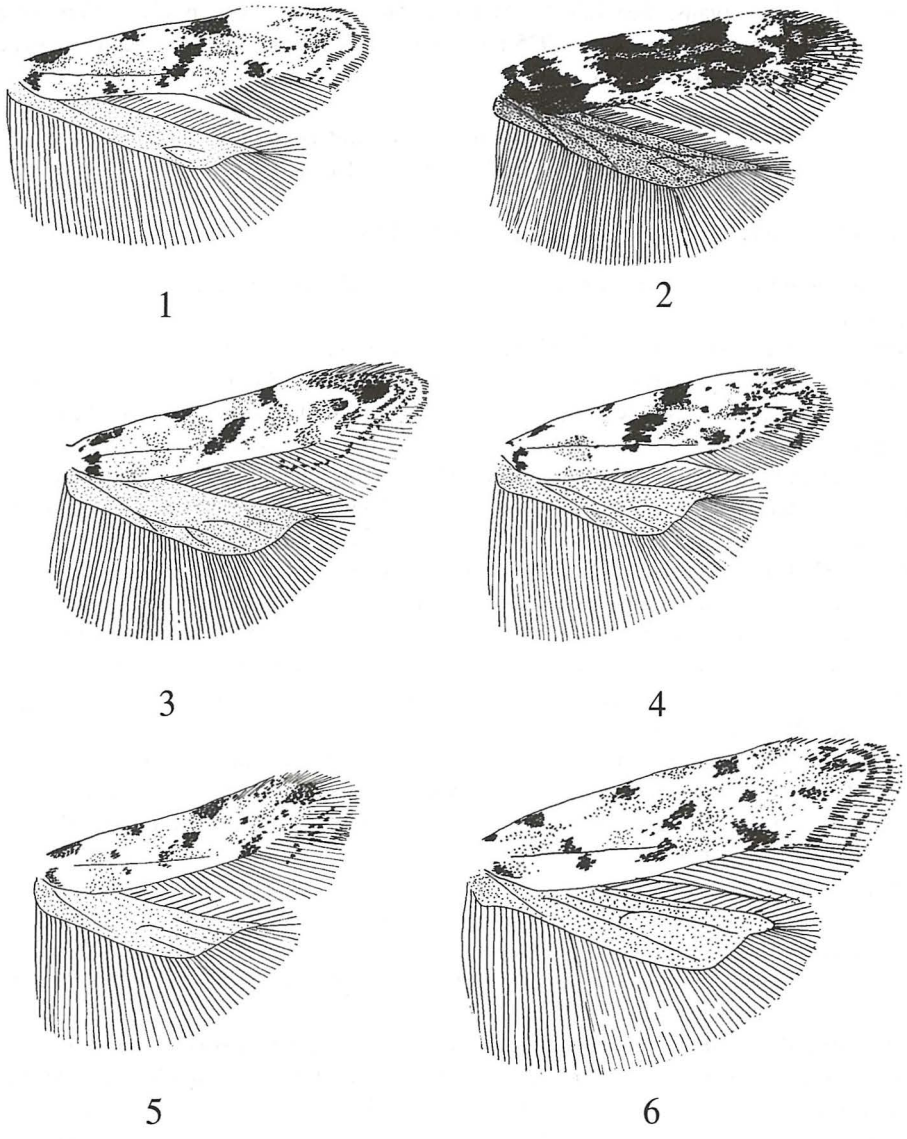
Description. Small-sized between Gelechiini, length of male forewing 4.5-5.8 mm, female forewing 3.9-5.8 mm in first generation from central Europe and 3.8 mm (♂) or 3.3-3.8 mm (♀) in second generation from Montenegro and Greece. Morphological structures described in generic characters. Head and tegula covered with white-rusty scales. Thorax whitish with a dark cross stripe. The terminal segment of labial palpus white having two black rings and a black tip. The medial one white, with two black ringlets, base dark. Abdominal segments dorsally greyish, ventrally ochreous. Fore- and midlegs dark brown with white ringlets on tibia. Forewing ground colour whitish, pattern consists of three black spots on costal margin (at base, 1/3, before 2/3) and 2 black spots on dorsal margin (at base, and at tornus) . On the apex a prolonged black stain; there is a black oblique stripe below the third costal spot, parallel to the termen, never reaching dorsum. Rusty-brown scales are scattered on forewing white surface. Cilia grey, containing two dark lines, the interior one consisting of black-white scales.Hindwing (length/width 4.5-5.3) greyish-brown including cilia (Figs 3-5).

Male genitalia. Basal part of tegumen emarginate to halfway. Uncus slender, distally spinose, rounded in ventral view. The costal process of valve slightly longer than valvella, reaching 4/5 of tegumen length. The aedeagal fulcrum equal to saccus in length, 1.5 times exceeding the saccullar process (Figs 11, 12, 16).

Female genitalia. Ductus bursae narrow, more than twice as long as corpus bursae, distal fourth discernibly sclerotized, the remaining part membranous; anteriorly of sclerotized part ductus seminalis arises. Corpus bursae oval, membranous without signum. Anterior end of apophysis posterior drop-shaped. Ovipositor relatively robust, lobus analis longer than corpus bursae (Fig. 18). Further characters of genitalia are given in the generic description.

Differential diagnosis. *S. pseudogemmellus* gen. n., sp. n. can be easily distinguished from externally very similar *S. gemmella* by the hind wing, length/width ratio of which is in average 5.0 in *S. pseudogemmellus* and about 7.5 in *S. gemmella* (Figs 1, 3-5). Both species strikingly differ through the structure of male and female genitalia (Figs 11, 12, 14, 16, 18, 19, 20 21). The other external character separating both species is the forewing pattern, namely the middle cross-stripe, in *S. pseudogemmellus* gen. n. sp. n. it never reaches the dorsal margin, in *S. gemmella* indistinctly prolonged to dorsum and sometimes continually proceeding along the dorsal margin toward the base.

Variation. Forewing pattern and coloration, as well as genitalia of both sexes are little varying. The seasonal dimorphism is probably strongly pronounced by smaller size of aestival moths.



Figs 1-6. Wing pattern. 1 - *Stenolechia gemmella*, Czech Republic (Bohemia), Srbsko; 2 - *Parachronistis albiceps*, Czech Republic (Bohemia), Rokycany; 3-5 - *Stenolechiodes pseudogemmellus* sp. n. - various specimens from Slovakia: 3, 5 - Čifáre, 4 - Mikulášov; 6 - *Parastenolechia nigrinotella*, Slovakia, Štúrovo.

Obr. 1-6. Kresba křídel. 1 - *Stenolechia gemmella*, Česká republika (Bohemia), Srbsko; 2 - *Parachronistis albiceps*, Česká republika (Bohemia), Rokycany; 3-5 - *Stenolechiodes pseudogemmellus* sp. n. - různé exempláře ze Slovenska: 3, 5 - Čifáre, 4 - Mikulášov, 6 - *Parastenolechia nigrinotella*, Slovensko, Štúrovo.

Type material. Holotype: Czech Republic (Bohemia): České středohoří-hills, Tlučeň (5450)*), 2.v.1975, ♂ ,F. Krampl lgt., coll. NMPC. Holotype not dissected.

Paratypes: **Poland:** Brzoza Bydg. (53°02'N; 18°01'E), 12. v. 1984, 1♀, J. Buszko lgt., coll. ZMUC; **Czech Republic:** (Bohemia sept.): Salesel a. Elbe bei Aussig [=Zálezly] (5450), 6.v.1938, 1 ♂, Zimmermann lgt., coll. NMPC; (Bohemia sept.): Brná nad Labem (5350), 1.v.1975, 1 ♂ , F. Krampl lgt., coll. NMPC; (Bohemia sept.): Velemín (5449), 12.v.1990, 1 ♀, 26.5.1989, 3 ♀♀, G. Elsner lgt, coll. BMNH, MNHN, MIOJ; (Bohemia centr.): Praha-Podhoří (5852), 29.iv.1937, 1 ♂, Vlach lgt., coll. NMPC; (Bohemia centr.): Praha-Trója (5852), 3.v.1950, 1 ♂, Vlach lgt., coll. NMPC; (Bohemia centr.): Praha-Prokopské údolí (5952), v.1934, 1 ♀, Vlach lgt., coll. NMPC; (Bohemia centr.): Praha-Bohnice (5852), 14.v.1988, 1 ♀, G. Elsner lgt. et coll.; (Bohemia centr.): Milovice (5755), 19. v. 1993, 1 ♀, G. Elsner lgt. et coll.; (Moravia or.): Buchlovice (6969), 29.iv.1979, 1 ♂, M. Janovský lgt. et coll.; (Moravia mer.): Bořetice (7067), 19.v.1978, 1 ♀, F. Gregor lgt. et coll.; (Moravia mer.): Valtice (7266), 9.v.1980, 1 ♂, J. Skyva lgt. et coll.; (Moravia mer.): Lednice (7053), 8.v.1980, e.l. 1 ♀, M. Petrů lgt. et coll.; (Moravia mer.): Hodonín-Pánov (7168), 11.v.1995, 2 ♂♂, 9 ♀♀, G. Elsner lgt. et coll.; **Slovakia:** Mikulášov (7469), 20.v.1982, 1 ♀, G. Elsner lgt. et coll; Čifáre (7776), v.1974, 2 ♂♂, J. Patočka lgt. et coll.; Pustá Ves (7371), 1. v. 1992, 1♂, 4 ♀♀, V. Elsner lgt. et coll. **Austria:** (Burgenland): Kohfidisch, 8.iv.1961, 1 ♂, Malicky lgt., coll. TLMF; (Niederösterreich): Neusiedel a. d. Zaya, 1.v.1987, 1♂, Lichtenberger lgt., coll. TLMF.; **Germany:** (Bayern): Hirschgarten, 520 m, v. 1968, 1♀, Zürnbauer lgt., coll. TLMF; (Württemberg): Bissingen/Enz, Friedenseiche, 9.iv.1991, 1 ♀, Süssner lgt., coll. TLMF; Slovenia: Ajdovsnica, Lokavec, 200m, 1.-9.v.1970, 1 ♀, coll. TLMF; **Italy:** (South Tyrol): Montiggl, Gr. Pirol, 600 m, 14.v.1993, 3 ♀♀, P. Huemer lgt., coll. TLMF; (Prov. Verona): Monte, 300 m, 1♂, Cerny lgt., coll TLMF; **Montenegro** (Yugoslavia): Buljarica (42°12'N; 18°58'E), 3.vii.1985, 1 ♂,1 ♀, G. Elsner lgt. et coll.; **Greece:** Ev., 30 km M. Alexandropolis, Kirki, 100 m, 7.vii.1995, 1 ♀, lgt. B. Skule & P. Skou, coll. ZMUC; **Turkey:** (Hakkari): Tanin Daglari 1250 m (37°17'N;27°48'E), 23.iv.1987, 1 ♂, Schreier lgt., coll. Derra.

Phenology and biological remarks. The specimens were captured at light or when sitting on oak trunks by day exclusively in oak forests with dominancy of *Quercus robur* L. and *Q. pubescens* Willd. Specimens rest on bark with head turned downwards, the author also observed a female flittering at bark of an old oak tree. One female was reared by M. Petrů from an oak sprig together with *Phyllonorycter* spp. This confirms the close affinity of *S. pseudogemmellus* gen. n., sp. n. with oak. Only one (spring) generation in central Europe was observed. But two extremely small specimens (length of forewing 3.3 and 3.8 mm) belonging most probably to the second generation were captured by the author, on 3.vii. in Buljarica (coast of Montenegro, where other thermophilous oak species occur). Further summer records come from Italy and Greece (P. Huemer and O. Karsholt in litt.)

Distribution. Central and south-eastern Europe and Asia Minor.

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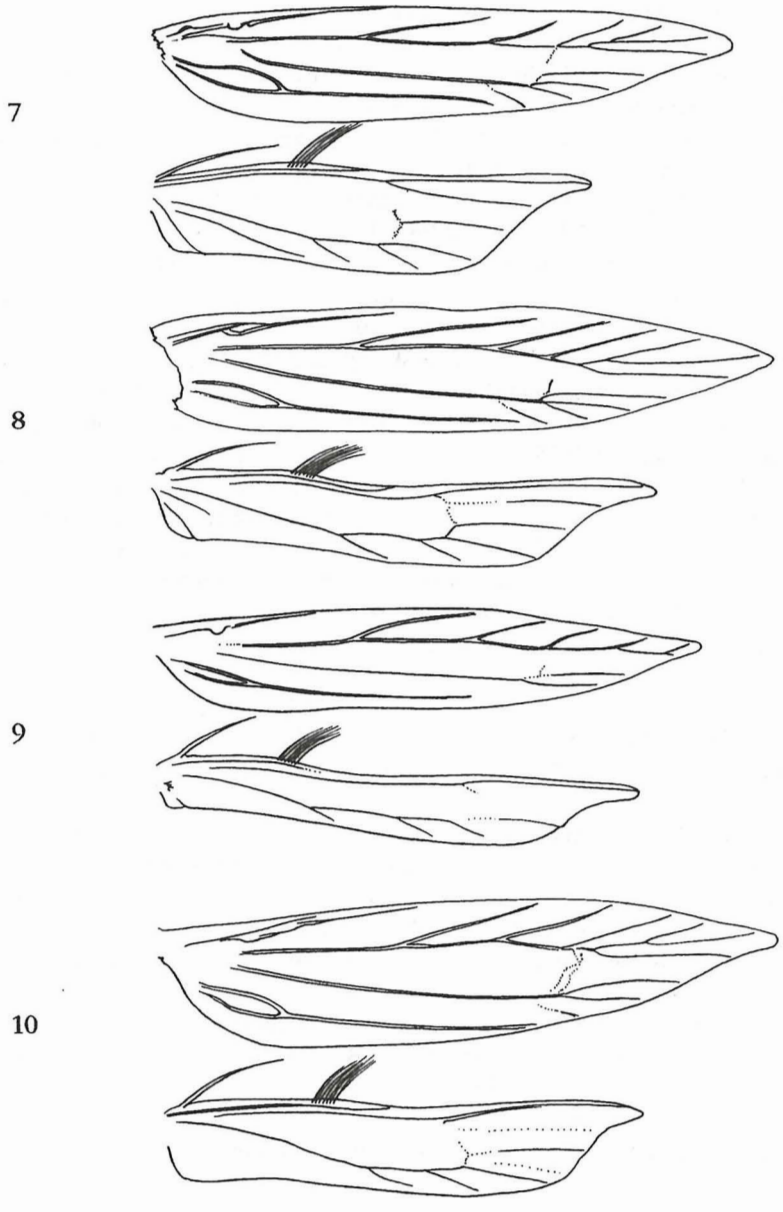
*) Numbers in brackets given in localities from the Czech Republic and Slovakia correspond with international grid-mapping system which is recommend for publishing Faunistic Records (Novák 1989).



Figs 7-10. Wing venation . 7 - *Stenolechiodes pseudogemmellus* sp. n., Slovakia, Domaníky; 8 - *Parachronistis albiceps*, Czech Republic, Rokycany; 9 - *Stenolechia gemmella*, Czech Republic, Srbsko; 10 - *Parastenolechia nigrinotella*, Montenegro, Buljarica.

Obr. 7-10. Žilnatina křídel. 7 - *Stenolechiodes pseudogemmellus* sp. n., Slovensko, Domaníky; 8 - *Parachronistis albiceps*, Česká republika, Rokycany; 9 - *Stenolechia gemmella*, Česká republika, Srbsko; 10 - *Parastenolechia nigrinotella*, Černá Hora, Buljarica

Chorivalva Omel'ko, 1988
(Figs 26, 27, 28, 29)

Chorivalva Omel'ko, 1988: 143. Type species: *C. unisaccula* Omel'ko, 1988.
Neochronistis Park, 1989: 162. Type species: *N. hodgesi* Park,1989 (synonymized by Park (1991)).

Medium sized among Gelechiinae. Ground coloration blackish (Fig. 28). In forewing discal cell closed, M_1 from discocellular cross vein. In hindwing M_1 absent (Fig. 29). Androconial hair-like scale tufts situated between 2nd and 3rd tergite. Genital case with lateral hair tufts well developed (Park 1994). In male genitalia the valve-costal processes fused basally, valvella long and slender, aedeagal fulcrum long and recurved,its distal third setose. The gnathos terminated with median acute projection. Aedeagus thick, with cornutus. Its ventroproximal part of subzonal sheath fused with anterior part of saccus. In female genitalia ductus bursae very short, bursa copulatrix cucumiform or bisaccular (Fig. 27).

Remarks. The genus *Chorivalva* comprises only three species - *C. unisaccula*, *C. bisaccula* and *C. grandialata*, all described by Omel'ko (1988). Park (1994) reports *C. unisaccula* and *C. bisaccula* from the Korean peninsula and discusses the taxonomic significance of androconial scale-tufts between the 2nd and 3rd abdominal segment in *Chorivalva* and *Parachronistis* (but - followed Omel'ko, 1986 - situated it errorneously between the 1st and 2nd abdominal segment).

For present study no material of this genus was available.

Differential diagnosis. The genus *Chorivalva* differs from its relatives in having cornutus in male genitalia, further differences see Tab. 1 and Figs 26, 27, 28, 29.

Distribution. Far East: Southern Maritime Territory of Russia, Korean peninsula.

Stenolechia Meyrick, 1894

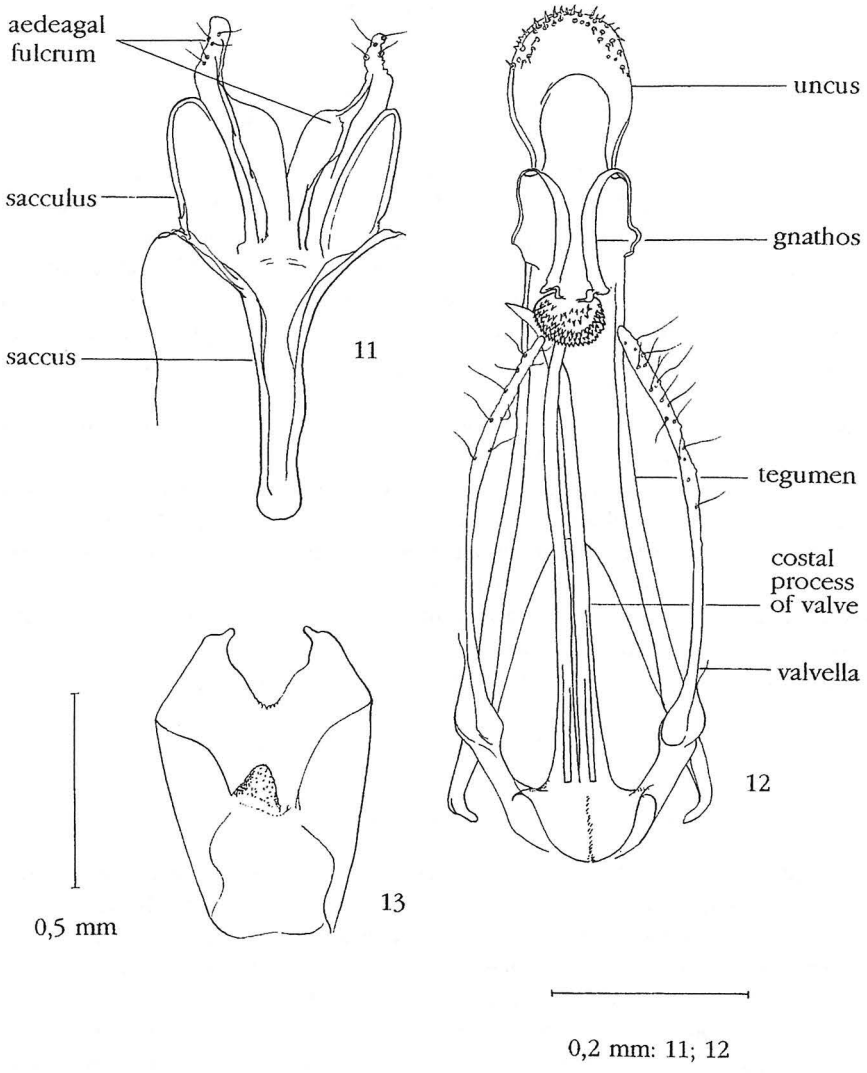
Stenolechia Meyrick, 1894: 230 (objective replacement name for *Poecilia* Heinemann, 1870, nomen praeocc.). Type species: *Phalaena (Tinea) gemmella* Linnaeus, 1758: 539, by subsequent designation: Meyrick 1925: 51.

Small-sized moths having the white to whitish ochreous forewing marked with scattered dark spots, and two dark rings on the terminal segments of palps. Head smoothly scaled. proboscis well developed. Antenna about 4/5 of the forewing, in male simple; scape moderate, without pecten. Labial palpus long recurved; 2nd segment covered with appressed scales above, hardly rough ones beneath; 3rd segment shorter than 2nd, slender and acute. Maxillary palpus very short, filiform, appressed to proboscis. Hind tibia clothed with hair-like scales above. In forewing R_1 from middle, R_4, R_5 and M_1 from a common stalk, R_5 to costa, M_2 rather approximated to Cu_{1a}; M_2 and Cu_{1b} absent, Cu_1 from angle. Hindwing narrow trapezoidal, apex acute and produced, termen usually emarginate; Rs and M_1 nearly parallel, M_2 curved and rather approximated to M_3; M_3, Cu_{1a} and Cu_{2b} remote and parallel .

Male abdomen. Androconial scale tuft is either situated in the fold between the 3rd and 4th tergite (S. *gemmella*), or absent in some Japanese species (Park 1994). Eighth tergite much reduced, divided in two tiny lobate sclerites densely spinulated or absent. The weakly sclerotized eight sternite usually shorter than tegumen, its posterior edge regularly slightly emarginated.

Male genitalia. Tab. 1., Fig. 14 (anterior end of saccus is normally fused with subzonal sheath of aedeagus, on Fig. 14 aedeagus removed).

Female genitalia. Tab. 1., Figs 20, 21.

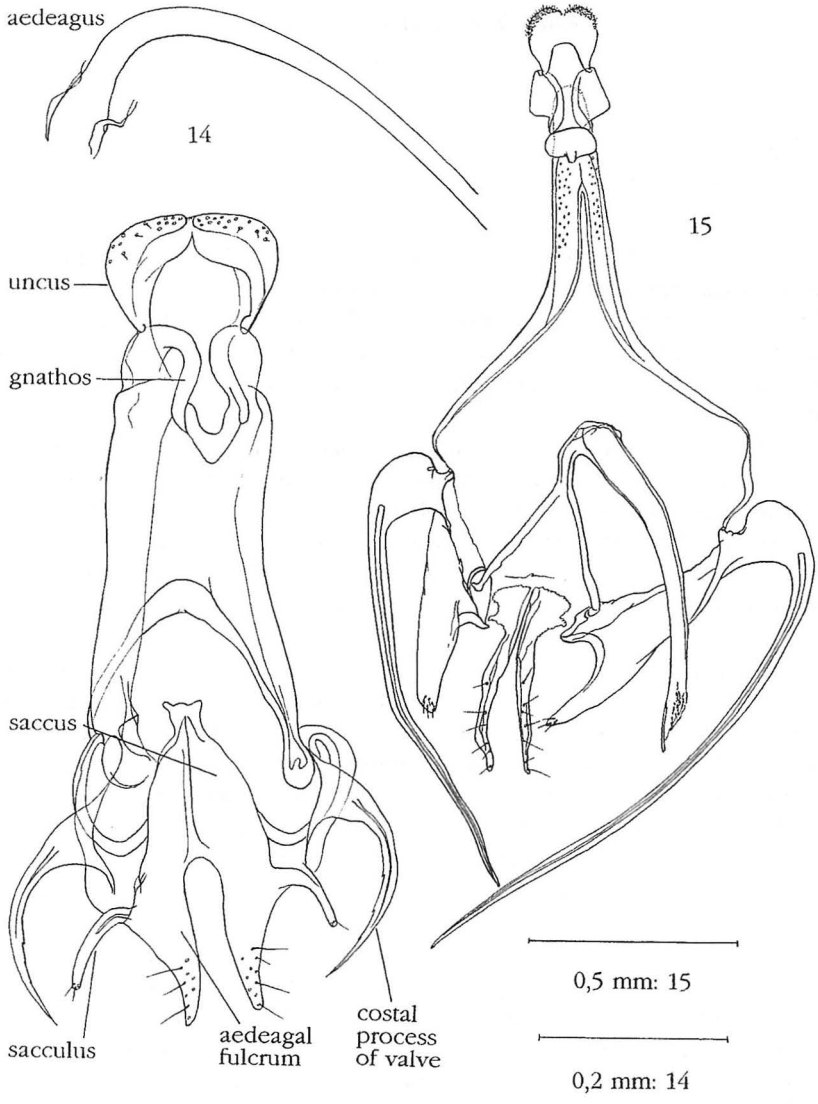


Figs 11-13. 11-12 - Male genitalia of *Stenolechiodes pseudogemmellus* sp. n. 11 - saccus, sacculi and aedeagal fulcrum, 12 - uncus - tegumen complex with gnathos, valve-costal processes and valvella. 13 - 8th abdominal segment (genitalia case) of *S. pseudogemmellus* sp. n. in dorsal view. All Slovakia, Domaníky.

Obr. 11-13. 11-12 - Samčí kopulační ústrojí *Stenolechiodes pseudogemmellus* sp. n. 11 - saccus, sacculi a opěra aedeagu, 12 - uncus-tegumen komplex, gnathos, kostální výběžek valvy a valvella. 13 - *S. pseudogemmellus* sp. n. - dorsální pohled na. 8. abdomenální segment (pouzdro kopulačního ústrojí). Vše Slovensko, Domaníky.

Remarks. *Stenolechia*, in Europe represented only by the type species *S. gemmella*, is well differentiated and defined gelechiine genus. A number of species were described from Asia, especially from Far East. The Japanese species have been recently revised by Kanazawa (1984), but *S. gemmella* unfortunately has not been included. As some species show relatively conspicuous dif-

ferences, they were placed in three distinct species-group, all essentially fit to the genus *Stenolechia*. Describing the genus *Stenolechiodes* gen. n., externally very similar to *Stenolechia*, the type species *S. gemmella* was studied in detail and compared with the new species.



Figs 14-15. Male genitalia. 14 - *Stenolechia gemmella* (lectotype of *Lita nigrovittella*, teste P. Leraut, prép. No 1414 „nigrovittella D." „Duponchel", „2000"), Lithuania; 15 - *Parastenolechia nigrinotella* comb. n., Montenegro, Buljarica. Figs 14 and 15 in an unusual position.

Obr. 14-15. Samčí kopulační ústrojí. 14 - *Stenolechia gemmella* (lectotypus *Lita nigrovittella*, teste P. Leraut, prép. No 1414 „nigrovittella D." „Duponchel", „2000"), Litva; 15 - *Parastenolechia nigrinotella comb.* nov., Černá Hora, Buljarica. Obr. 14 a 15 v neobvyklé poloze.

Differential diagnosis. The genus *Stenolechia* differs from all its relatives in having well developed 8th sternite in females. Other differences see Tab. 1.
Distribution. Europe and Asia to the Far East and Japan.

Stenolechia gemmella (Linnaeus, 1758)
(Figs 1, 9, 14, 20, 21)

Phalaena (Tinea) gemmella Linnaeus, 1758: 539.
Stenolechia gemmella: Meyrick, 1925: 51.
Alucita nivella Fabricius, 1794: 335.
Lita nigrovittella Duponchel, [1839]: 315.
Gelechia lepidella Zeller, 1839: 202.

Small-sized among Gelechiini, length of male forewing 3.6-5.3 mm, female forewing 3.9-5.5 mm. Morphological structures given in generic characters.

Head and tegula covered with white-rusty scales. Thorax whitish with a dark cross strip. The terminal segment of labial palpus white with two black rings and usually white tip. Basal half of the median segment dark, distal white with a black ringlet. Abdominal segments dorsally greyish, ventrally ochreous. Fore- and midlegs dark brown with white ringlets on tibia. Forewing ground colour whitish, pattern consists of three black spots on costal margin (at base, 1/3, before 2/3) and 2 black spots on dorsal margin (at base, and at tornus) . On the apex sometimes a small black stain and below the third costal spot a black oblique stripe parallel to the termen, indistinctly prolonged to dorsum and sometimes proceeding along it toward the base of wing. Rusty-brown scales are scattered on forewing white surface. Cilia grey, containing two dark lines, the inner consisting of black-white scales. Hindwing (length/width 7.2-8.6) greyish-brown including cilia (Fig. 1).

Male genitalia. Tegumen rather thick, basal part emarginate to 1/3. Uncus wide, distally spinose, rounded in ventral view, with small excision in the middle of caudal margin. Gnathos as long as uncus, lateral sclerites approximated medially, median sclerit subtriangular in dorsal view, with distal projection recurved ventrally. Basal third of costal process of valve bulbous, distal part strongly incurved ventrally; The distal part in the lectotype distinctly serrate but in other specimens mostly smooth. Sacculus digitate, strongly sclerotized, curved ventrally; apically setose. Process of aedeagal fulcrum triangular, distally setose. Saccus robust, cup-shaped, anterior part tightly fused with subzonal sheath of aedeagus. Aedeagus recurved, slender, without cornutus. (Fig. 14).

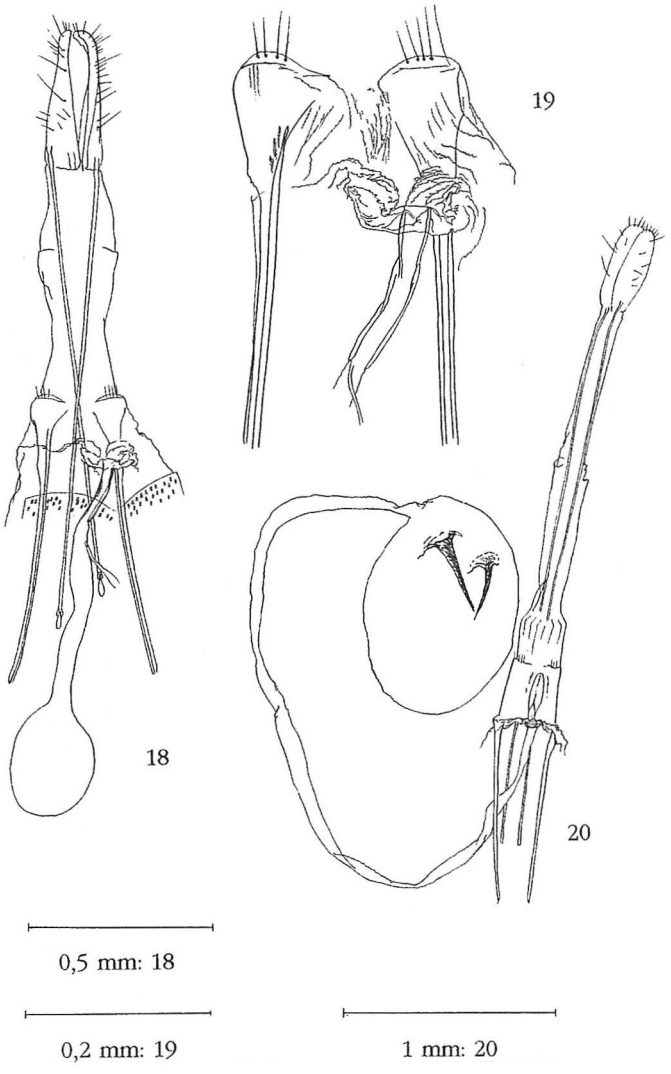
Female genitalia. Eight tergite long and rather slender, strongly sclerotized but medially membranous; eight sternite small cone-shaped , well sclerotized (Fig. 21). Ostium bursae situated at anterior margin of 8th abdominal segment (Fig. 21); ductus bursae slender, membranous, 3 times as long as oval corpus bursae; antrum weakly sclerotized. Signum consists of a pair of big spines. Apophysis posterior very long, more than 3 times as long as apophysis anterior (Fig. 20).
Taxonomic remarks. The species *Stenolechia gemmella* is based on the Linnean type deposited in the Linnean Society, London. The type-specimen was examined and as lectotype designated by Robinson & Nielsen (1983): „Linnaeus: 1 ♀ with pupa, glued to paper square with /in ramis querci/ in (?) Linnaeus's hand, labelled */gemmella/* [by Linnaeus] */gemmella* 894/ [by Smith]." It appeared impossible to dissect the genitalia of the lectotype without risking its damage.

Type-material of *Alucita nivella* described from England, is probably lost (Sattler in litt., 1984). One syntype of *Lita nigrovittella* was examined at present and here designated as lectotype (Fig. 14) (deposited in MNHN). The lectotype of *Gelechia lepidella* without locality label is deposited in BMNH. In original description two localities are given: Germany, Frankfurt (July) and Glogau [=Glogów] at present Poland, (August).

Figs 16-17. Male genitalia, ventro-lateral view. 16 - *Stenolechiodes pseudogemmellus* sp. n., Slovakia, Domaníky; 17 - *Parachronistis albiceps*, Czech Republic, Praha.
Obr. 16-17. Samčí kopulační ústrojí, ventrolaterální pohled. 16 - *Stenolechiodes pseudogemmellus* sp. n., Slovensko, Domaníky; 17 - *Parachronistis albiceps*, Česká republika, Praha.

The author believed that the lectotype of *S. gemmella* originates from northern Europe and represents the species occurring abundantly in the summer in central Europe being conspecific with *Lita nigrovittella*.

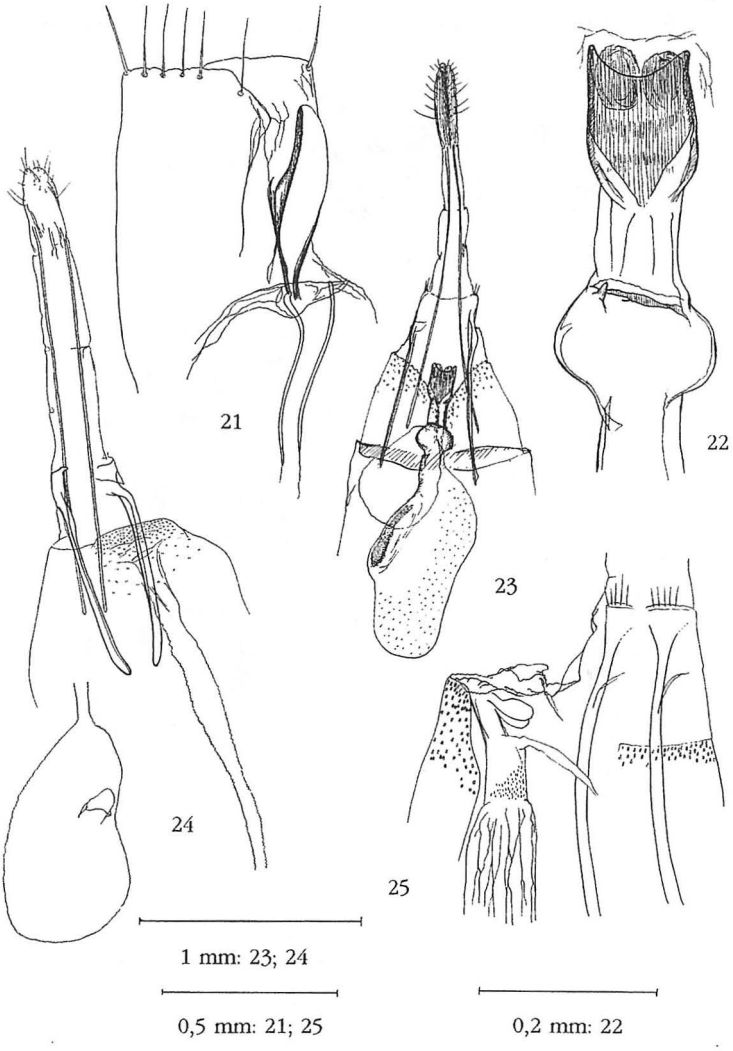
Material examined. Lithuania: here designated Lectotype of *Lita nigrovittella*, ♂, teste P. Leraut, prép. No 1414 „nigrovittella D." „Duponchel", „2000", coll. MNHN. **Sweden:** Göteborg, viii.1933, 1 ♀, 19.viii.1935, 1♀,; Utbynäs, 14. viii.1935, 2 ♀, all in coll. NMPC. **Czech**



Figs 18-20. Female genitalia. 18-19 - *Stenolechiodes pseudogemmellus* sp. n., Czech Republic, Milovice: 18 - total view, 19 - detail of ostium bursae-area; 20 - *Stenolechia gemmella*, total view, Czech Republic, Srbsko .

Obr. 18-20. Samičí kopulační ústrojí. 18-19 - *Stenolechiodes pseudogemmellus* sp. n., Česká republika, Milovice: 18 - celkový pohled; 19 - oblast ostium bursae - detail; 20 - *Stenolechia gemmella*, celkový pohled, Česká republika, Srbsko.

Republic: Bohemia: Litoměřice (5450), 10.viii.1934, 2 ♀♀, Z[immermann] lgt.; Kamýk u Litoměřic (5450), 18.viii.1932, 1 ♀, 2 ♂♂, Zimmermann lgt.; Nový Hradec Králové (5860), 21.viii.1954, 1 ♂ ; Frýdlant (5056), 23.viii.1922, 1 ♀, Soffner lgt.; Praha (5852), vi.1939, 1 ♀, Vlach lgt.; Praha-Šárka (5852), vii.1950, 1 ♂, Vlach lgt., all coll. NMPC. Milovice (5755),



Figs 21-25. Female genitalia. 21 - *Stenolechia gemmella*, ostium bursae-area, ventro-lateral view, Czech Republic, Srbsko; 22-23 - *Parachronistis albiceps*, Austria, Vorarlberg: 22 - detail of ostium bursae and antrum, ventral view; 23 - total view. 24-25 - *Parastenolechia nigrinotella* comb. n., Slovakia, Štúrovo: 24 - total view; 25 - detail of ostium bursae-area in lateral view.
Obr. 21-25. Samičí kopulační ústrojí. 21 - *Stenolechia gemmella*, oblast ostium bursae - ventrolaterální pohled, Česká republika, Srbsko; 22-23 - *Parachronistis albiceps*, Rakousko, Vorarlberg: 22 - ostium bursae a antrum, ventrální pohled - detail; 23 - celkový pohled; 24-25 - *Parastenolechia nigrinotella* comb. n., Slovensko, Štúrovo: 24 - celkový pohled; 25 - oblast ostium bursae v laterálním pohledu.

7.viii.1992, 1 ♂, 1 ♀, 19.viii.1992, 3 ♀♀ ; Kornatice (6347), 8.viii.1964, 1 ♂, 18.ix.1984, 1 ♀; Káraný (5854), 8.viii.1991, 1 ♂; Srbsko (6050), 9.viii.1985, 2 ♂♂, 13.viii.1971, 1 ♂, 15.viii. 1986, 1 ♂; 24.viii.1984, 3 ♂♂, 2 ♀♀, 8.ix.1985, 1 ♀; Lovosice (5450), 8.ix.1988, 2 ♀♀; Rokycany (6247), 29.ix.1986, 1 ♀; Moravia: Kobylí (7067), 7.vii.1994, 1 ♂, 24.viii.1985, 1 ♀; all G. Elsner lgt. et coll. **Slovakia:** Žemberovce (7778), 18.viii.1991, 3 ♀♀, 20.viii.1983, 1 ♂; Pustá Ves (7371), 6.ix.1986, 2 ♀♀; Bátovce (7778), 16.viii.1981, 1 ♀; all G. Elsner lgt. et coll.

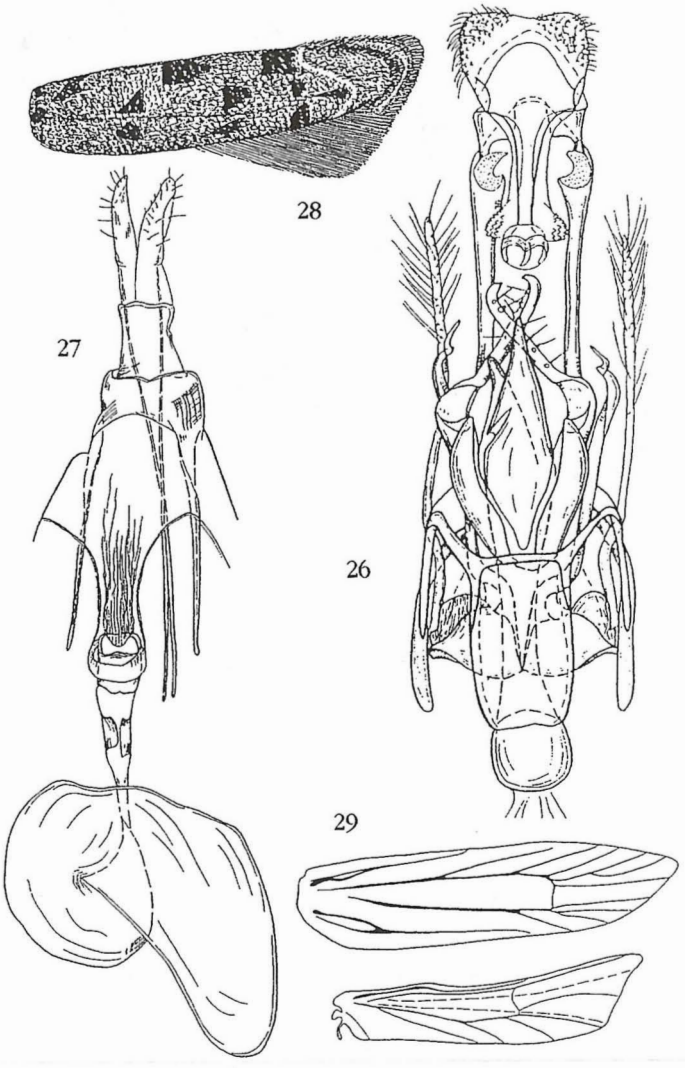


Fig. 26-29. *Chorivalva* (after Omel'ko 1988). 26-27: *Chorivalva unisaccula*; 26 - male genitalia; 27 - female genitalia. 28-29: *C. bisaccula*; 28 - forewing pattern; 29 - wing venation.
Obr. 26-29. *Chorivalva* (podle Omel'ka 1988). 26-27: *Chorivalva unisaccula*; 26 - samčí kopulační orgány; 27 - samičí kopulační orgány. 28-29: *C. bisaccula*; 28 - kresba předního křídla; 29 - žilnatina křídel.

Differential diagnosis. Given in *Stenolechiodes pseudogemmellus* gen. n., sp. n.
Phenology and biological remarks. Biology and first stages of this ocassional oak-pest are well known (cf. Patočka 1977). Moths occur from the end of June to the end of September in oak forests. Specimens were captured at light.
Distribution. *Stenolechia gemmella* is recorded from nearly all of Europe, Caucasia, Trans-Caucasia and it reaches Near East (Piskunov 1981). But most records, especially of vernal generation, ought to be checked: (Meess 1910, Escherich 1931, Hering 1932, Gozmány 1958, Hrubý 1964). Reliable data and material now examined come from Sweden, Lithuania, Czech Republic and Slovakia.

Parastenolechia Kanazawa, 1985

Parastenolechia Kanazawa, 1985: 6. Type species: *Parastenolechia asymmetrica* Kanazawa, 1985: 9.
Origo Omel'ko, 1988 [as a subgenus of *Laris* Omel'ko, 1988]: 156. **Syn. nov.** Type-species: *Telphusa argobathra* Meyrick, 1935: 66.

Medium size among Gelechiini. Ground coloration whitish. In forewing M_1 and M_2 approximated. In hindwind M_1 absent. Male abdomen without androconial scale tufts. In male genitalia anterior end of saccus fused with subzonal sheath of aedeagus. Costal processes of valve very long, valve broad with clavate process longly setose apically (Kanazawa 1985) or elongated having sparse setae terminally (Fig. 15). In female genitalia signum forms subtriangular plate anteriorly with a pair of short acute lateral processes (Fig. 24).
Remark. *Telphusa argobathra* as a type-species of *Origo* Omel'ko, 1988 was transferred in the genus *Parastenolechia* yet by Kanazawa (1985) based on external characters and female genitalia structures.
Differential diagnosis. This genus differs from other mentioned genera through absence of androconial scale-tuft between abdominal segments of male and through the characteristic signum in female. Other differences see Tab. 1.
Distribution. Europe and Palaearctic Asia.

Parastenolechia nigrinotella (Zeller, 1847), **comb. n.**
(Figs 6, 10, 15, 24, 25)

Gelechia nigrinotella Zeller, 1847: 856.
Stenolechia nigrinotella: Meeß in Spuler 1910: 357; Gozmány 1958: 257, fig. 126; Klimesch 1968: 116; Leraut 1980: 76; Piskunov 1981: 709; Huemer & Tarmann 1993: 55.
Parachronistis nigrinotella: Patočka et al. 1989: 25.

External characters of *Gelechia nigrinotella* (Fig. 6), asymmetrical male genitalia excepting uncus and gnathos (Fig. 15) and characteristic signum of female genitalia (Fig. 24) are very similar to *P. asymmetrica*, and thus univocally confirm that this species actually belongs to the genus *Parastenolechia*.
Material examined. Slovakia: Štúrovo (8178), e.l. vi.1964, 1 ♂,1 ♀, J. Patočka lgt. et coll.; **Montenegro:** Buljarica (42°12'N, 18°58'E), 3.vii.1985, 4 ♂♂, 22 ♀♀, G. Elsner lgt. et coll.
Distribution. Europe (Slovakia, Austria, Hungary, Croatia, Italy, France, Montenegro) and Asia Minor.

Tab. 1 The main characters of genera *Stenolechiodes* gen. nov., *Chorivalva, Parastenolechia* and *Stenolechia.*
Tab. 1 Hlavní znaky rodů *Stenolechiodes* gen. nov., *Chorivalva, Parastenolechia* a *Stenolechia.*

		Stenolechiodes	*Chorivalva*	*Parastenolechia*	*Stenolechia*
Forewing	ground color	whitish (Figs. 3, 4, 5)	blackish to dark grey (Fig. 28)	whitish (Fig. 6)	whitish (Fig. 1)
	vein M1	from common stalk with R_{4+5} (Fig. 7)	from discal vein separely (Fig. 29)	from common stalk with R_{4+5} (Fig. 10)	from common stalk with R_{4+5} (Fig. 9)
Hindwing	vein M1	developed (Fig. 7)	absent (Fig. 29)	absent (Fig. 10)	absent (fig. 9)
	width; lenght/width ratio	wide; 4.5-5.3	wide; 5	wide; 5.6	narrow; 7.2-8.6
Male abdomen	genitalia case (Fig. 13)	developed, without long hair brushes	developed, with long hair brushes	absent	absent or exceptly present
	androconial tufts	between 2nd and 3rd abdom. segment	between 2nd and 3rd abdom. segment	absent	between 3rd and 4th abdominal segment or absent
Male genitalia	gnathos terminal part	spinose oval, without median projection (Fig. 16)	with median projection, smooth or subapically serrate (Fig. 26)	smooth, with median projection (Fig. 15)	smooth, with median projection (Fig. 14)
	aedeagus	slender, without cornutus (Fig. 16)	thick, with cornutus (Fig. 26)	slender, without cornutus (Fig. 15)	slender, without cornutus (Fig. 14)
	valvella	developed (Figs. 12, 16)	developed (Fig. 26)	absent	absent
	globate dilatations of valve costal processes	fused basally (Fig. 12)	fused basally (Fig. 26)	remote (Fig. 15)	remote (Fig. 14)
Female abdomen	8th sternite (Figs. 18, 19)	indistinct (Fig. 27)	indistinct (Figs. 24, 25)	indistinct (Figs. 20, 21)	well developed
Female genitalia	ductus bursae	long (Fig. 18)	very short (Fig. 27)	long (Fig. 24)	very long to short (Fig. 20)
	corpus bursae	oval	cucumiform or bisaccular	nearly oval	nearly oval to elongate
	signum	absent	absent	plate with a pair of short processes	two exceptly one big usually spine - like

DISCUSSION

The genus *Stenolechiodes* gen. n. belongs to the rank of *Chorivalva*, *Parastenolechia*, *Stenolechia* and *Parachronistis,* but close relationship between these genera remains hitherto unclear. These genera together with more differentiated and somewhat distant *Piskunovia* Omel'ko, 1988, *Angustialata* Omel'ko, 1988 and *Laris* Omel'ko, 1988 form a group of genera within the tribe Gelechiini, which is well recognisable by male genitalia: the anterior part of saccus is fused with the base of subzonal sheath of aedeagus (Figs 15, 16, 17). This fusion of aedeagal base is after Kanazawa (1984) and the present author unique among the gelechioid moths. Moreover, as far as known larvae of this group live endophagous either as leaf-miners on conifers or as bud- and shoot-miners on deciduous trees (cf. Patočka 1977, Kanazawa 1984, Omel'ko 1988, Park 1994). Only further research of this Euro-Asian group may clear both relationships between genera within this group and probable, its supposed taxonomical status as the tribal level.

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SOUHRN

V práci je popsán a vyobrazen *Stenolechiodes pseudogemmellus* gen. n., sp. n. včetně uvedení známých fenologických a chorologických dat. Diferenční diagnóza příbuzných rodů *Stenolechiodes*, *Chorivalva*, *Stenolechia* a *Parastenolechia* prokazuje oprávněnost stanovení nových taxonů. Rody *Chorivalva*, *Parachronistis*, *Stenolechia*, *Parastenolechia*, *Piskunovia*, *Angustialata* a *Laris* s podobnou biologií a morfologií jsou na základě společné neobvyklé struktury v samčích kopulačních orgánech charakterizovány jako zvláštní skupina tribu Gelechiini. V souvislosti s řešením taxonomických otázek je zde *G. nigrinotella* převedena do rodu *Parastenolechia* a podrod *Origo* je synonymizován s rodem *Parastenolechia*.

V této práci popsaný *Stenolechiodes pseudogemmellus* gen. n., sp. n. se habituelně velmi podobá druhu *Stenolechia gemmella*, za jehož prvou generaci byl dříve mylně považován. Druh *S. gemmella* je založen na Linnéově typovém exempláři, jehož bližší morfologické studium a vyšetření genitálií není možné bez vážného poškození celého kusu. Proto byla ověřena jeho mladší synonyma a druh s letním výskytem ve střední Evropě byl stabilizován stanovením lektotypu *Lita nigrovittella*. *S. gemmella* je nyní prokázána pouze v jedné generaci od konce června do začátku října. Nově popsaný druh létá ve střední Evropě od konce dubna do druhé poloviny května a v jižní Evropě (Černá Hora, Itálie, Řecko) vytváří patrně druhou generaci počátkem července.