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## The description of a new species of the genus Paraglossecia GORBUNOV, 1988, from Northeastern China, with the erection of a new tribe of the subfamily Tinthiinae

(Lepidoptera, Sesiidae) by OLEG G. GORBUNOV & ULE FUTSCHBERGER

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When describing the genus *Paraglossecia* (GORBUNOV, 1988), we payed attention to the fact that this genus occupies position intermediate between two tribes of the subfamily Tinthiinae by the characters both of antenna and wing venation. However, *Paraglossecia* differs well from by the structure of the male genitalia. Still, both the deficiency of material (we had at hand 4 males of the only one species, *P. micra* GORBUNOV, 1988) and mainly the lack of females did not allow to achieve a conclusion about the exact position of this genus within the system of the Tinthiinae.

Studying material of Sesiidae from the Entomological Museum of Dr. U. EITSCHBERGER, we found a series of specimens, including females, of a new species of the genus *Paraglossecia*. A detailed examination of these specimens provides a good chance to redefine the diagnosis of this genus and, moreover, to distinguish a new tribus for it.

## Paraglosseciini trib. nov.

Antenna in male filiform, plumose; in female setiform; forewing: R4 and R5, and M2 and M3 fused, Cu2 well developed; hindwing: M2 from middle of the cell; M3 and Cu1 behind cell, stalked from midlength; Cu1 and Cu2 parallel; A1 sclerotized; male genitalia: tegumen as wide as uncus; gnathos absent; saccus long but thin, as long as vinculum; aedoeagus about 1.5 to 2 times as long as valva, thin, somewhat bulbous basally; vesica vith numerous but small cornuti; valva triangular, covered with simple setae and carries two groups of small but thick thorns; female genitalia: antrum narrow, well sclerotized; ductus bursae narrow, coiled through 180° near corpus bursae; the latter membraneous, oval, with long screw-shaped signum ventrally near ductus bursae.

Judged from the above description, and in accordance with NAUMANN's (1971) opinion, this new tribe has more apomorphous characters (such as the completely fused veins R4-R5 and M2-M3 in the forewing, presence processes vinculi and spezialized setae (thorns) on the inner sides of the valve) than both other tribes. Therefore, this tribe should be considered as a more advanced and progressive group within the Tinthiinae. It seems opportune to present here the table which NAUMANN (1971) provided for the division of the subfamily into tribes, with some amendments:

	Tinthiini	Pennisetiini	Paraglosseciini
Forewing:	R4 and R5 always separate; M1 to M3 present;	R4 and R5 stalked together; M2 and M3 fused;	R4 and R5 fused M2 and M3 fused
Hindwing:	M2 issues in the upper part of the cell together with M1;	M2 issues from the middle of upper third of the cell;	M2 issues from the middle of the cell;
Antenna (male)	filiform	bipectinate (unknown in <i>Rectala</i> )	filiform
Saccus	wide and triangular	wide and triangular	long and thin;
Processus vinculi	absent;	absent;	as long as saccus, thin;
shape of valve	rectangular to square;	rectangular to square;	triangular;
sensory setae of valve	simple (hairy-like);	simple (hairy-like);	simple (hairy-like) and small but
Ductus bursae	strait.	coiled through 180°.	thick thorns; coiled through 180°.
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## Paraglossecia GORBUNOV, 1988

## Type species: Paraglossecia micra GORBUNOV, 1988

Small with alar expanse up to 15 mm; eye oval, 2.5 times less wide than frons; labial palpi erect, reaching to half of frons; transparent areas of forewing absent or with some transparent cells subapically; hindwing transparent or thickly covered with colourless scales; abdomen compressed laterally and curved ventrally; female genitalia: apophysis posterior about 3 to 3.2 times, anterior twice as long as segment no. 8; papilla analis small; lamella postvaginalis well sclerotized; ostium bursae membraneous, lies in intersegmental membrans of segments nos. 7 and 8; corpus bursae with cornuti.

## Paraglossecia oliveri spec. nov.

Material:

Holotype ♂, NE China, Mandschuria, Charbin, 12.VIII.1951.

Paratypes: 1 3, 7 99, same locality and date as holotype; all ex coll. Dr. F.J. GROSS, Königsdorf, now in EMEM.

Holotype and 4 paratypes ( $\varphi \varphi$ ) are deposited in the Entomological Museum of Dr. U. EITSCHBERGER, Marktleuthen (EMEM), other paratypes in the collection of Dr. O. GORBUNOV, Moscow.

## Description:

Holotype ♂ (colour plate XV, figs. 1, 2). Body length 6.1, forewing 5.8, antenna 3.7 mm.

Head: frons brown with bronze lustre; vertex and antenna brown; pericephalic hairs brown dorsally and ochre laterally; labial palpi brown dorsally and ochre ventrally.

Thorax: completely dark brown with bronze lustre.

Forewing: from above dark brown with bronze lustre, with a small orange-yellow speck instead of discal spot, and one more subapically near costal margin; anterior and posterior transparent areas absent, external transparent area consists of two elongate cells between veins M1-M2+3 and M2+3-Cu1, latter cell being longer; from below dark brown with ochre costal margin; cilia brown with bronze lustre.

Hindwing: transparent but covered with colourless scales; veins dark brown; discal spot absent.

Legs: fore tarsi ochre, middle and hind ones ochre with brown basal segment dorsally; fore tibiae dark brown dorsally and ochre ventrally, middle and hind ones inside dark brown with a small orange-yellow speck both basally and near the base of apical spurs, outside ochre; scales of middle and hind tibiae on apical half at spurs elongate and forming a triangular tuft; fore and middle femorae brown with bronze lustre, with a narrow ochre strip in front, hind femorae brown with a small ochre speck ventro-apically; fore coxae brown, mixed with ochre; spurs brown ventrally and ochre dorsally.

Abdomen: ground colour brown with bronze lustre; dorsally segment no. 1 with a few brown scales, segment no. 4 with a narrow ochre strip distally; segments nos. 6 and 7 with a few ochre scales; ventrally segments nos. 2, 3 and 4 ochre; anal tuft very small, ochre dorsally and brown ventrally.

Genitalia: uncus with a few long setae apically, as wide as tegumen (fig. 1); valve triangular, inner side covered with long sensory setae and with two groups of thorns, apically with 3 or 4 small thorns (fig. 2); processus vinculi well developed, narrow, as long as saccus (fig. 3); aedoeagus narrow, about twice as long as valve, vesica with numerous but small cornuti (fig. 4).

Paratype Q (colour plate XV, figs. 3-8): very similar to male; forewing from above with more numerous orange-yellow scales, as well as an additional speck centrally; anal tuft yellowish dorsally.

Genitalia (fig. 5): apophysis posterior 3 to 3.2 times, anterior twice as long as segment no. 8; papilla analis small; lamella postvaginalis well sclerotized; ostium bursae membraneous, lies in intersegmental membrane of segments nos. 7 and 8; antrum narrow, well sclerotized, twice as long as segment no. 8; ductus bursae narrow, about 3.5 times as long as antrum; corpus bursae membraneous, oval, with a large screw-shaped signum.

Variability: all the other paratypes have only small size differences from the above description: body length 5.5 to 7.0, forewing 5.5 to 6.8 and antenna 3.2 to 4.0 mm.



- Figs. 1-4: Male genitalia of *Paraglossecia oliveri* spec. nov., paratype: 1) tegumen-uncus complex; 2) right valve; 3) saccus; 4) aedoeagus. Line on the right: 0.25 mm:
- Fig. 5: Female genitalia of *Paraglossecia oliveri* spec. nov, paratype. Line on the right: 0.5 mm.

Diagnosis: The species of the genus Paraglossecia may be separated by the following key:

1 (2). Frons with a white strip laterally; ground colour of head, thorax, wings and abdomen black; forewing without transparent areas; fore coxae black with a white strip laterally; segment no. 4 of Abdomen with 2 white specks dorsolaterally; anal tuft black dorsally and yellow ventrally; inner side of valve with 4 thick thorns dorsally and a group of longer thorns ventrally, as well as with 5-6 small thorns apically

P. micra GORBUNOV, 1988

2 (1). Frons without white strip laterally; ground colour of head, thorax, wings and abdomen brown to dark brown; forewing with external transparent area divided into 2 cells; fore coxae brown with ochre scales; segment no. 4 of abdomen with a narrow ochre strip distally; anal tuft ochre or yellowish dorsally and brown ventrally; inner side of valva with 2 groups of homogenous thorns and with 3-4 small thorns apically

P. oliveri spec. nov.

Bionomics: unknown.

Habitat: unknown.

Distribution: knwon only from the type locality.

Etymology: Dedicated to OLIVER EITSCHBERGER, the coauthor's youngest son.

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#### References

- GORBUNOV, O. G. (1988): A new species and genus of the clearwing moths (Lepidoptera, Sesiidae) of the subfamily Tinthiinae from the Primorsky Kray. - Biol. nauki No. 7:45-47 (in russian).
- NAUMANN, C. M. (1971): Untersuchungen zur Systematik und Phylogenese der holarktischen Sesiiden (Insecta, Lepidoptera). - Bonn. zool. Monographien 1:1-190.

Explanation of colour plate XV (p.345):

Paraglossecia oliveri spec. nov., Charbin, 12.VIII.1951, coll. GROSS, all figured specimens in coll. EMEM.

Figs. 1-2: holotype ♂:

1: habit view; 2: left wing.

Figs. 3-8: paratypes QQ:

3, 5, 7: habit view; 4, 6, 8: left wings.

1	2
3	4
5	6
7	8

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Explanation of colour plate XV:

GORBUNOV O.G. & U. EITSCHBERGER: The description of a new species of the genus *Paraglossecia* GORBUNOV, 1988, from Northeastern China, with the erection of a new tribe of the subfamily Tinthiinae. - Atalanta **21**(3/4):289-294.

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1	2
3	4
5	6
7	8

# Colour plate XV



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