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Towards a natural system of the Incurvarioidea. Part 2: Procacitas gen. nov. for Alloclemensia orientella KOZLOV, 1987, with new data on the distribution

(Lepidoptera, Incurvariidae s. str.)

by

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Summary: A monotypic genus *Procacitas* gen .nov. is proposed for *Alloclemensia orientella* KOZLOV, 1987. The new genus is very similar to *Alloclemensia* NIELSEN, 1981, but differs clearly in the structure of male and female genitalia. The diagnostic characters of the new genus, male and female genitalia illustrations and a redescription of *P. orientella* are given. *P. orientella* formerly known only from Sakhalin, is recorded here for the first time from continental russian Far East, North Korea and the Lake Baikal region.

Zusammenfassung: Für *Alloclemensia orientella* KOZLOV, 1987 wird die monotypische Gattung *Procacitas* gen. nov. aufgestellt. Die neue Gattung ist *Alloclemensia* NIELSEN, 1981 sehr ähnlich, doch unterscheidet sie sich deutlich im Bau der männlichen und weiblichen Genitalarmatur. Die Kennzeichen der neuen Gattung, Abbildungen der Genitalarmaturen beider Geschlechter werden dargestellt und eine Neubeschreibung von *P. orientella* gegeben. Die früher nur von Sachalin bekannte Art wird hier zum ersten mal für Primorye, das Baikalsee-gebiet und Nordkorea gemeldet.

Автореферат

Монотипический род *Procacitas* gen. nov. предложои для *Alloclemensia orientella* KOZLOV, 1987. Установлена новая комбинация *Procacitas orientella* (KOZLOV, 1987). Новый род близок к роду *Alloclemensia* NIELSEN, 1981, но хорошо отличается от последнего по строению гениталий самцов и самок. Приводятся диагностическиепризнаки нового рода, изображения гениталий самцов и самок и переописание *P. orientella*. Ранее известиая только с о. Сахалин отмечается впервые для Приморья, Прибайкалья и Северной Кореи.

Introduction

The genus *Alloclemensia* NIELSEN, 1981 originally included five species (NIELSEN, 1981). Two further species *A. minima* KOZLOV, 1987 and *A. orientella* KOZLOV, 1987 from the Russian Far East – were added by KOZLOV (1987). Type specimens and some other examples of these species were examined by me during the revision of the Russian Incurvariidae s.str. *A. minima* was transferred to *Phylloporia* HEINEMANN (KUPRIJANOV, 1992). Also *A. orientella* has to be placed into a separate genus because it differs from all remaining members of *Alloclemensia* in essential characters. The diagnosis of that new genus and a redescription of *A. orientella* is given below:

Procacitas gen. nov.

Type-species: *Alloclemensia orientella* KOZLOV, 1987

Diagnosis

Procacitas orientella (KOZLOV, 1987) **comb. nov.** is most similar to the *Alloclemensia* species in the colour pattern of the wings, presence of a well developed epiphysis on the foretibia and certain characters in male genitalia, i.e. presence of the mediocaudal process of tegumen and longitudinal sclerotized crest on the internal surface of the valva, structure of aedoeagus apex, presence of a strong cornutus in the vesica. Differences between these two genera are given in the following table (please note that these two genera differ clearly only in genitalia structure)

Characters	*Procacitas orientella* (KOZLOV) comb. nov.	*Alloclemensia* spp.
Mediocaudal process of tegumen	diamond-shaped, shorter than tegumen	stick-shaped, equal inlength or longer than tegumen
Vesicle-shaped setose projections on the internal surface of the valva	not present	present*
Spinelike setae on the internal surface of the valva	situated on the apical part of the valva as a longitudinal row of 3-5 setae, and a dense obligue band of 3-4 setae (figs. 1, 2)	situated on the apical part of the valva as a dense group of more than 10 setae
Dorsal sclerites of juxta	present	not present
Tip of the ovipositor	serrated laterally	with one or two pairs of prominent subapical teeth or modified one (as in *A. maculata* NIELSEN, 1981)
Sclerotisation in the ductus bursae copulatrix	not present	present

* This structure is not observed on the illustrations given by NIELSEN (1981) for *A. unifasciata* NIELSEN (l.c., fig. 33) and it is not mentioned in the description of this species (l.c., p. 284-290), but it is present in other species and was designated by NIELSEN (1981) as "setosae lobe on the ventral margin"

Figs. 1-6: Male genitalia of *Procacitas orientella* KOZLOV, 1987, Irkutsk region. 1, 2 – 9th segment, valvae; 3, 4 – aedoeagus; 5, 6 – juxta (5 – ventral plate, 6 – dorsal sclerites). (1, 3 in lateral view; 2, 4, 5, 6 in dorsal view; scale bar: 0.25 mm).

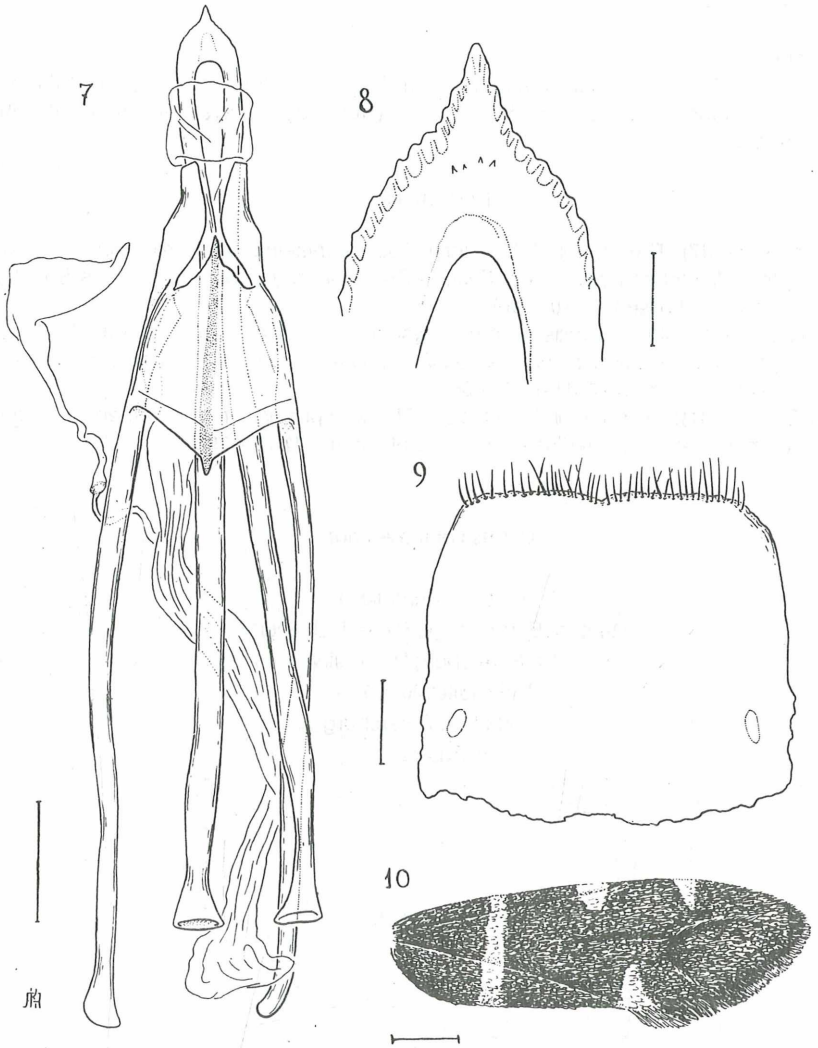
Derivation of the name
The generic name *"Procacitas"* is adopted from old Latin and must be used as of feminine gender.

The only species hitherto known for this genus is redescribed below:

Procacitas orientella (KOZLOV, 1987) comb. nov.
Alloclemensia orientella KOZLOV, 1987:18-20, figs. 3, 6, 13, 19.

Redescription (figs. 1-9)
Head vestiture pale yellow on vertex, whitish on frons, brownish around occipital surface, labial and maxillar palpi whitish. Antennae dark fuscous. Thorax: mesonotum and tegulae dark fuscous with faint purple sheen, otherwise fuscous. Legs fuscous with calcarea and tips of tibiae and tarsal segments whitish; foretibia with epiphysis present. Forewings: ground colour dark fuscous with faint purple sheen; markings white, one transverse band at 1/3 from base and three spots, two on costal margin at 1/2 and 3/4 from base and one in tornus; fringe apically white; length of forewing 5.4-6.5 mm. Hindwings fuscous.
Male genitalia: Tegumen box-shaped; lateral tegminal lobes rounded; mediocaudal process (see laterally!) diamond-shaped, shorter than tegumen. Vinculum V-shaped, posterolateral corners of vinculum almost rectangular. Valvae relatively long (5/6 length of vinculum), slender and slightly curved S-shaped. Internal surface of the valva longitudinal sclerotized. Crest in apical 2/5 and strong spinelike setae situated on the apical part as a longitudinal row of 3-5 setae between sclerotized crest and ventral margin of the valva and as a oblique band 3-5 close set setae just beyond 1/2 from base. Transtilla W-shaped with long anterolateral processes and prominent posteromedial projection, separated from valva with slender membraneous zone. Aedoeagus basally tube-shaped, apically divided into two lobes. Ductus ejaculatorius proximally with close set ringlike folds, distally with a dense group of small spines and 4-5 strong spinelike cornuti. Juxta consists of a ventral plate and a pair of dorsal sclerites.
Female genitalia: Tip of ovipositor flattened dorsoventrally with lateral serration. Ductus bursae with longitudinal folds. Caudal margin of female sternum VII with small medial notch.

Material examined
Holotype ♂: Russia, Sakhalin, Yuzhno-Sakhalinsk, 2.VII.1983 (KOZLOV) (micr. praep. N 15613).
Paratypes: 1 ♂, 2 ♀♀ same data as holotype.
4 ♂♂: Russia, Irkutsk region, 3 km E Slyudyanka, coast of Lake Baikal, 7.VII. 1984 (SINEV). First record from Lake Baikal region.
1 ♀: Russia, Primorye, Gornotayozhnoe, 20 km SE Ussurijsk, 5.VI.1984 (OMELKO). First record from continental russian Far East.
5 ♂♂, 1 ♀: Russia, Sakhalin, Juzhno-Sakhalinsk, 2.-9.VII.1983 (SINEV).
1 ♂ Russia, Sakhalin, near korsakov, 2.VII.1991 (KUPRIJANOV).
1 ♂ North Korea, N. Hamgyong Prov., Musanri, 500m, 10.VI.1987 (JAROŠ). First record from Korea. (This specimen is deposited among the type material, but not mentioned by KOZLOV due to its too late receipt.)



Figs. 7-9: Female genitalia of *Procacitas orientella* KOZLOV, 1987, Sakhalin Island. 7 – general view of the female genitalia from dorsal side; 8 – tip of ovipositor in dorsal view; 9 – 7th sternum in ventral view. (scale bars: 7, 9 – 0.25 mm; 8 – 0.05 mm).

All the material examined with the exception of the ♀ collected by OMELKO is deposited in the collection of the Zoological Institute of the Russian Academy of Sciences (RAN) in St.-Petersburg. The OMELKO-specimen is deposited in the collection of the Gornotayozhnoye Station of the RAN.

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