

***Ypsolopha colleaguella* n. sp. (Lepidoptera: Ypsolophidae).
Contributions to the knowledge of Yponomeutoidea (Lepidoptera). VI.**

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ABSTRACT. A new Ypsolophidae species from Russia (Sarepta) and Kazakhstan (Saisan), *Ypsolopha colleaguella* sp. n. is described and illustrated. The range of the species and the characteristic features distinguishing it from similar species of the same genus are specified.

KEY WORDS: entomology, taxonomy, new species, Lepidoptera, Ypsolophidae, Ypsolopha, Russia, Kazakhstan.

INTRODUCTION

The genus *Ypsolopha* Latreille, 1796 is the most abundantly represented in the family Ypsolophidae (AGASSIZ 1985, AGASSIZ, FRIESE 1996). Up to now more than 120 species distributed mainly in the Holarctic Region have been described (DUGDALE et al. 1999). In the Palaearctic Region the genus *Ypsolopha* is represented by about 70 species (ZAGULAJEV 1981, PARK 1983). Nearly all these species are similar in external appearance, as well as in the shape of the male and female genitalia, which are very specific of this genus (MORIUTI 1964, 1977, ZAGULAJEV 1981).

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TAXONOMY

Ypsolopha colleaguella sp.n.

(Figs 1-10)

Material examined

2 males, 2 females, and one specimens without abdomen.

Holotype: 1 male (genitalia slide no. 30668) Sarepta, leg. CHRISTOPH, (Frey Coll., Brit. Mus. 1890-62, (In The Natural History Museum, London, UK).

Allotype: Female, with label: hand-written Sarepta, leg. CHRISTOPH, ex coll. Staudinger (in the collection of the Museum für Naturkunde der Humboldt Universität, Berlin, Germany), (genitalia slide no YPO 198/2004)

Paratypes:

1 male (genitalia slide no 30669), (Frey Coll., Brit. Mus.1890-62). (In The Natural History Museum, London, UK).

1 female, with label: hand-written Saisan Hbhr. [HABERHAUER leg.] (on green paper) (in the collection of the Museum für Naturkunde der Humboldt Universität, Berlin, Germany), abdomen slightly damaged (genitalia slide no YPO 199/2004, bursa copulatrix much damaged).

1 specimen without abdomen, Sarepta, leg. CHRISTOPH, ex coll Staudinger (in the collection of the Museum für Naturkunde der Humboldt Universität, Berlin, Germany).

Description of the imago

Wings span: 17.5 – 19.5. The head with brown scales of white colour margins. There are a few protruding white scales with brown margins.

Antenna – the flagellum segments white, ended with brown rings. Scape – with appraised brown scales.

Labial palpus – long. The last segment short, brown-white, curved and pointed (Fig. 2). The middle segment significantly longer than the basal one. Middle segment with distinct tuft of white-brown scales, the tuft twice longer than the length of the segment (Fig 2). Maxillary palpus well visible, curved, dark brown, scales with pure white margins.

The forewing (Fig. 1) lanceolate with apex acutely produced. It is two-coloured and the division line between the two colours runs along the white narrow band passing in the half of its width from the base to the external margin. The part adjacent to the costal margin white with, sometimes tinged dark-brown scales, the fragment adjacent to the rear margin dark grey with a narrow whitish streak at the dorsum. In the dark part of the wing along the line it joins the white part starting from the basal area to 1/3 of the wing length there is a dark-brown band ended with an elongated spot clearly seen in the white part of the wing. In the apex three narrow, wedge-shaped dark-brown spots. Over the whole area of the wing



Fig. 1. Female of the, *Ypsolopha colleaguella* sp. n., Saisan HBHR. [HABERHAUER leg.] (In the collection of the Museum für Naturkunde der Humboldt Universität, Berlin, Germany) – paratype.

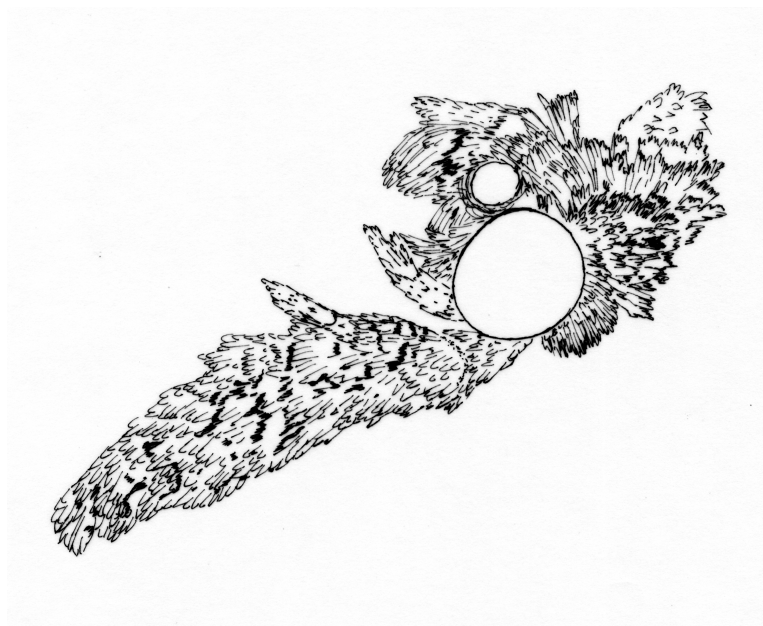


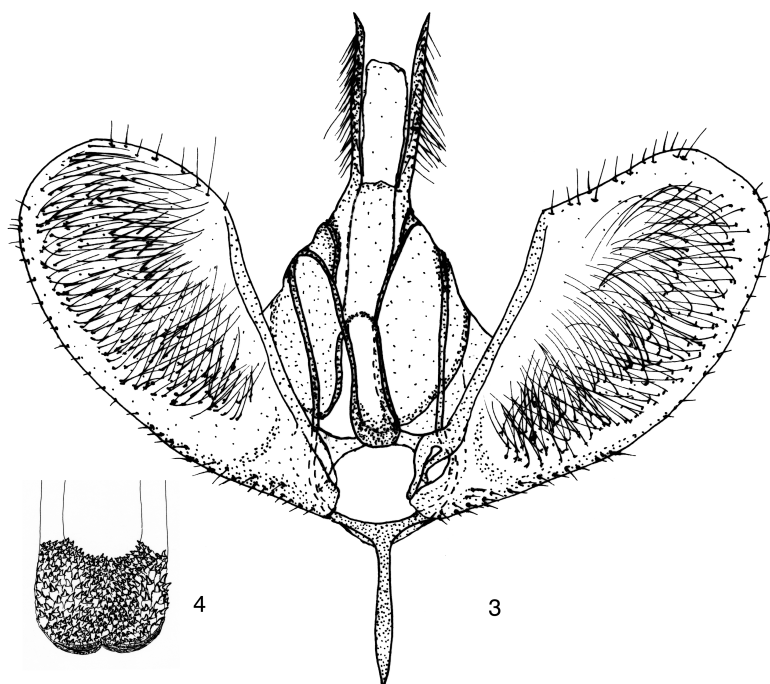
Fig. 2. Head and labial palpus of *Ypsolopha colleaguella* sp. n.; lateral aspect.

there are irregularly distributed small dark dots. The fringes are three-coloured and the colour of a given part matches that of the corresponding part of the wing.

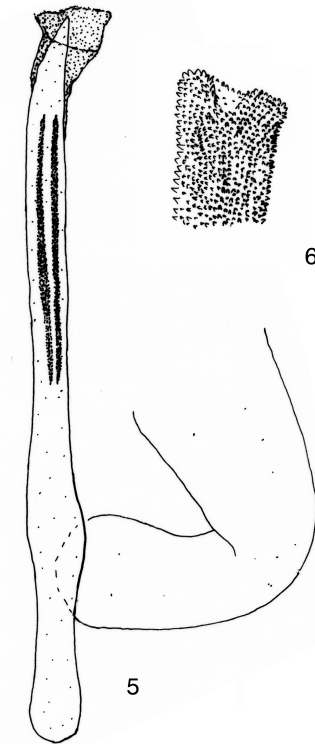
The hindwing white-grey at the base and in the middle part; distinctly dark grey at the apex. The fringes of the same colour.

Thorax white-grey; abdomen white with a few grey scales, glittering. Legs covered with two-coloured white-grey adherent scales, only the last segments of the tarsus are clearly dark grey.

Male genitalia (Figs 3-6): valva narrow, elongated with smoothly rounded top, vinculum long and narrow. Saccus short and the widest in the central part, clearly narrowing distally. Gnathos long and wide, forming a spoon-like ventral plate with characteristic spines (Fig. 4). Aedeagus (Fig. 5) much longer than valva, narrow, broadest in the part by the end of ductus ejaculatorius. Two long cornuti in the vesica, clearly pointed at the apex. The length of cornuti shorter than the half-length of aedeagus. Anellus (Fig. 6) very short with characteristic small spines.



Figs 3-4. Male genitalia of the *Ypsolopha colleagueuella* sp. n.; 3 – ventral aspect, anellus removed; 4 – part of gnathos.

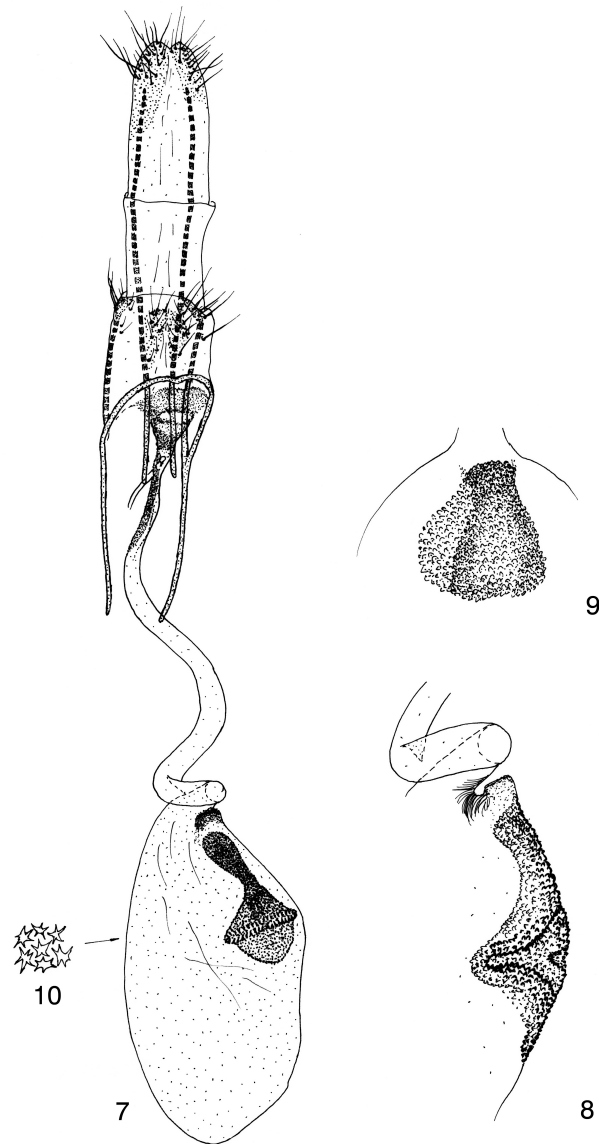


Figs 5-6. Male genitalia of the *Ypsolopha colleaguella* sp. n.; 5 – aedeagus, 6 – annellus,

Female genitalia (Figs 7-10): intersegmental membrane between papilla analis and 8th abdominal segment long. Apophysis posterior very long, narrow, apophysis anterior slightly wider, branched and short. Antrum, membranous, getting narrower, strengthened in the upper part. Ductus bursae short, membranous, of the same width almost over the whole length, getting slightly narrower only immediately before antrium. At the inception to the bursa copulatrix it is strongly bent, making a loop, significantly strengthened. Inception of ductus seminalis just before antrum, thin, membranous.

Bursa copulatrix elongated, relatively small, with walls densely covered with small denticles (Fig. 10). The strengthening of the bursa copulatrix at the inception of the ductus and signum clearly seen as a swelling (Fig. 9). Signum (Fig. 8) elongated, takes 1/2 of the bursa length, with one ridge, well-visible.

Biology and habitat unknown.



Figs. 7-10. Female genitalia of the *Ypsolopha colleagueuella* sp. n., 7 – general view; 8 – signum; 9 – strengthening of the bursa copulatrix, lateral aspect; 10 – denticles on corpus bursae .

Distribution

This new species known only from two very different localities. Location of their situation the adds are that since Palaearctic range of distribution.

Clarification of the historical localities:

Sarepta is a small village in the vicinity of the town Krasnoarmeysk, in the Volga River valley, Russia (48°30'N, 44°03' E);

Zaysan (Saisan) is a small town in the vicinity of the lake of this same name. This small town is situated in Kazakhstan, on the lower Irtysz River, nearby Chinese border line (47°27'N, 84°52' E).

Etymology

The name of this species is dedicated to all my friends that helped me in my work on Ypsolophidae. My special thanks go to all the members of SEL for kindness, understanding and patience in tolerating my long keeping of the borrowed material.

Remarks

The elongated shape of the forewing makes this species similar to the group of *mucronella* proposed by MORIUTI (1977). The colour of the wing distinguishes this species from the hitherto known Palaearctic ones. The two colours of the wing: white and grey make this species similar to *Y. longus* MORIUTI, 1977, however, in *Y. colleaguella* the fragment of the wing adjacent to the front costal margin is significantly brighter.

In the male genitalia the shape of the valva and proportions of aedeagus to valva lengths are similar to those in *Y. semitessella* (MANN 1861). Anellus is very short and narrow, covered with finely spiculate. In *Y. semitessella* (MANN) anellus is also short but much wider and the spikes covering it are longer and better visible.

In the female genitalia: the structure of signum in bursa copulatrix is similar to that in *Y. acuminata* (BUTLER 1878). Ductus bursae, of the same narrowing almost along the whole length, getting a little narrower immediately prior to antrium. At the inception to the bursa copulatrix the ductus bursae is much voluted, and the bursa at this site is strengthened. In *Y. acuminata* the ductus bursae at the inception to the bursa is slightly widened, strongly sclerotised and only slightly recurvate but never voluted.

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