

## *Caloptilia dubatolovi* sp. n. from the Russian Far East (Lepidoptera: Gracillariidae)

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*Caloptilia dubatolovi* sp. n. from Bol'shekhokhtsirskii Nature Reserve near Khabarovsk is described.

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### *Caloptilia dubatolovi* sp. n.

*Holotype*. ♂ (damaged), **Russia**, *Khabarovsk Terr.*, environs of Khabarovsk, Bol'shekhokhtsirskii Nature Reserve, Bychikha, 48°18'N, 134°49'E, light trap, 12.VI. 2005 (V.V. Dubatolov); deposited at Zoological Institute, St. Petersburg.

*Description. Male*. Length of forewing 4.5 mm. Labial palpi upturned, whitish, with apical segments pointed and second segments slightly roughened. Head vestiture silvery greyish, smooth on frons and somewhat appressed on occiput. Antennae partly broken, whitish with broad brown annulations; scape slightly thickened, with pecten of several setae. Thorax and tegulae greyish. Legs broken off. Fore wing grey with dull golden lustre and deprived of any markings, being uniformly covered by scales with fuscous apices; short fringes, coloured as forewing, preserved only along termen and at wing apex. Hind wing and fringes greyish. Abdominal segments VII and VIII each bearing a pair of coremata of long hairlike scales, proximal pair consisting of more numerous and longer hairs. Tergum of abdominal segment VIII in addition covered with wide, apically dilated scales.

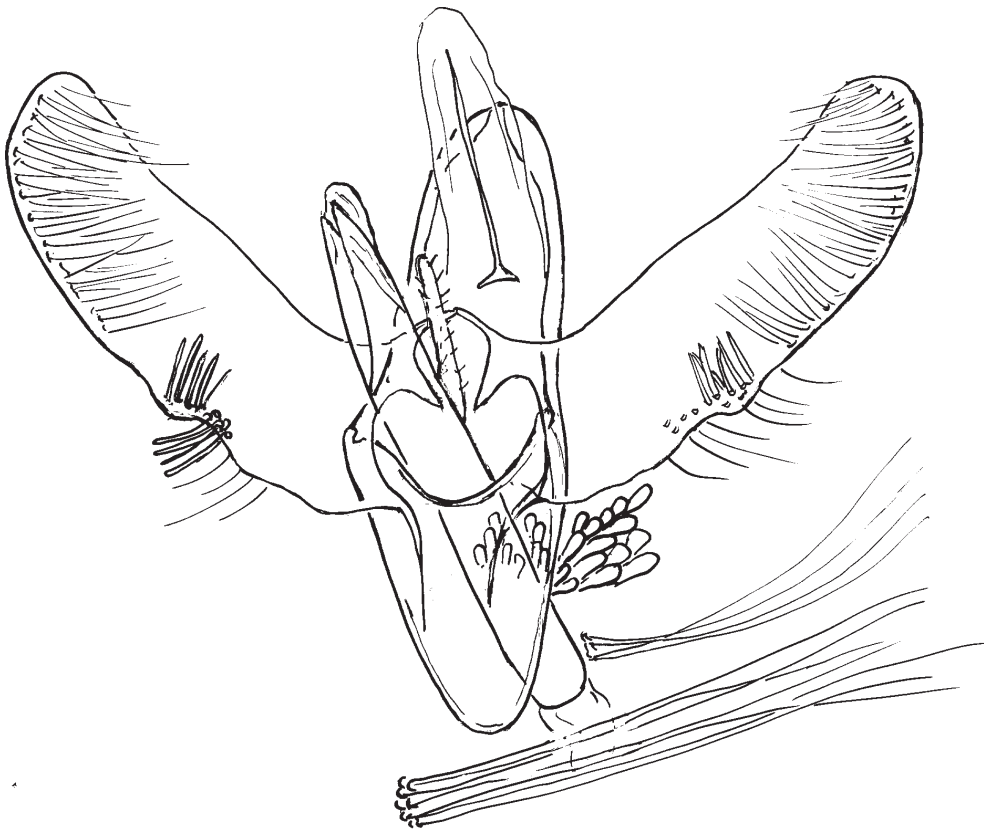
*Male genitalia* (see Figure). Tegumen semi-oval, rather short. Vinculum slightly shorter than tegumen, widely triangular and proximally rounded; saccus absent. Aedeagus approximately as long as valva, deeply cleft apically and possessing peculiar projection on dorsal wall: rather long, slender, finger-shaped process covered with fine setae and directed towards aedeagus apex. Valvae slightly upturned; basal processes divided, slenderer upper (dorsal) arms forming a transtilla. Valva not dilated apically; lower valval margin non-curved, uneven in basal half, with inconspicuous rounded projection and group of stout setae near middle.

*Female* unknown.

*Comparison*. The new species is similar to the unicolorous specimens of the widely distributed *Caloptilia elongella* (Linnaeus, 1761) in the absence of markings in the fore wings and in apical division of the aedeagus, but markedly differs from this species in the smaller moth size, presence of the peculiar setaceous process of the aedeagus, absence of cornuti in the vesica and another shape of valva, which is not widened towards apex and possesses a small projection as well as characteristic thickened spines at the middle part of its lower margin. The vinculum of the new species is wider in comparison to that of *C. elongella*.

In the general appearance and structure of aedeagus, *C. dubatolovi* sp. n. also somewhat resembles the East-Asian *Eucalybites aureola* Kumata, 1982, the type species of the genus *Eucalybites* closely related to the genus *Caloptilia*, being distinguished, however, from *E. aureola* by the absence of juxta, development of the subscaphium, presence of a single process of aedeagus (instead of two processes in *E. aureola*), nonodontoid vesica of aedeagus and markedly less intricate valva (without acutely pointed sacculus and rounded lobe in the valval apical portion).

*Taxonomic remarks*. The new species is provisionally referred to the genus *Caloptilia* Hübner, 1825, chiefly on the basis of the male genitalia: shape of the tegumen and vinculum, development of the characteristic subscaphium and presence of two pairs of coremata formed by long hairs on the pregenital segments of the male abdomen. The single poorly preserved specimen of *C. dubatolovi* sp. n. provides no possibility for proper comparing it with congeners as well as with representatives of several other genera similar to *Caloptilia*: *Calybites* Hübner, 1822; *Eucalybites* Kumata, 1982 and *Euspilapteryx* Stephens, 1835. Notably, the status of *Eucalybites* and *Euspilap-*



*Caloptilia dubatolovi* sp. n., holotype, ♂, genitalia.

*teryx* is not quite clear, these closely related taxa being variously synonymized by different authors with each other or with other genera (e.g. Váry, 1961; Kumata, 1982; Buszko, 1996; Leraut, 1997; Kuznetsov & Baryshnikova, 1998) or regarded as distinct genera (e.g. Nye & Fletcher, 1991; Kuznetsov & Baryshnikova, 2001; De Prins & De Prins, 2005).

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