

Notes on Scandinavian Ephydriidae (Diptera Brachycera)

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Abstract

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The following species are recorded as new to Sweden: *Setacera aurata* Stenh., *S. breviventris*

Loew, *Coenia curvicauda* Meig.

The following species are described as new to science: *Coenia borealis*, *C. elbergi*, *Pelina norvegica*.

The following synonymity is proposed: *Para-coenia beckeri* Kuntze syn. of *P. fumosa* Stenh.

In 1959 I published my first work on Scandinavian Ephydriidae. After that my knowledge of this fauna has been improved by more excursions, by the studies of material in other collections and by the publications of Wright, Collin, Beschovsky, Nartshuk, etc. The present paper is to be considered as what may be called a first order survey dealing with the genera *Setacera*, *Coenia* and *Pelina*.

Genus *Setacera* Cresson

Of the four European species of this genus only *micans* Haliday is well-known with regard to its taxonomic status and geographic distribution in Scandinavia. Collin (1963: 48) has proved the validity of *aurata* Stenhammar as a good species which can be separated from *micans* especially by means of genital characters (fig. 1). An examination of my *Setacera* material gives the following data of Scandinavian *aurata* specimens: Skåne: Förslövsholm, 20.7.1971, Höör 1.8.1966, Ystad, Fyleån 8.7.1954, Lomma 24.8.1954; Blekinge: Karlshamn 3.8.1968 (leg. R. Dahl).

S. breviventris Loew is previously known only from Southern Europe (Dahl 1967), but I can report a finding outside the Mediterranean area from South Sweden, Skåne: Helsingborg, Råå 6.9.1967, two specimens (leg. R. Dahl).

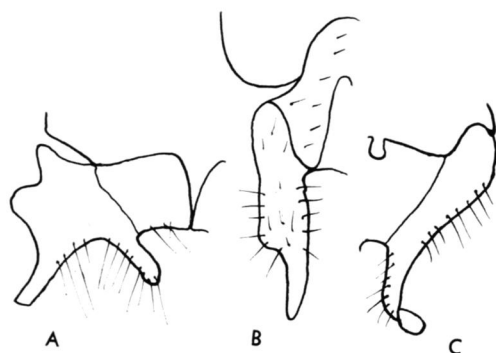


Fig. 1. *Setacera*, hypopygium: external clasper. A. *S. aurata* Stenh., B. *S. micans* Hal., C. *S. breviventris* Loew.

Genus *Coenia* Robineau-Desvoidy

As *beckeri* Kuntze and *fumosa* Stenhammar are now regarded as belonging to *Para-*

coenia, there seems to be only one species in Europe that can be placed in this genus, *palustris* Fallén. As a synonym of this species Becker (1926: 77) mentioned *curvicauda* Meigen, a species recorded from North America by Sturtevant and Wheeler (1953: 164). The distinction between *palustris* and *curvicauda* is discussed by Cresson (1930: 119), who from a study of the Ephydridae in the collection belonging to the Naturhistorisches Museum in Vienna identified the species as two good ones. The distinction was made though the species show very few specific characters with the exception of the development of the hypopygium of the males. As Cresson only studied the hypopygial external characters without dissections, it may be justified to give a picture of some of these (fig. 2).

After a study of my material of *Coenia* I got the following records of *curvicauda* in Sweden: Skåne: Höör 10.6.1971; Småland: Oskarshamn 10.5.1959; Uppland: Knivsta 12.5.1956, Vaddö 20.5.1956 (leg. R. Dahl).

During the revision of *Coenia* material from various collections — also outside Scandinavia — I have found two new species of the genus, which will be described below.

Coenia borealis n.sp.

Description, male:

Frons metallic shining with two pairs of fronto-orbitals and verticals, one pair of ocellars and no intrafrontals. The frontal triangle is indistinct. The second antennal segment with some small bristles, arista with ± 10 rays, not longer than the width of the antennal segment 2. Face brown with long facial and epistomal bristles, genae very small and with one bristle. Palpi dark, slender. — Thorax brown, somewhat shining, four (one indistinct) pairs of dorso-centrals, one prescutellar and one interalar pair, three alar and two notopleural pairs of bristles. Acrostichals small in two rows,

scutellum dark brown with one great and one small pairs of bristles. — Wings of the common *Coenia* type with no spots, costa dark, index 6:1, basicosta with a long bristle. — Legs dark with no distinct setae, claws small and curved.

Male hypopygium fig. 2. Body length 2.3 mm.

Holotypus, ♂, in coll. Boheman, Riksmuseum, Stockholm, with the locality label *Lp, in*, which means Lapponia inferior or possibly Lapponia interior.

Coenia elbergi n.sp.

Description, male:

Antennae dark, the second segment with one dorsal bristle, arista with 8—10 long bristles. The frons is dark metallic with two pairs of orbital and vertical bristles, one

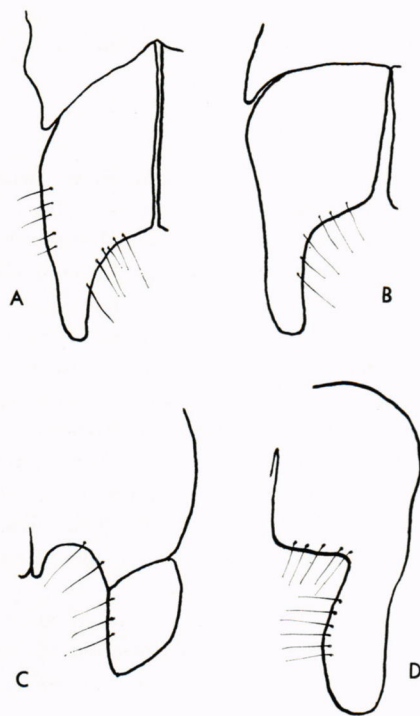


Fig. 2. *Coenia*, hypopygium: external clasper. A. *C. palustris* Fall., B. *C. curvicauda* Meig., C. *C. borealis* n.sp., D. *C. elbergi* n.sp.

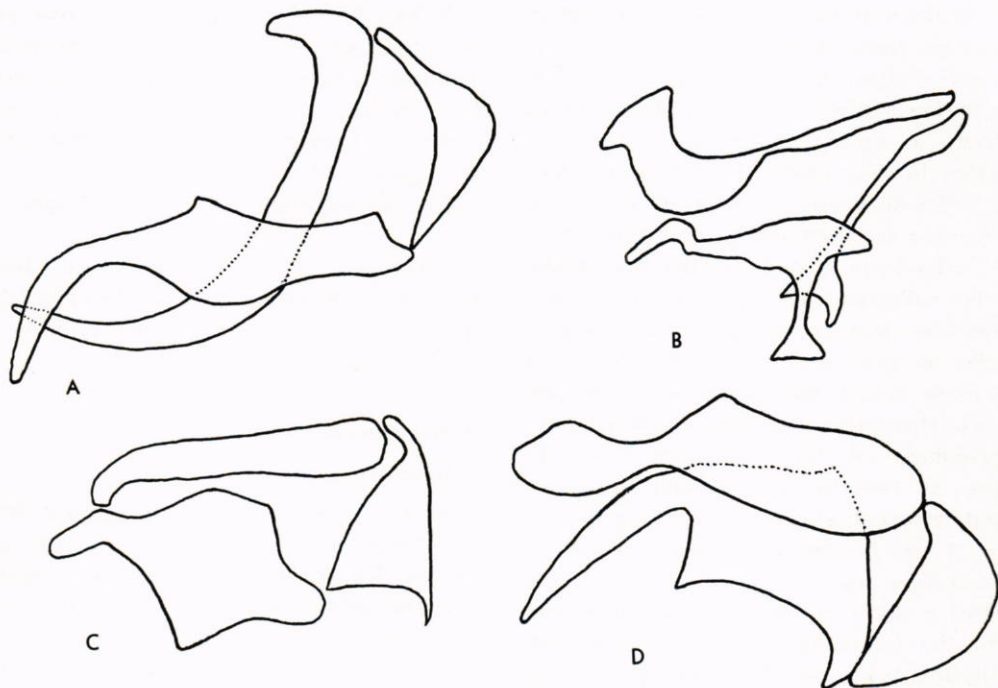


Fig. 3. *Pelina*, copulatory apparatus. A. *P. aenescens* Stenh., B. *P. aenea* Fall., C. *P. norvegica* n.sp., D. *P. nitens* Loew.

ocellar pair and no intrafrontal bristles. Face and epistomal margin with long bristles, genae small with one bristle. Palpi dark, slender. — Thorax dark brown, somewhat shining with three pairs of dorso-centrals, acrostichals small in two rows anterior to suture. Scutellum rounded with two pairs of bristles, the anterior one rather little developed. — Wings of ordinary type with yellowish basicosta. — Legs darkish with no distinct chaetotaxy, pulvilli present, claws curved. — Abdomen dark shining. Male hypopygium fig. 2. — Body length 2.4 mm.

Holotypus, ♂, Arabatuk (25 km SO from Borsja, on the shore of a thermokarst lake), U.S.S.R., coll. J. Vilbaste, Museum of Tartu.

Paratypus, ♂, same data.

Dedicated to Dr. K. Elberg of the University of Tartu, in recognition of his great kindness to give me the opportunity of

studying some of his material of Ephydriidae, collected in U.S.S.R.

Genus *Pelina* Haliday

During a study of South-European material of *Pelina* I had to make genital dissections of some specimens in my own collection of Scandinavian material. A comparison of the hypopygium of the males unveiled a new species, near related to *aenescens* Stenh.

Pelina norvegica n.sp.

Description, male:

Frons shining black with 1.5 orbital bristles, antennae black with a pubescent arista. Face silvery pollinose, more long than broad, with a lateral row of small bristles. Head index 3:1. — The black mesonotum smooth and polished with no distinct stripes, mesopleurae shining black.

Scutellum weakly coriaceous. — Legs black with yellowish tarsi. Wing index 3:1. — The abdomen finely granulose on second and third tergites. — Male hypopygium fig. 3. As a comparison also the European species *aenea* Fallén, *aenescens* Stenhammar and *nitens* Loew are figured. — Body length 2.7 mm.

Holotypus, ♂, Norway, Nnø. Sørkil 28.6. 1956, coll. R. Dahl.

This species forms together with *aenescens* a group of the genus *Pelina* characterized by having the mesopleura largely smooth and polished and by being entirely black. They are difficult to distinguish from each other except by the genital characters.

Addendum:

Genus *Paracoenia* Cresson

Thanks to the kindness of Prof. Dr. Giordano Soika, Venice, I have received some specimens of *Coenia beckeri* Kuntze collected at Sorgenti Acque Albule, Roma 13.7.1956, leg. A. Giordani Soika. An examination of the genital characters indicated a close

relationship to *P. fumosa* Stenhammar, and I therefore prefer to treat *beckeri* as a synonym of that species.

Acknowledgements

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