

Notes on some Danish Aphid Parasites (Hym., Aphidiidae).

By
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Information on distribution and host range of hymenopterous parasites of aphids in northern Europe is very scant. Though considerable material has been collected little of the results were published. The following records are based on a small collection of aphid parasites of the family Aphidiidae (Ichneumonoidea) that were reared by the junior author in the course of his studies on the Danish aphid fauna. The 24 samples examined contained representatives of 17 species belonging to six genera. Most of the parasites were not reported before either from Denmark or from other European countries. In addition, some of the host records, marked by an asterisk (*), are new.

The host aphids and aphid host plants were identified by Ole Heie, the parasites by Manfred Mackauer. All localities mentioned are in Jutland, except for Samsø, a little island north of Funen.

Most of the material belongs to the Zoological Museum of Copenhagen, Denmark. Some specimens are in the collection of the senior author at Belleville, Ontario, Canada.

List of the species.

1. *Praon abjectum* (Haliday)

1 ♀; Strandkjær, Mols, 5-VIII-59, reared from *Aphis* sp., probably *epilobii* Kalt., found on *Epilobium montanum* L.

2. *Praon flavinode* (Haliday)

1 ♀, 3 ♂♂; Kjellerup, 1-VIII-59; Skive, 26-VIII-58 and 14-IX-58; Legind Bjerge, Mors, 3-VI-59; all reared from alate viviparous females of *Euceraphis punctipennis* (Zett.) collected on *Betula alba* L. (= *pubescens* Ehrh.) (fig. 1).

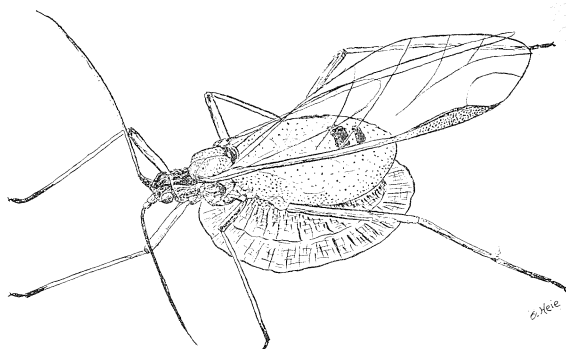


Fig. 1. The empty skin of *Euceraphis punctipennis* (Zett.) above the cocoon of *Praon flavinode* (Haliday) (collected on *Betula alba* at Skive, 14-IX-58).

1 ♂; Madum Lake, Himmerland, 25-V-59, reared from a larva of *Euceraphis punctipennis* (Zett.) found on *Betula verrucosa* Ehrh.

1 ♂; Skive, 10-IX-58, reared from an apterous larva of **Calaphis basalis* (Stroyan) found on *Betula alba* L.

1 ♀; Blokhus, 15-VII-60, reared from *Callipterinella callipterus* (Hartig) found on *Betula verrucosa* Ehrh.

3. *Praon volucre* (Haliday) s. l.

3 ♀♀, 2 ♂♂; Lemvig, 4-VII-59, reared from *Hyalopterus pruni* (Geoffroy) collected on a plum tree (*Prunus* sp.).

4. *Lysiphlebus hirticornis* Mackauer

1 ♀, 4 ♂♂; Pandrup, Vendsyssel, 12-VIII-63, collected in a colony of *Metopeurum fuscoviride* Stroyan on *Tanacetum vulgare* L. The parasites were not reared but collected as imagines in the colony where several aphids were killed by parasites.

5. *Diaeretus leucopterus* (Haliday)

1 ♂; Glyngøre, Salling, 10-VII-59, reared from an apterous specimen of *Eulachnus* sp., probably **E. brevipilosus* Börner, collected on *Empetrum nigrum* L. under *Pinus*, from which it might have fallen down.

6. *Pauesia pini* (Haliday)

3 ♀♀; Skive, 13-V-59, reared from apterous specimens of *Cinara* sp., probably *nuda* Mordv., found on *Pinus mugo* Turra.

7. *Aphidius aulacorthi* Stary

1 ♀; Addit Forest between Silkeborg and Horsens, 28-VI-59, reared

from **Aulacorthum knautiae* Heie on *Knautia arvensis* (L.) Coult.

8. *Aphidius avenae* Haliday

1 ♂; Lundbro, Skive, 17-IX-59, reared from an apterous larva of *Macrosiphum* (*Sitobion*) *avenae* (Fabr.) found on *Fragaria* sp. (cult.) but probably gone astray from grass.

9. *Aphidius ervi* Haliday subsp. *nigrescens* Mackauer

2 ♂♂; Sælvig, Samsø, 12-VIII-58, reared from apterous specimens of **Acyrtosiphon auctus* (Walker) collected on *Honckenya peploides* (L.) Ehrh.

10. *Aphidius funebris* Mackauer

1 ♀; Tvede, near Randers, 13-VII-59, reared from *Dactynotus cichorii* (Koch) subsp. **grossus* H.R.L. collected on *Crepis capillaris* (L.) Wallr. 1 ♂; Studsgaard, 9-VII-59, reared from **Dactynotus hypochoeridis* Hille Ris Lambers found on *Hypochoeris radicata* L.

11. *Aphidius hieraciorum* Stary

1 ♀, 1 ♂; Ulstrup, Djursland, 6-VII-60, reared from *Nasonovia pilosellae* (Börner) collected on *Hieracium pilosella* L.

12. *Aphidius hortensis* Marshall

1 ♀, 1 ♂; Skive, 27-VI-59, reared from *Liosomaphis berberidis* (Kalt.) collected on *Berberis* sp.

13. *Aphidius pascuorum* Marshall

1 ♂; Brund, near Horsens, 28-VI-59, reared from an apterous viviparous female of *Hyalopteroides humilis* (Walker) that was found on a lower leaf of *Knautia arvensis* (L.) Coult. but that had probably gone astray from *Dactylis glomerata* L.

14. *Aphidius salicis* Haliday

1 ♀; Sundøre, Salling, 23-VI-59, reared from an apterous specimen of *Cavariella aegopodii* (Scopoli) collected on *Anthriscus silvestris* (L.) Hoffm.

15. *Aphidius silvaticus* Stary

1 ♀; Blokhus, 22-VIII-64, reared from apterous *Amphorophora ampullata* Buckton on fern.

16. *Trioxyys cirsii* (Curtis)

1 ♀; Skive, 13-IX-58, reared from a nymph of *Drepanosiphum platanoidis* (Schrank) found on *Acer pseudoplatanus* L.

17. *Trioxyys* (*Betuloxyys*) *compressicornis* Ruthe

1 ♀; Krabbesholm Forest, Skive, 9-IX-58, reared from an alate

viviparous female of *Euceraphis punctipennis* (Zett.) found on *Betula alba* L. (= *pubescens* Ehrh.) (fig. 2).

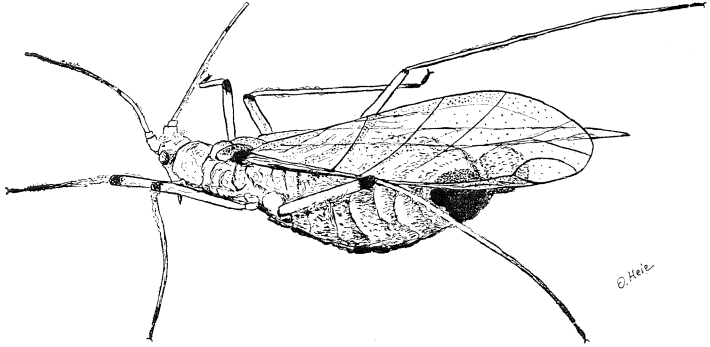


Fig. 2. The empty skin of *Euceraphis punctipennis* (Zett.) after the escape of *Trioxyis compressicornis* Ruthe (collected on *Betula alba* in Krabbesholm Forest, Skive, 9-IX-58).

Comments.

The data presented above are not sufficient to conclude on faunal composition or on zoo-geographical connections in any detail. However, it would appear that the Danish fauna of Aphididae is similar, by and large, to that of western and central Europe.

The new host records fall within the known host ranges of the parasites. The most interesting record is that of *Praon flavinode* (Haliday) as a parasite of *Calaphis basalis* (Stroyan). This record adds further evidence to the assumed preference of *flavinode* to the Phyllaphidina.
