# Three *Aphis* spp. new to the Danish aphid fauna (Hemiptera: Aphidoidea)

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Until recently 468 species of aphids and 5 subspecies have been recorded from Denmark (Heie, 1999). Three species have now been added to the Danish aphid fauna, one of them previously recorded under another name, so the total number is now 471.

## Aphis etiolata Stroyan, 1952, a species on Rumex acetosella new to Denmark (Heie, 1986, p. 135)

This species is pale yellowish green, whitish green or bluish green. The Danish material differs from the original description in the following characters (in brackets measurements given by Stroyan (1952)): Antenna 0.5 x body (0.3-0.4); apical segment of rostrum 1.2-1.3 x segment II of hind tarsus (1.4-1.6); siphunculus 1.2 x cauda (1.3-1.9).

It is holocyclic and not host-alternating and feeds on roots of *Rumex acetosella* in ants' nests. The male is apterous. It was found in Rågeleje (district NEZ) on June 26, 1996. It has been recorded from Europe north of the Alps, including southern Sweden.

#### Aphis genistae Scopoli, 1763, a species on Genista new to Denmark

This species is black and wax powdered. It is holocyclic and lives without host alternation on *Genista* spp., occasionally attended by ants. The male is alate. In Denmark it has been found once, viz.in Bagsværd near Copenhagen (district NEZ), on July 18, 1999, a colony feeding on the upper stem of *Genista tinctoria*, cultivated in a garden. It has been recorded from Sweden on the same host plant. Distribution: Europe.

#### Aphis spp. occurring on Hieracium umbellatum in Scandinavia

Holman (1998) described several new species of the genus *Aphis* occurring on *Hieracium* and decided that samples from the west coast of Jutland, described as a long-haired variety of *A. hieracii* by Heie (1986), should be regarded as belonging to a new species, *Aphis heiei*. The type material consists of the Danish specimens and is kept in the Zoological Museum in Copenhagen. These two species can be identified by means of the following key. Additional short descriptions are given below:

#### Key to species of Aphis on Hieracium umbellatum

Marginal hairs on abdominal segment III up to 0.8-1.3 x the basal diameter of antennal segment III. Frontal hairs 0.6-2.0 x the same diameter. Posterior hair on hind trochanter 0.3-0.8 x the diameter of the suture between trochanter and femur. *A. hieracii* Schr.

Marginal hairs on abdominal segment III  $3-3.5 \times 10^{-1}$  x the basal diameter of antennal segment III. Frontal hairs about 2.5 x the same diameter. Posterior hair on hind trochanter 1.1-1.4 x the diameter of the suture between trochanter and femur .... A. heiei Holman

<sup>(</sup>Heie, 1986, p. 164)

#### Aphis heiei Holman, 1998

(described in Heie, 1986 p. 172 under the name of *A. hieracii*)

Apterous viviparous female: Bluish green. Body length 1,2-1,8 mm. Deviating from *A. hieracii* by longer hairs. Antennae 0.4-0.6 x body; hairs on segment III about about 1.2 x basal diameter of the segment. Abdominal segments II-VI with a total of 0-4 marginal tubercles. Siphunculus 0.11-0.16 x body, 1.3-1.8 x cauda. - Alate viviparous female: Abdomen with dorsal cross bands on posterior segments and marginal and postsiphuncular sclerites. Differs frem the apterous viviparous female by having a darker antennal segment III.

It lives without host alternation on *Hieracium umbellatum*. It has been found three times in localities along the west coast of Jutland in dune areas: Blokhus (NEJ), August 3, 1967, Henne Strand (WJ), July 1, 1958, and Holmsland Klit (WJ), June 30, 1958. It has not been found outside Denmark.

#### Aphis hieracii Schrank, 1801

(Danish name: Blågrøn høgeurtbladlus)

(described in Heie, 1986 p. 172)

Apterous viviparous female and oviparous female: Bluish green like *A. heiei*. Differences between the two species are given in the key. Body length 0,8–1,8 mm. The male is apterous.

This species is also monoecious on stems and leaves of *Hieracium* spp., especially *H. umbellatum*. It has been recorded from several places in Jutland, but only one of these records refers to this species: Rømø (SJ), July 3, 1958. The others belong to *A. heiei. Aphis hieracii* is also known from Sweden. Distribution: North, Central and East Europe and North Asia. It has also been recorded from North America.

#### Dansk resumé

Tre arter af slægten *Aphis* skal tilføjes listen over danske bladlus (Heie, 1999), nemlig *A. etiolata*, en grøn bladlus på rødder af rødknæ, *A. genistae*, en mørk, vokspudret bladlus på visse, og *A. heiei*, en blågrøn bladlus på smalbladet høgeurt. De fleste fund af sidstnævnte art er tidligere blevet bestemt til *A. hieracii*. Det samlede antal arter af bladlus her i landet er således nu 471.

#### References

Heie, O. E., 1986. The Aphidoidea (Hemiptera) of Fennoscandia and Denmark. III. – Fauna ent. scand. 17: 1-314.

Heie, O. E., 1999. Annotated list of aphids recorded from Denmark (Hemiptera: Phylloxeroidea and Aphidoidea). – *Ent. Meddr.* 67: 13-36.

Holman, J., 1998. Species of the genus Aphis living on Hieracium. - Eur. J. Entomol. 95: 383-394.

Stroyan, H. L. G., 1952. Three new species of British aphids. – Proc. R. ent. Soc. Lond. (B) 21: 117-130.