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Description of *Syntemna haagvari*, a new species of Mycetophilidae (Diptera) from Norway

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In this article seven species of *Syntemna* are reported from southeastern Norway. One of the species, *Syntemna haagvari*, is described for the first time.

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Syntemna Winnertz 1863 is considered to be a strongly boreal genus with many Holarctic species. The genus was revised by Hutson in 1979, and since that time new species have been added by Plassmann (1978, 1990), Vockeroth (1980, Nearctic species) and Zaitzev (1994). Adults of this genus seem to be relatively uncommon in collections and samples. Little is known about biology beyond that two of the species have been reared or collected from saproxylic habitats (Hutson 1979).

In the period 1991-93 fungus gnats have been collected by malaise traps and trunk-window traps on polypore fungi (Kaila 1993) from a large number of localities with old spruce-dominated forest in different parts of south-eastern Norway. The material contained seven species of *Syntemna*: *Syntemna hungarica* (Lundström 1912), *Syntemna nitidula* Edwards 1925, *Syntemna setigera* (Lundström 1914), *Syntemna stylata* Hutson 1979, *Syntemna relicta* (Lundström 1912), *Syntemna penicilla* Hutson 1979, and a new species *Syntemna haagvari* described below.

***Syntemna haagvari* sp.n.**

Syntemna haagvari seems to be closely related to *Syntemna setigera* (Lundstr.). The macrotrichia are mainly restricted to the apical half of the wing beyond the base of Median fork, and none are found in or close to the Basal cell. An apical brush of pale hairs curved distally is found at the apex of tarsal sement 1, but not at the apex of tarsal segment 2 of the fore leg. However, the new species is distinguished by principle differences in the morphology of the male genitalia. Parameres are lacking in *S. haagvari* (**Figure 1**), but are present in *S. setigera* (Lundstr.) and other related species (**Figure 2**, and Hutson 1979). The gonostyle of *S. haagvari* differs from *S. setigera* and *S. penicilla* in its shape and the absence of a very stout bristle on the inner surface surrounded at base of a membranous ring or a socket (**Figure 1** and **2**, and Hutson 1979). The median process of tergite 9 is broader and shorter in *S. haagvari* compared to the related species (**Figure 1**, **2** and Hutson 1979). Differences were also found in other parts of the body, but are considered as supporting characters because body characters may be less consistent in *Syntemna* (Hutson 1979).

Description: Body length 3.9 mm. **Head**: head dark brown with light brown mouthparts; maxilar palps pale and 4-segmented; both segment 3 and 4 long, each about twice as long as segment 2; segment 4 much thinner than the

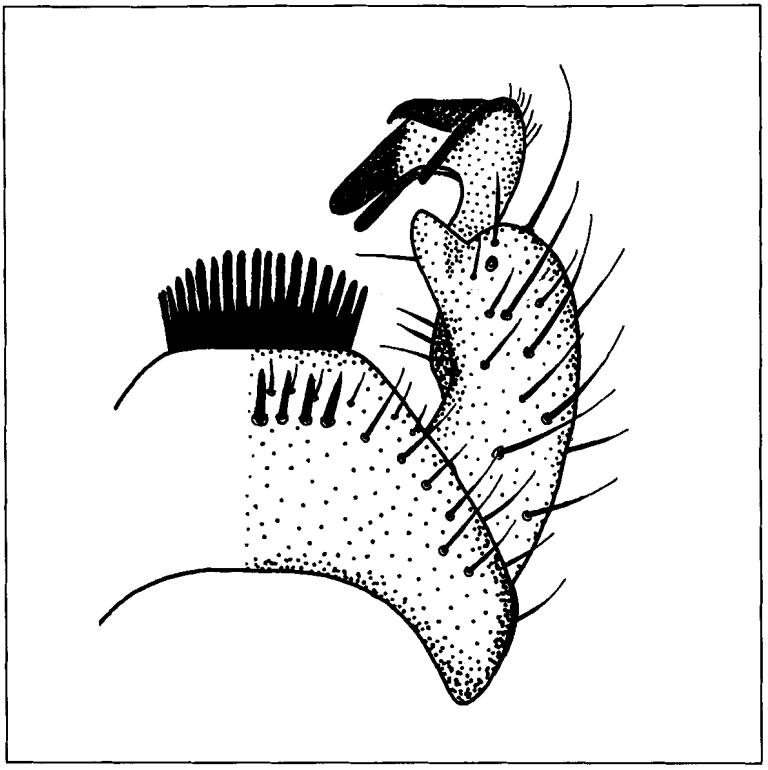

Figure 1
Male gentalia of Syntemna haagvari *sp.n.*

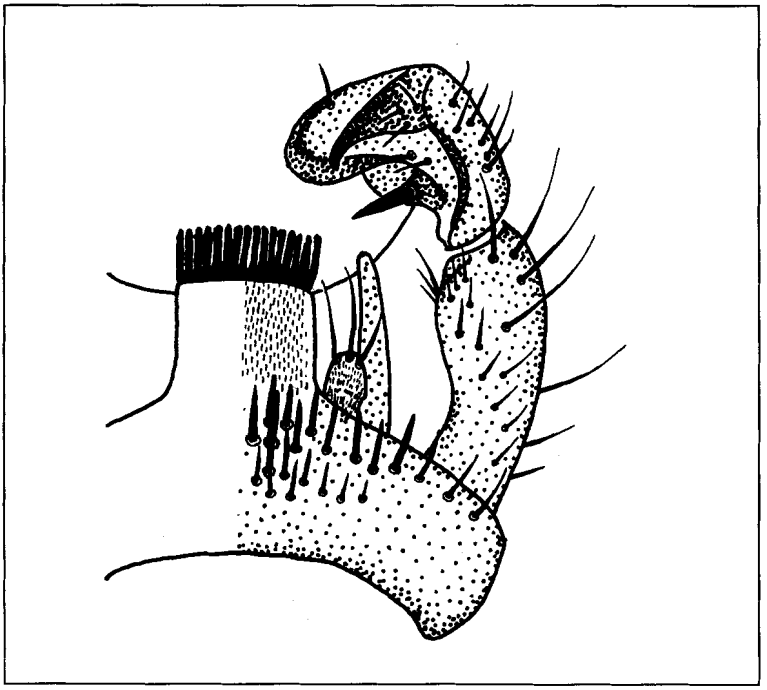

Figure 2
Male gentalia of Syntemna setigera *(Lundström 1914)*

other palp segments; oval spot on innerside of segment 2; Vertex covered with short pale hairs and with well-developed greyish ocelli, the lateral ocelli about 2 ocelli diameters from the eye margin; antenna clearly longer than head and thorax together, length 1.9 mm; Mid flagellar segments with length 2.0-2.5 X the width; all antennal segments densely covered with pale hairs shorter than the segment width; scape dark brown; pedicel and 1st flagellar segment pale; other flagellar segments brown. **Thorax**: Mesonotum, scutellum and mediotergite dark brown; sideplates of thorax and lateral parts of mesonotum and mediotergite brown; light brown shoulder spot; mesonotum with long pale bristles covering lateral and frontal parts and forming three longitudinal stripes in the center of the discal plate; 6 major scutellar bristles placed to either side of scutellum; mediotergite and sideplates of thorax bare, except for a group of long pale bristles on pleurotergite and 2-4 bristles at each of the propleuron and the forepart of pronotum; halters pale. **Wings**: Clear, length 3.7 mm; microtrichia in the whole wing; macrotrichia mainly restricted to the apical part beyond the base of Median fork, with none in or close to the basal cell; most veins with macrotrichia except for bare Medial stem, R-M, and stem of hind fork; Anal vein bare or with a few macrotrichia at its tip; R4 present, forming a small cell with Rs; length of Medial stem about twice the length of RM; Sc ending in R1 about the level of R4; C reaching well beyond the end of R5; the veins C, R1, R4, R5 and Rs brown, other veins light brown or pale; distinct black spots at the base of the wing. **Legs**: Coxae and femura yellow, more pale in fore leg; trochanters and the base of coxae brown; tibiae and tarsal segments pale, but increasing density of darker hairs towards apex gives the tarsal segments a darker impression; all tibia with yellow apical spurs, fore tibia with a single spur, and tibia 2 and 3 with 2 spurs, one of the spurs about 1/5 shorter than the other; length of tibia about 1.2 X the length of basitarsus in foreleg; apical brush of pale hairs curved distally present at the apex of tarsal sement 1, but absent at the apex of tarsal segment 2 of the fore leg; fore basitarsus slightly swelling apically; all legs with wide tarsal claws with a well-developed denticulation; bristles of mid tibia: 3a, 2pd, 3p, 6pv, 3av, and hind tibia: 6a, 9pd, 6p, 3pv. **Abdomen**: Segments 1-3 brown, and all segments behind dark brown; abdominal plates covered with long pale hairs. *Genitalia* (male): Parameres absent; hind margin of tergite 9 convex with a broad and short median process bearing a comb of 18 dark fingerlike fringes; anterior of the median process is a row of smaller bristles, and anterior of this a row of 8-10 stout dark bristles, continuing laterally into a row of bristles along the hind margin of tergite 9; internal flaps at apex of gonocoxites well-developed; gonostyle with some strongly sclerotized processes on the inner side, but none of them are bristles surrounded at base of membranous ring or socket.

Holotype male: NORWAY, Oppland, Gausdal, Ormetjernkampen, June 1993. The type is preserved in the Zoological museum of Oslo. Later on, two male individuals have been identified by Dr. A. Zaitzev. One of these was sufficient for being included as paratype.

Paratype male: Oppland, Gausdal, Tjuruverket, vii 1993. The paratype is preserved at A.N. Severtzov Institute of Ecology and Evolution, Moscow.

ACKNOWLEDGEMENTS

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SAMMENDRAG

Beskrivelse av *Syntemna haagvari*, en ny art av Mycetophilidae (Diptera) fra Norge.

I denne artikkelen rapporteres syv *Syntemna* arter fra sørøst Norge. Blant disse er en art, *Syntemna haagvari*, beskrevet for første gang.

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