

The genus *Nothochrysa* (Planipennia, Chrysopidae) in Norway

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The genus *Nothochrysa* is reported for the first time from Norway. The two species *N. fulviceps* (Stephens, 1836) and *N. capitata* (Fabricius, 1793) were captured in light-traps in Kristiansand (VAY) in 1999. The biology and distribution are briefly discussed, and a key to identify the two species is supplied. Both species should be included in the national red-list with the category «declining, care demanding» (DC) or «declining, monitor species» (DM).

Key words: Planipennia, Chrysopidae, *Nothochrysa*, red list.

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INTRODUCTION

Only two species of the genus *Nothochrysa* are known from Northern Europe (Aspöck et al. 1980), and surprisingly both of these were recorded for the first time in Norway in 1999. These findings increase the number of Norwegian Chrysopidae to sixteen, two more than predicted by Ottesen (1993). All the specimens of *Nothochrysa* are deposited in the collections at the Zoological Museum of Oslo.

IDENTIFICATION

The fourteen species of Chrysopidae known from Norway (i.e. *Nineta*, *Chrysotropia*, *Chrysoperla*, *Chrysopa*, *Anisochrysa*, *Cunctochrysa*) can be identified using the key given by Greve (1987). The genus *Nothochrysa* may be separated from these by their brownish colour of the body and wings. However, this character may be somewhat misleading, as specimens of *Chrysoperla carnea*

Stephens, 1836 turn ochreous or greyish during hibernation, and the green colour in all the species easily fade in contact with certain chemicals (e.g. ethylacetate). The following key will serve to separate *Nothochrysa* from the other Norwegian Chrysopidae and to identify the two species:

1. Green or yellow coloured insects; wing venation green, sometimes with black areas. Discoidal (median) cell (Mc) triangular (Fig. 1 a). Females have so far not been observed with a white, swampy mass attached to the dorsal side of the abdomen..... Norwegian Chrysopidae excl. *Nothochrysa*; for determination see Greve (1987).
- Reddish-brown insects; wing venation black, brown, reddish-brown or ochreous. Discoidal (median) cell (Mc) forming an elongate quadrangle (see Fig. 1 b). In fertile females a white, swampy mass is sometimes attached to the dorsal side of the abdomen (Fig. 3 a, b).
..... *Nothochrysa* (2).

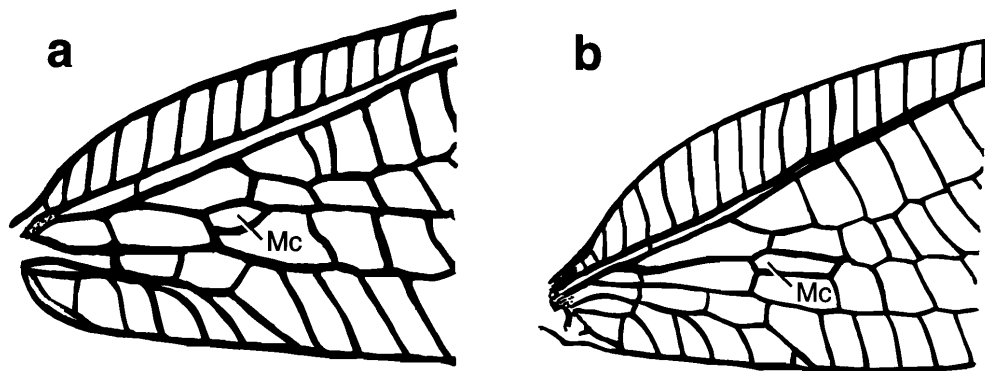


Figure 1. Wing venation: a. *Chrysopa septempunctata* (Wesmael, 1841) ♀; b. *Nothochrysa capitata* ♀.

2. Larger species, total wingspan 40–48 mm. Wings narrower and longer than in *N. capitata*. A basal expansion almost forming a teeth at the base of the tarsal claws (Fig. 2 a) *N. fulviceps*.
- Smaller species, total wingspan 30–36 mm. Wings broader and shorter than in *N. fulviceps*. No basal teethlike expansion at the tarsal claws (Fig. 2 b) *N. capitata*.

Anomalies in wing venation can occur among the green Chrysopidae, and species like *Chrysopa abbreviata* Curtis, 1834 and *Cunctochrysa albolineata* (Killington, 1935) have quite often been observed with a quadrangular discoidal cell in one or both of the forewings (Ohm 1961, Greve 1967). For this reason it is important to check both wings. However, specimens of these genera differ strikingly in colour and bodyform from the species of *Nothochrysa*.

THE SPECIES

Nothochrysa fulviceps (Stephens, 1836)

A single female was captured in a light trap at VAY Kristiansand: Bråvann (EIS 2), 17 August 1999 (leg. KB) (Fig. 3 a). Total wingspan 41 mm. The specimen had a white, swampy mass attached to the dorsal side of the abdomen. The locality is a warm, sunexposed housing estate with scattered oak (*Quercus*) and other deciduous trees, as well as some Scotch pine (*Pinus sylvestris*). The light

trap was located close to some oak trees. *N. fulviceps* is recorded from Sweden, Denmark and Britain (Esben-Petersen 1929, Tjeder 1940, Steel 1964), but not from Finland. In Sweden it is recorded from Skåne, Östergötland, Södermanland and Uppland (Tjeder 1940, Hedström 1985). In Denmark it is found scattered all over the country, but seems to be more abundant on the islands than on the mainland (Jutland) (Esben-Petersen 1929). According to Steel (1954), *N. fulviceps* appears to be confined to oak, keeping to the upper branches and is for this reason rarely seen. Mass emergences sometimes occur, and large numbers of specimens may be found under oak trees clinging to grass stems.

Nothochrysa capitata (Fabricius, 1793)

A female was captured in a light-trap at VAY Kristiansand: Flekkerøy, Beltevinga (EIS 2), 13 July

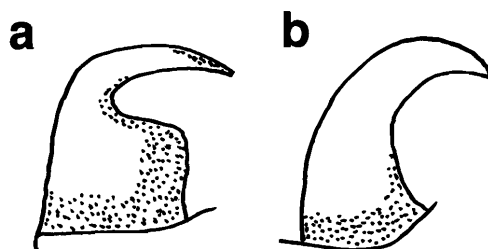


Figure 2. Tarsal claws: a. *N. fulviceps*; b. *N. capitata*.

1999 (leg. KB) (Fig. 3 b). Later, on 3 August 1999 a male was captured at the same locality (leg. KB). The total wingspan of the female was 31 mm; for the male 33 mm. As for the previous species, the female had a white, swampy mass attached to the dorsal side of the abdomen. The trap was situated at a locality with both heath, mire, forest and a large pond. The area has scattered deciduous trees such as oak (*Quercus*), aspen (*Populus tremulae*) and different *Salix*-spp. Most dominant is, however, a dry pine forest (*Pinus sylvestris*), and the light trap was located close to this. *N. capitata* is recorded from Sweden, Denmark and Britain (Esben-Petersen 1929, Tjeder 1940, Steel 1964), but not from Finland. It is only recorded from Skåne in Sweden (Tjeder 1940), but in Denmark it seems «not so rare» on the mainland (Jutland) (Esben-Petersen 1929). *N. capitata* is according to Esben-Petersen (1929) associated with conifers, and Steel (1954) mentions in particular Scotch pine (*Pinus sylvestris*) from Britain. Mass emergences take sometimes place under conifers in the same way as for *N. fulviceps*.

RED-LIST CATEGORY

Both species are associated with warm coastal forests, a most threatened type of nature in Southern Norway, due to logging and housing estates. For this reason both species should be included in the national red list with the category «declining, care demanding» (DC) or «declining, monitor species» (DM), which are categories in accordance with the revised red list (Direktoratet for Naturforvaltning 1999).

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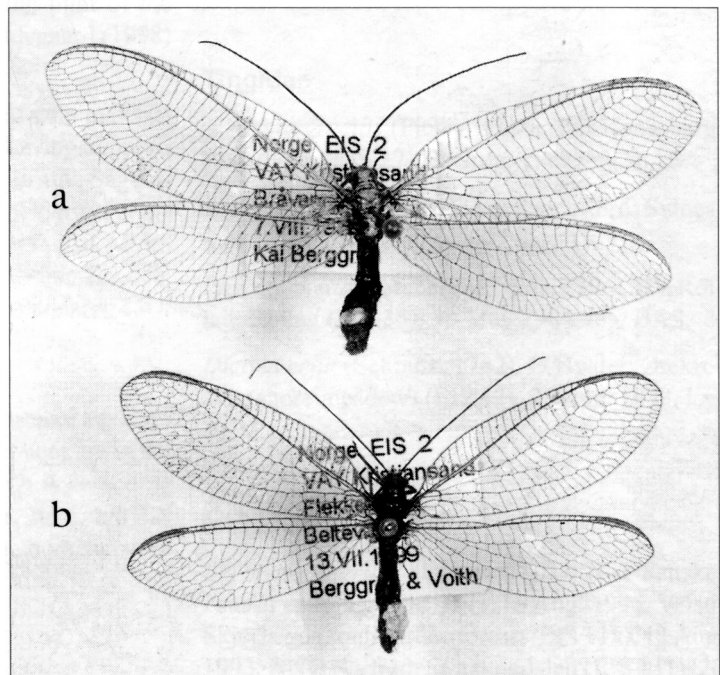


Figure 3. Imago: a. *Nothochrysa fulviceps* ♀; b. *Nothochrysa capitata* ♀. Photo: Lars Ove Hansen.

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