# The ichneumonid wasp *Neorhacodes enslini* (Ruschka, 1922) (Hymenoptera, Ichneumonidae) in Norway

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The ichneumonid wasp *Neorhacodes enslini* (Ruschka, 1922) is recorded for the first time in Norway. A single female was caught in a Malaise-trap at Abildsø, Østensjøvannet, Oslo municipality (AK; EIS 28), July 1996. This is the first record of this species in Norway. *N. enslini* has traditionally been included in Neorhacodinae, but this subfamily was recently merged into Tersilochinae. The distribution and biology of the species are briefly discussed.

Key words: Ichneumonidae, Tersilochinae, Neorhacodinae, Neorhacodes enslini, Spilomena, distribution, biology, Norway.

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### Introduction

The Ichneumonidae is the largest family of Hymenoptera, in just the Palaearctic it comprises almost 9000 described species (Yu et al. 2005). Due to their diversity and the dispersed and inaccessible literature, our knowledge of many taxa in the group remains incomplete. Since 1997, many additions to the Norwegian fauna have been published (e.g. Riedel & Berg 1997, Riedel et al. 2000, 2005, Riedel & Hansen 2007, Hansen et al. 2010). Although almost 1600 species of Ichneumonidae are known from Norway so far, there is still a large portion of unrecorded species. Some of the subfamilies contain a lot of species, but others are small, like the former subfamily Neorhacodinae, which traditionally has been treated as a separate subfamily (Gauld & Bolton 1988). This subfamily contains very few species worldwide, and only two are reported from Europe (Notton & Shaw 1998). This article deals with the first record of Neorhacodes enslini (Ruschka, 1922), which represents one of these

species. However, Neorhacodinae was recently merged into the subfamily Tersilochinae (Quicke et al. 2009).

#### Material

A single female of *Neorhacodes enslini* (Ruschka,1922) was captured in a Malaise-trap at Abildsø Østensjøvannet, Oslo municipality (AK, EIS 28) [MGRS: 32V PM 0181 4029 ±25m] in July 1996, leg. Morten Falck. The specimen is deposited in the insect collections at the Natural History Museum in Oslo. The specimen is illustrated in Figure 1.

## Distribution and biology

Neorhacodes enslini is hitherto only reported from the West Palaearctic, and the distribution stretches throughout southern and central Europe north to Finland and Russia (Notton &



**FIGURE 1**. Female of *Neorhacodes enslini* (Ruschka, 1922) from AK, Oslo: Østensjøvannet, Abildsø, July 1996. Photo: Karsten Sund, Natural History Museum, Oslo.

Shaw 1998, Yu et al. 2005, Zwakhals 2011. It is associated with the diggerwasp-genus *Spilomena* Shuckard, 1838 (Hymenoptera, Crabronidae), and *S. differens* Bluthgen, 1953, *S. enslini* Bluthgen, 1953 and *S. troglodytes* (Vander Linden, 1829) have been reported as hosts (Danks 1970). The larvae are probably endoparasitic, spinning a thick eggshaped cocoon inside the cell of the host when full grown. They utilize twigs and stems with soft internal parts, of plants such as *Buddleja* sp., *Gossypium hirsutum* L., *Rhamnus cathartica* L. and different species of *Rubus* spp. (Danks 1970).

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