

The myrmecophilous fly *Microdon myrmicae* Schönrogge et al., 2002 (Diptera, Syrphidae) in Norway

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Gammelmo, Ø. & Aarvik, L. 2007. The myrmecophilous fly *Microdon myrmicae* Schönrogge et al., 2002 (Diptera, Syrphidae) in Norway. Norw. J. Entomol. 54, 43-48.

The hoverfly *Microdon myrmicae* Schönrogge et al., 2002 is reported for the first time from Norway. *M. myrmicae* is a parasite on *Myrmica scabrinodis* Nylander, 1846 (Formicidae). Comments on its biology and locality are given.

Keywords: *Microdon myrmicae*, Syrphidae, Diptera, myrmecophily, new record, Norway.

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INTRODUCTION

Most species of the hoverfly genus *Microdon* Meigen, 1803 are associated with ants (Formicidae) while a few have been reported to live among other wasps (Hymenoptera) and termites (Isoptera). Species of *Microdon* occur in forests, dry grasslands and bogs. The larvae live in ant nests, where they feed on the eggs and larvae. Adults emerge in spring or early summer from puparia situated near the surface of the ant nests (Akre et al. 1990). The genus consists of approximately 400 species worldwide (Stankiewicz 2003). In Northwest Europe five species of *Microdon* are present; *M. analis* (Macquart, 1842), *M. devius* (Linnaeus, 1761), *M. miki* Doczkal & Schmid, 1999, *M. mutabilis* (Linnaeus, 1758) and *M. myrmicae* Schönrogge et al., 2002 (van Veen 2004, Speight 2004). The cryptic species *Microdon myrmicae* was described in 2002 mainly based on characters of the puparium (Schönrogge et al. 2002a, 2002b, Speight 2002a). Three species of *Microdon* have so far been reported from Norway; *M. analis*, *M. miki* and *M. mutabilis* (Nielsen 1999).

MATERIAL & METHODS

List of material (*M. myrmicae*):

VE Horten: Adalstjernet (EIS 19, UTM WGS84 32V NL 816820) 15.VI.2005, 1 ♂ 2 ♀♀, leg. L. Aarvik, coll. NHMO; 12.V.2006, 1 ♂ 2 ♀♀, leg. Ø. Gammelmo & L. Aarvik, coll. NHMO. **VAY** Kristiansand: Nedre Timenes (EIS 2, UTM WGS84 32V MK 470 475) 18.VI.2005, 1 ♂, leg. K. Berggren, coll. S. Svendsen.

In 2005 the second author captured three specimens of *Microdon* flying low over the *Sphagnum* at Adalstjernet in Vestfold County (Figure 1). The behaviour of these specimens and the locality strongly suggested that it was *M. myrmicae* which is a parasite on *Myrmica scabrinodis* Nylander, 1846 (Formicidae). In 2006 the authors searched for larvae and puparia in order to establish the identity of the material. The nests of *M. scabrinodes* were located by digging into the bog where the *Sphagnum* formed slight heaps. The nests are invisible on the surface of the bog. Seven puparia and six larvae of *M. myrmicae* were found, together with remains of empty