Aglaostigma alpinum (Thomson, 1871) and *Tenthredo velox* Fabricius, 1798 in Norway (Hymenoptera, Symphyta, Tenthredinidae)

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The following two species of sawflies (Hymenoptera, Symphyta, Tenthredinidae) *Aglaostigma alpinum* (Thomson, 1871) and *Tenthredo velox* Fabricius, 1798, are recorded for the first time from Norway. Remarks on their biology and distribution are given.

Keywords: Tenthredinidae, *Aglaostigma alpinum*, *Tenthredo velox*, new records, Norway.

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INTRODUCTION

The thenthredinid genera *Aglaostigma* and *Tenthredo* are so far represented with 2 and 26 species respectively in Norway (Siebke 1980, Strand 1898, Kiær 1898, Nuorteva et al. 2005, Heibo & Lønnve 2006, Taeger et al. 2006). Both genera belong to the large subfamily Tenthredininae (Viitasaari 2002), that contains most of the large and colourful tenthredinids. A number of species are carnivorous as adults, and attack smaller insects. Unlike most other sawflies number of tenthredininies are polyphagous, feeding as a larva on a wide range of host plants.

In this paper two more species are added to the Norwegian fauna: *Aglaostigma alpinum* (Thomson, 1871) and *Tenhtredo velox* Fabricius, 1798. All hitherto known records of *A. alpinum* and *T. velox* in Norway are presented.

MATERIAL & METHODS

Material from all major museums in Norway has been reviewed. The presented material is deposited in the collections of the Natural History Museum, University of Oslo, German Entomological Institute in the Leibniz Centre for Agricultural Land Use Research (ZALF), and private collection of E. Heibo. Regional abbreviations are given in accordance to Økland (1981). The nomenclature is according to Blank et al. (2006), while plant names are according to Lid (1987).

RESULTS & DISCUSSION

***Aglaostigma alpinum* (Thomson, 1871)**

= *Aglaostigma nivosa* Klug, 1814

= *Tenthredopsis nivosa* (Klug, 1814)

A. alpinum (see Figure 1) is 7.5–11 mm long with brown, white and yellowish pattern. It is

Figure 1. The picture shows a ♀ specimen of *A. alpinum* from Seljord, Blika 25 june 2005. Photo: Karsten Sund.

only recorded in south-eastern part of Norway (Table 1). *A. alpinum* is also known from Sweden (Malaise 1931). Further distribution includes Finland, Karelia, Central Urals, Carpathian, Balkans, Far East of Russia, and in Central and Northern parts of Western Europe (Viitasaari & Vikberg 1985, Zhelochovtsev 1994, Taeger et al. 2006)). The host plant is not known, but all the Norwegian specimens are found in shady and moist localities where at least *Tussilágo fárfara* and *Filipendula ulmária* are present. This type of habitat is widespread in Norway. Most collectors usually collect in sunny dry fields and therefore *A. alpinum* could be overlooked. Still few records indicates that this species is not common. Malaise (1931) claims *A. alpinum* to be rare in Sweden. Other European *Aglaostigma*-species feed on *Tussilago fárfara*, *Petasites* sp., *Galium* sp., *Epilobium* sp., *Filipendula ulmaria* and *Impatiens noli-tangera* (Taeger et al. 1998).

Table 1. The table shows the records of *Aglaostigma alpinum* in Norway. Abbreviations: OJL = Ole J. Lønnve, EH = Erik Heibo and NHM = Natural History Museum, University of Oslo, DEI = German Entomological Institute in the Leibniz Centre for Agricultural Land Use Research (ZALF).

Strand-region	Municipality	Locality	EIS	UTM [WGS84]	Coll. date	N ♂/♀	leg	Col.
TEI	Seljord	Blika	26	32VMM752054	25 June 2005	1♀	OJL	NHM
BØ	Lier	Elveroa	28	32VNM747325	9-31 May 2008	1♀	EH	EH
AK	Bærum	Kjaglidalen	28	32VNM790467	7 June 1997	2♀	OJL	NHM
AK	Bærum	Kjaglidalen	28	32VNM790467	19 June 1998	1♀	OJL	EH
AK	Oslo	Maridalen, Turter	36	32VNM989540	29 May–5 June 2002	2♀	EH/OJL	NHM/DEI
OS	Lunner	Vestern	36	32VNM812863	11 June 2000	1♀	OJL	NHM

***Tenthredo velox* Fabricius, 1798**

T. velox is 10–11 mm long with black colour except for the antenna which is white beneath. The males are red on abdomen from the 3rd tergite and backwards. A single male was captured at Jarfjord (EIS 169) in Sør-Varanger (FØ), on 6. August 1996 (leg. J. Skartveit). The specimen is kept at the Natural History Museum, Oslo. The locality is an alpine meadow on the coast of arctic Norway with plants like *Valeriána sambucifólia*, *Urtica dioíca sondénii* and *Anthríscus sylvéstris*. Malaise (1931) lists *T. velox* for Sweden on the basis of an uncertain record with unknown locality. *T. velox* is known from Finland (Viitasaari & Vikberg 1985). Viitasaari (pers. com.) says that *T. velox* is not uncommon in Finland, and that there exists records from Finish Lapland as far north as Lake Inari. Further distribution includes Great Britain and Denmark, Balkans, Northern Caucasus, Mongolia, Far East of Russia and Japan (Nielsen & Henriksen 1915, Zhelochovtsev 1994, Taeger et al. 2006). The distribution pattern of *T. velox* in Fennoscandia is interesting. Although the species are widespread in Finland and most of Central Europe, it has not yet been recorded with certainty on the Scandinavian peninsula. Material from the "long-horned" group of Tenthredo (which *T. velox* belongs to) has been gathered from all over Norway, but the specimen from Jarfjord is so far the only *T. velox* that has been found. This is interesting since this group of insects is well represented in collections. It is therefore possible that *T. velox* has a north eastern colonization route into Norway and probably Sweden as well. It is well known that many other insects have colonized Scandinavia in this way, for example several saproxylic beetles (Andersen et al. 2000, Olberg et al. 2001). The host plants of *T. velox* are *Alnus viridis*, *Polygonum bistorta*, and *Salix aurita* (Schedl 1976, Weiffenbach 1988). *Polygonum bistorta* is a rare imported guest in Norway and *Salix aurita* is only distributed approximately north to the Arctic Circle, while *Alnus viridis* is found in the Alps of central Europe (Lid 1987). In Finland at least *Salix aurita* is distributed up to the border of Lapland (Lid 1987). Therefore with no known host plant in Arctic Norway we suggest it could be a relative to the plants listed.

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