Notes on Norwegian Coleoptera 6

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This contribution deals with additions and corrections to the list of Norwegian Coleoptera. The following three species are reported for the first time from Norway: *Nicrophorus interruptus* Stephens, 1830 (Silphidae), *Triphyllus bicolor* (Fabricius, 1777) (Mycetophagidae) and *Mordellaria aurofasciata* (Comolli, 1837) (Mordellidae). *Cryptolaemus montrouzieri* Mulsant, 1853 (Coccinellidae) is reported for the first time outside a greenhouse in Norway. This species is frequently used for biological control of mealy-bugs in greenhouses. *Scymnus ater* Kugelan, 1794 (Coccinellidae) is removed from the Norwegian list. The previous report of this species was based on a misidentification.

Key words: Coleoptera, *Nicrophorus interruptus, Cryptolaemus montrouzieri, Mordellaria aurofasciata, Triphyllus bicolor, Scymnus ater*, Silphidae, Mordellidae, Mycetophagidae, Coccinellidae.

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INTRODUCTION

The Norwegian beetle-fauna is far from fully investigated, and new species to the Norwegian fauna are still encountered. The aim of this paper is to add recent information concerning Norwegian Coleoptera, and to update additions and corrections to the list. This is the sixth contribution in the series. The latest one was Sagvolden & Hansen (2001). The nomenclature follows Silfverberg (2004), if not otherwise is stated. The records are given in accordance with Økland (1981), and the EIS-squares with Økland (1977). If nothing else is stated, the material is collected by the authors, and deposited in the collections of the junior author or at the Natural History Museum, University of Oslo. The following abbreviations have been used in the text: LOH = Lars Ove Hansen, BAS = Bjørn A. Sagvolden.

SPECIES ADDED TO THE NORWEGIAN LIST

Silphidae

Nicrophorus interruptus Stephens, 1830; nec Brullé, 1822
[= *Nicrophorus fossor* Erichson, 1837]

A single male was captured in a pitfall-trap at **Ø** Hvaler: Kirkøy, Ørekroken [UTM WGS84 32V PL 153454; EIS 12], 22 June-16 July 2003 (leg. LOH). The locality is an open sandy shore scattered with meadows and open pine forest. The area has previously been grazed by cattle, but the open areas are now reduced and starting to get overgrown by bushes and trees. The trap collected several other *Nicrophorus* spp., even though it was only loaded with ethylene glycol. The attraction was probably caused by two mice (*Mu*s spp.) that had drowned in the trap, and started to decompose. Several more traps were

Figure 1. *Nicrophorus interruptus* Stephens, 1830 from Hvaler, Norway. Photo: Karsten Sund.

put out later in the season, some with different kind of bait (e.g. fish, meat), but more specimens of *N. interruptus* were not captured. The collected specimen is illustrated in **Figure 1**.

N. interruptus is reported from Sweden, Denmark and the Baltic countries, but not Finland, or the Russian part of Fennoscandia (Silferberg 2004). However, it is considered rare, and few recent records are present from N Europe. It has previously erroneously been listed as Norwegian by Lundberg (1995). The species is included in the latest edition of the Norwegian red-list, with the category «critically endangered» (CR) (Ødegaard et al. 2006).

The literature has changed frequently between the use of *N. interruptus* and *N. fossor* through the history. However, Sikes et al. (2002) argue convincingly for the priority of *N. interruptus* before *N. fossor*, and this has been followed here. This is also in accordance with Löbl & Smetana (2004), but not Silverberg (2004). The latter uses *N. fossor*.

Coccinellidae

Cryptolaemus montrouzieri Mulsant, 1853

During a field-course for the public arranged by the Natural history museum at **AK** Oslo: Tøyen, 15 June 2003, a single specimen of a ladybird

Figure 2. *Cryptolaemus montrouzieri* Mulsant, 1853 from Oslo, Norway. Photo: Karsten Sund.

Figure 3. *Mordellaria aurofasciata* (Comolli, 1837) from Asker, Norway. Photo: Karsten Sund.

was sweep-netted by the senior author (LOH). The locality was a small meadow in the Botanical garden of the University of Oslo, not far from some greenhouses. According to Anne Finnanger (pers. comm.), *C. montrouzieri* is frequently imported and released in the greenhouses to combat mealy bugs (*Pseudococcus* spp.; Hem., Pseudococcidae). This is the first record outdoors of this species in Norway. It has been reported outside greenhouses in Sweden (Ehnström & Lundberg 1997) and Britain (Constantine & Majerus 1994). Hovever, this is a tropical and subtropical species, so it is to believe that it will not survive the winter in Norway, but observations from Britain indicate that the species may survive shorter periods with frost (Halstead 1999). The species is easy recognizable, and may be determined from the photo in Figure 2.

C. montrouzieri has a quite amazing history, and was among the very first species to be used in biological control of agricultural insect pests. Since the first introduction into California in USA in 1891 from New South Wales, Australia, it has later been introduced to many countries around the world (Booth & Pope 1986).

Mycetophagidae

Triphyllus bicolor (Fabricius, 1777)
Several specimens of this species were captured in a light-trap at **VAY** Kristiansand: Nedre Timenes, [UTM WGS84 32VMK 470 470, EIS 2]; 1 ex. June 2002, 2 exx. August 2002, 1 ex. August 2005, 5 exx. September 2006, 4 exx. October 2006, leg. Kai Berggren. The trap was situated in an oak forest. A single specimen was recently captured in **VAY** Søgne: Åros (EIS 2), 2006 (Sverdrup-Thygeson et al. 2007).

T. bicolor is reported from Sweden, Denmark and the Baltic countries, but not Finland (Silfverberg 2004). It is associated with older deciduous trees, particularly oak (*Quercus* spp.) and beech (*Fagus* sp.) (Koch 1990). The species is included in the latest edition of the Norwegian red-list, with the category «endangered» (EN) (Ødegaard et al. 2006).

Mordellidae

Mordellaria aurofasciata (Comolli, 1837)
During an investigation this species was captured at **AK** Asker: Nesøya, Storenga, 1♂, June-July 2003, window-trap, 1♂ Ultimo July-Primo August 2003, malaise-trap (leg. LOH). In addition 1♂ was taken in a malaise-trap at **AK** Bærum: Oksenøya, Oksenøyveien, July-August 2003 (leg. LOH). All the localities were open meadows scattered with decidous threes, but with little dead or decaying wood. The three localities are close to each others.

With the use of the keys in Ermisch (1969), the specimens were keyed to *Mordellaria*. Only one European species is present in this genus, viz. *Mordellaria aurofasciata*. The male genitalia of one of the Norwegian specimens was compared with Figure 104 in Borowiec (1996), and they were found slightly different. However, specimens were borrowed from Budapest and Berlin and they turned out to be similar to the Norwegian specimens. A characteristic feature is the golden-white anchor-shaped area ¾ on the back on the elytrae (**Figure 3**).

From the biology of related species, it is to be assumed that *M. aurofasciata* develops in decaying wood (Ermisch 1969, Borowiec 1996). The distribution covers S Europe north to Germany, Poland and Ukraine (Ermisch 1969, Borowiec 1996). It has hitherto not been reported from N Europe. The Norwegian records may represent a relict population or a recent establishment. However, it is not reported to be expanding at the moment. It is included in the latest edition of the Norwegian red-list, with the category «data deficient» (Ødegaard et al. 2006).

SPECIES REMOVED FROM THE NORWEGIAN LLIST

Coccinelllidae

Scymnus ater Kugelann, 1794
S. ater has earlier been reported from Norway, but

Strand (1975) indicated that this record actually represented a misidentification of *S. limbatus* Stephens, 1832. Sagvolden & Hansen (2001) once again reported *S. ater* from Norway, presenting a record from **BØ** Røyken: Kinnartangen. However, the specimen was later checked by Hans-Erik Wanntorp who found that this was a misidentification of the more common Stethorus punctillum (Weise, 1891). *S. ater* should, thus, again be removed from the Norwegian list. According to Wanntorp (2004) the species is so far not present in N Europe, and occurs in C and S Europe northwards to The Baltic countries and N Germany (Wanntorp 2004).

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