

Micromus variegatus (FABRICIUS 1793) (Neuroptera, Hemerobiidae) in Norway¹

L. GREVE

Abstract: Within a period of 15 years, altogether 22 specimens of *Micromus variegatus* (FABRICIUS 1793) from 7 localities have been collected in SW Norway. The locality at AK Nesodden, Fagerstrand is the northernmost record from Europe.

Key words: *Micromus variegatus* (Neuroptera: Hemerobiidae), new Norwegian records, northernmost, Europe.

M. variegatus is a distinctive species of the family Hemerobiidae with a wide distribution in Europe, moreover it has been recorded in Northern Iran and Japan. In northern Europe *M. variegatus* was recorded from Southern Sweden, north to Västergötland, and Denmark (ASPÖCK et al. 1980), until the species was recorded as new to Norway (GREVE 1988) based on one male netted near Grimstad, the province of Aust-Agder (AAY), Norway in 1984. *M. variegatus* was first considered to be very rare in Norway due to the fact that no other specimens had been caught in different surveys in the Oslofjord area. Also, there was a theoretical possibility of a windblown migration from Denmark across the Skagerak.

In the last fifteen years, however, the following material of *M. variegatus* has been collected:

Ø Borge: Borge Varde EIS 20, 26 Aug 1992, net, 1♂ leg. T. J. Olsen; Hvaler: Asmaløy Huser, EIS 12, Aug. 1995, LT, 1♀ leg. B. M. Fjellstad; Sarpsborg: Råkil EIS 20 Tune 1 May 2001, net, 1♂ leg. T. J. Olsen. AK Nesodden: Fagerstrand EIS 28 14–15. Aug. 2000, LT, 1♂; 26–27 Aug. 2001 LT 2♂♂; 7–8. Aug. 2002, LT, 1♂ 1♀; 4–5 Sept. 2002, LT, 1♂; 6–7 Aug. 2003, LT, 1♀; 12–13 Aug. 2003, LT, 1♂ 1♀; 20–21 Aug. 2003, LT, 1♂; 21–22 Aug. 2003, LT, 1♂; 24–25 Aug. 2003, LT, 1♂; 5 or 7. Sept. 2003, LT, 1♂; 14–15 Sept. 2003, LT, 2♀ ♀; 15–16 Sept. 2003, LT, 1♀ leg. S. Kobro. VE Tjøme: Gon EIS 19 31 May 1990 1♂, Sande 7 Aug. 1993 1♀ leg. A. Fjellberg. LT = Lighttrap.

This is a total of 21 specimens from 6 localities.

M. variegatus has a distinctly southern distribution in Fennoscandia, recorded from southern Sweden and southern Norway only. HEDSTROEM (1987, 1989) published two reports on new insect finds including new records of Neuroptera from Swedish areas, but *M. variegatus* was not commented on. The Norwegian records from Fagerstrand is the northernmost recorded from Eu-

rope, and the Norwegian distribution is located in the South-East, mostly areas around the Oslofjord and further south to the town Grimstad in the west.

During the time 1988–1996 32 species of Neuroptera were collected in the light trap at Fagerstrand (GREVE & KOBRO 1998). The collection with the light trap has been continued, and *M. variegatus* was for the first time collected in the light trap in year 2000, and it was also collected in the three following years, including the summer 2003.

Light trapping of *M. variegatus* is obviously an effective method in Norway since ten males and seven females have been collected by lighttrapping compared to only four males (including the male from Grimstad) and one female by netting and Malaise trapping. Two males were collected in early spring, while the others were collected from the first week of August until the middle of September.

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Zusammenfassung

In einem Zeitraum von 15 Jahren wurden insgesamt 22 Individuen von *Micromus variegatus* (FABRICIUS, 1793) von sieben Fundorten in SW Norwegen gesammelt. Der Fund von AK Nesodden, Fagerstrand ist der nördlichste Nachweis von Europa.

¹ I am happy to participate in this volume dedicated respectfully and cordially to Prof. Dr. Horst Aspöck on the occasion of his 65th birthday, in admiration of his lifelong work and his contribution to science.

References

- ASPOCK H., ASPOCK U. & H. HÖLZEL (1980): Die Neuropteren Europas. — Goecke & Evers, Krefeld, I 495pp + II 355pp.
- GREVE L. (1988). *Micromus variegatus* (FABRICIUS, 1793) (Neuroptera Planipennia: Hemerobiidae) new to the fauna of Norway. — Fauna norvegica Ser. B **36**: 142.
- GREVE L. & S. KOBRO (1998): Preliminary data on abundance of phototactic Neuroptera and Raphidioptera in SE Norway as indicated by light-trap catches. — Acta Zoologica Fennica **209**: 119-120.
- HEDSTROEM L. (1987): Svenska insektfynd - rapport 3 (Swedish insect records - report 3.). — Entomologisk Tidskrift **108**: 149-158.
- HEDSTROEM L. (1989): Svenska insektfynd - rapport 5 (Swedish insect records - report 5.). — Entomologisk Tidskrift **110**: 149-155.

Address of the author:

Lita GREV
Museum of Zoology
University of Bergen
P.O. Box 7800
N-5020 Bergen, Norway
E-Mail: lita.greve.jensen@ZMB.UIB.NO