

Aculeata of Norway. 4. Two species of bees new to Norway (Hymenoptera, Apoidea)

Øistein Berg

Berg, Ø. 2008. Aculeata of Norway. 4. Two species of bees new to Norway (Hymenoptera, Apoidea). *Norw. J. Entomol.* Vol. 55, 43–44.

Two species of bees (Apoidea) are published from Norway for the first time: *Andrena argentata* Smith, 1844 (Andrenidae) and *Melitta leporina* (Panzer, 1799) (Melittidae). A total of 186 bee species are now recorded from Norway.

Key words: Hymenoptera, Apoidea, solitary bees, Norway.

Øistein Berg, Kitty Kiellands vei 19 C, NO-1344 Haslum, Norway. E-mail: montanus@online.no

INTRODUCTION

Berg (2000) presented an overview of literature on Norwegian wild bees and concluded that some 184 species seem to have been published from Norway. Revision of museum material is necessary to establish an exact number; such work has not yet been carried out. Extensive bee collecting during the last years has resulted in three species not previously published from Norway.

THE SPECIES

Nomenclature follows Schwarz et al. (1996). Biogeographic regions are given according to Økland (1976) and EIS-squares according to Økland (1981) modified by Endrestøl (2005). The author has identified the specimens. The material is deposited in the author's collection.

***Andrena argentata* Smith, 1844**

AAI, Åmli: Kaunberget, UTM WGS84 32 V 0473592 6509833 (EIS 10), 2♂♂, 18 July 2005 leg. Ø. Berg on *Calluna vulgaris*. The specimens were collected at the edge of a sand pit; the species is known to nest in sand (Westrich 1990). The species is bivoltine; the two males collected obviously belong to the second generation.

A. argentata is known from temperate Europe to Western Kazakhstan (Dylewska 1987, Schmid-Egger & Scheuchl 1997). In Sweden it is found north to Dalarna (Cederberg 2008, unpublished). In Sweden the species is considered vulnerable (Gårdenfors 2005) due to loss of its sandy habitats.

A. argentata can be separated from its relative *A. barbilabris* (Kirby, 1802) by slightly denser punctuation on tergites 2–3, fresh specimens have rather broad tergal bands (Schmid-Egger & Scheuchl 1997). There is also a difference in the male genitalia. The penis valve is broad basally and very narrow apically in *A. barbilabris*, in *A. argentata* it is less broad basally and not that narrow apically. The two specimens have been compared with a male *A. argentata* from Denmark (det. H.B. Madsen), and 6 males of *A. barbilabris* from Norway (det F. Burger).

According to Nilsson (2003) C.G. Thomson used “*Andrena proxima* Kirby” for the taxon currently known as *A. argentata*. Thus it was deemed necessary to investigate any old records of *A. proxima* from Norway.

Schøyen reported that he found a female of "*Andrena proxima*" Kirby at "Ogne paa Jæderen i Juli 1882" (Schøyen 1887:6). In the collection of Natural History Museum, Oslo, there was a single specimen under a box label "*proxima* Kirby". It is labelled "Ogne"/"Schøyen", interpreted as "RY Hå: Ogna". This must be the specimen Schøyen published. The specimen has been examined and turned out to be a female of *A. barbilabris*. *A. barbilabris* is known to occur in very large numbers on the sand dunes of Jæren (Meidell 1934). The true *A. proxima* (Kirby, 1802) is a Central-European species not recorded from Fennoscandia.

***Melitta leporina* (Panzer, 1799)**

BØ, Ringerike: Busund. UTM WGS84 32 V 056910 666646 (EIS 36), 1♀, 24 July 2004 leg. Ø. Berg on *Melilotus alba*.

This is a widespread Palearctic species, recorded from Great Britain to Mongolia, north to Gulf of Bothnia. It is common in Central Europe. In Sweden it is found north to Dalarna (Cederberg 2008, unpublished). The species is oligolectic on a few species of Fabaceae, and is an important pollinator on cultivated lucerne (*Medicago sativa*) (Celary 2006, Michez & Eardley 2007).

DISCUSSION

Including the species listed above, there are now recorded some 186 species of bees in Norway. Further work on large genera such as *Hylaeus*, *Andrena*, *Lasioglossum*, *Sphecodes* and *Nomada* will presumably reveal more species. At least 200 species of bees should be found in Norway.

Acknowledgements. For help with identification I wish to thank Frank Burger, Germany (*Andrena*). For gift of reference specimens I would also like to thank Henning Bang Madsen, Copenhagen. For loan of Schøyen's published specimen I would like to thank the curator of Entomology, Dr. Vladimir Gusarov at the Natural History Museum, Oslo.

REFERENCES

Berg, Ø. 2000. Aculeata of Norway. 3. Eleven species of bees new to Norway (Hymenoptera: Apoidea).

- Norw. J. Entomol., 47, 177–181.
- Cederberg, B. 2008. Provsinlista över svenska biarter 2008-03-17. Unpublished, ArtDatabanken, SLU.
- Celary, W. 2006. Biology of the Solitary Ground-nesting Bee *Melitta leporina* (Panzer, 1799) (Hymenoptera: Apoidea: Melittidae). J. Kansas Entomol. Soc. 79, 136–145.
- Dylewska, M. 1987. Die Gattung *Andrena* Fabricius (Andrenidae, Apoidea) in Nord- und Mitteleuropa. Acta zool. cracov., 30, 359–708.
- Endrestøl, A. 2005. Ny versjon av EIS-systemet for Norge. Fauna (Oslo) 58, 92–97.
- Gårdenfors, U. (ed.). 2005. Rödlistade arter i Sverige 2005 – The 2005 Red List of Swedish Species. ArtDatabanken, SLU, Uppsala.
- Meidell, O. 1934. Bier og humler i Rogaland. Stavanger Museums Årshefte, 43. årgang (1932–33), 85–131.
- Michez, D. & Eardley, C. 2007. Monographic revision of the bee genus *Melitta* Kirby 1802 (Hymenoptera: Apoidea: Melittidae). Ann. soc. entomol. Fr. (n.s.), 43 (4), 379–440.
- Nilsson, L.A. 2003. Prerevisional checklist and synonymy of the bees of Sweden (Hymenoptera: Apoidea). Preliminary report. Swedish Wild Bee Project. 111 pp. ArtDatabanken, SLU, Uppsala.
- Økland, J. 1976. Utbredelsen av noen ferskvannsmuslinger i Norge, og litt om European Invertebrate Survey. Fauna (Oslo) 29, 29–40.
- Økland, K.A. 1981. Inndeling av Norge til bruk ved biogeografiske oppgaver – et revidert Strand-system. Fauna (Oslo) 34, 167–178.
- Schmid-Egger, C. & Scheuchl, E. 1997. Illustrierte Bestimmungstabellen der Wildbienen Deutschlands und Österreichs unter Berücksichtigung der Arten der Schweiz. Band III: Schlüssel der Arten der Familie Andrenidae. 180 pp. Privately Published, Velden.
- Schøyen, W.M. 1887. Supplement til H. Siebke's Enumeratio insectorum Norvegorum Fasc. V, Pars I (Hymenoptera phytophaga & aculeata). Forh. Vidensk.Sels. Christiania for 1887, no. 5, 3–11.
- Schwarz, M., Gusenleitner, F., Westrich, P. & Dathe, H.H. 1996. Katalog der Bienen Österreichs, Deutschlands und der Schweiz (Hymenoptera, Apidae). Entomofauna, Suppl. 8, 1–398.
- Westrich, P. 1990. Die Wildbienen Baden-Württembergs. 2 vols., 972 pp. 2nd ed. Ulmer, Stuttgart.

Received: 15 February 2008

Accepted: 6 March 2008