

New records of spiders and insects for NE Fennoscandia (Murmansk Region, Russia)

Ilona V. Blinova & V. G. Mironov

Blinova, I. V., Polar-Alpine Botanical Garden Institute, Kola Research Centre of Russian Academy of Sciences, Kirovsk, Murmansk Region, Russia. E-mail: ilbli@yahoo.com

Mironov V. G., Zoological Institute of Russian Academy of Sciences, St.-Petersburg, Russia. E-mail: pugs@zin.ru

Three arthropod species have been observed for the first time in Murmansk Region. All these species are widespread in western and central Europe and frequently occur in southern Fennoscandia, getting rare towards the north. New occurrences are among the northernmost for these taxa in Europe. The studies have been done in the years 2006–2012 predominately in central part of Murmansk Region in the north-taiga forest zone. Two records have been made in plant communities with rare Orchidaceae species, inside or on the flowers of orchids. The presence of the found spiders and the solitary bees is common in orchid consortia in Europe: *Misumena vatia* is an ambush predator of various insects, while *Andrena haemorrhoa* is a classical pollinator vector for *Cypripedium calceolus*.

We recommend that *Andrena haemorrhoa*, *Misumena vatia* and *Pasiphila rectangularata* are to be included in the next edition of the Red Data Book of Murmansk Region with the status of critically endangered species (CR).

Arachnida

Araneae

Family Thomisidae

Misumena vatia (Clerck, 1757)

1 km to the East from the town of Apatity, birch forest with *Picea obovata* and *Juniperus sibirica* and dwarf-shrub-herb cover along the lines of electricity, on the upper sur-

face of flowers of *Cypripedium calceolus*, 24.06.2006, N67 33 E33 25; surroundings of the town of Apatity, cottongrass-sedge rich fen, on flowers of *Dactylorhiza maculata*, *Gymnadenia conopsea*, 22.07.2007, N67 33 E33 27, det. Blinova I. (confirmed by Tuneva, T. K., Tanasevich, A. V.).

Insecta

Hymenoptera

Family Andrenidae

Andrena haemorrhoa (Fabricius, 1781)

1 km to the East from the town of Apatity, secondary birch forest with *Picea obovata* and *Juniperus sibirica* and with a dwarf-shrubs and tall herbs cover along the lines of electricity, inside of flower of *Cypripedium calceolus*, 29.06.2012, N67 33 E33 27, det. Blinova I. (confirmed by Paukkunen, J.).

Lepidoptera

Family Geometridae

Pasiphila rectangularata (Linnaeus, 1758)

The town of Olenegorsk, near houses, 02.07.2012, N68 08 E33 17, det. Mironov, V. G.

Acknowledgements. Many thanks go to J. Paukkunen (Finnish Museum of Natural History, Helsinki, Finland), T. K. Tuneva (Institute of Plant and Animal Ecology, Russian Academy of Sciences, Ekaterinburg) and A. V. Tanasevich (Centre for Forest Ecology and Production, Russian Academy of Sciences, Moscow) who have kindly proved some determinations.