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ANDRENA FEROX SMITH, 1848 AND *ANDRENA ORNATA* MORAWITZ, 1866 (HYMENOPTERA, APOIDEA: ANDRENIDAE) – A NEW BEES SPECIES FOR THE FAUNA OF BELARUS

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Abstract

The firs record of Andrena ferox Smith, 1848 and Andrena ornata Morawitz, 1855 from Belarus on the basis of specimens collected in the Belarusian State University Botanical garden in Minsk.

Key words: Hymenoptera, Andrenidae, Andrena ferox, Andrena ornata, first record, Belarus

Family Andrenidae (Latreille 1802) with about 3000 described species worldwide is the largest family of bees (Ascher and Pickering 2015). *Andrena* is the biggest genus among the bee genera in the world (Osytshnjuk et al. 2005) and can be considered as one of the most important pollinators of spring-blooming crops and trees (Delaplane et al. 2000).

Only 18 species was registered from the Palaearctic region (Gusenleitner and Schwarz 2002). According to Prokhorchik et al. (2015) 75 species of the genus *Andrena* has been reported from Belarus.

The main morphological characteristics distinguishing *A. ferox* from similar *Andrena hattorfiana* Fabricius, 1775 species and from the other species of the subgenus *Lepidadrena* are: in case of female – cheeks at the base with a tooth, the outgrowth of the upper lip is four times shorter than its width at the base (fig. 1b). Only the back edges of the first two tergites of the abdomen pour red (fig. 1ac).

A. ferox distributed from France in the west, Italian mainland in the south in Europe and in the East Palaearctic (Osytshnjuk et al. 2005). Belarus is the most northern locality of the species.

Nowadays *A. ornata* (fig. 2abc) is registered only in Roman, Azerbaijan, Northwest and South Russia (Osytshnjuk et al., 2005) and also noticed in Ukraine Red Book (Radchenko and Ivanov 2009).
Blüthgen (1914) was the first author who described a male of *A. ferox*. *A. ferox* is polylectic bee that collects pollen mainly from oak catkins (Leys 1978). Less information about *A. ornata,* as already mentioned, due to the fact that this's a rare bee and they biology not fully studied (Michener 2007).
We collected two specimens of the species from flowers of common melilot *Melilotus officinalis* (L.) Pall. in Belarusian state university Botanical gardens in the end of July in 2018 (53°50'11.59"N, 27°28'0.64"E). *A. ornata* was collected from flowers of *Galatella villosa* (L.) Rchb. f. Insects catches were carried out using standard entomological sac. To the identification of the specimens was used the key of Osytshnjuk (1978). Photomicrographs were prepared by author using Canon 1100D digital camera attached to microscope lens and employing a Xenon flash.

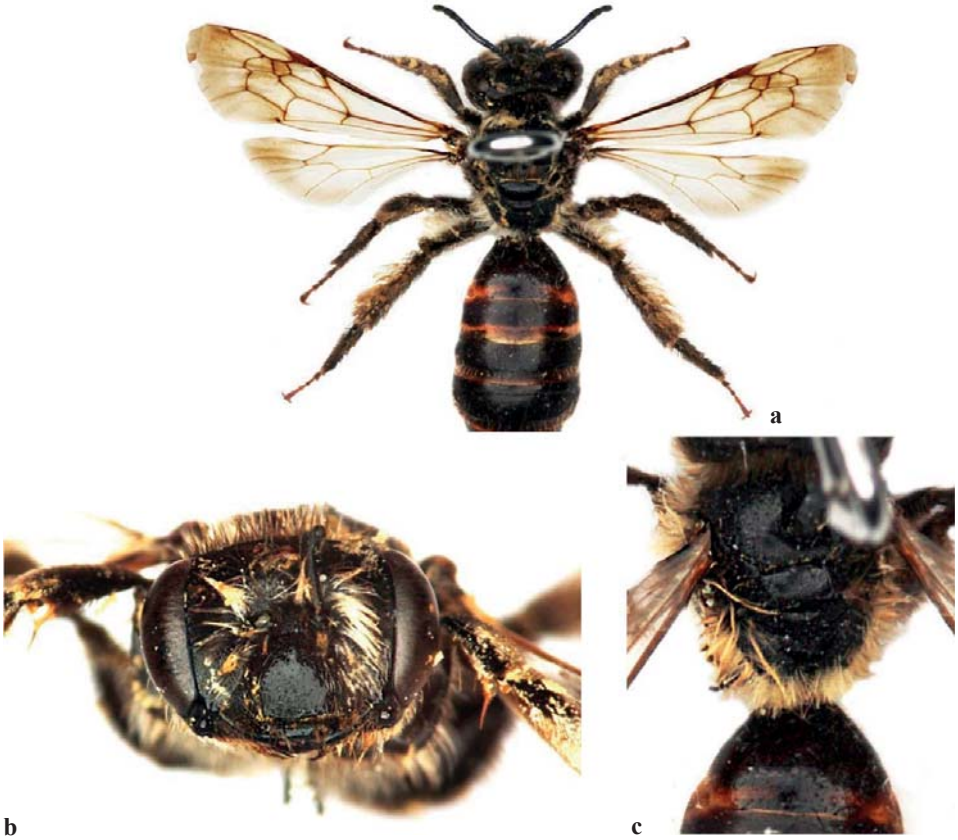

Fig. 1. Dorsal (ac) and face (c) view of *Andrena ferox*

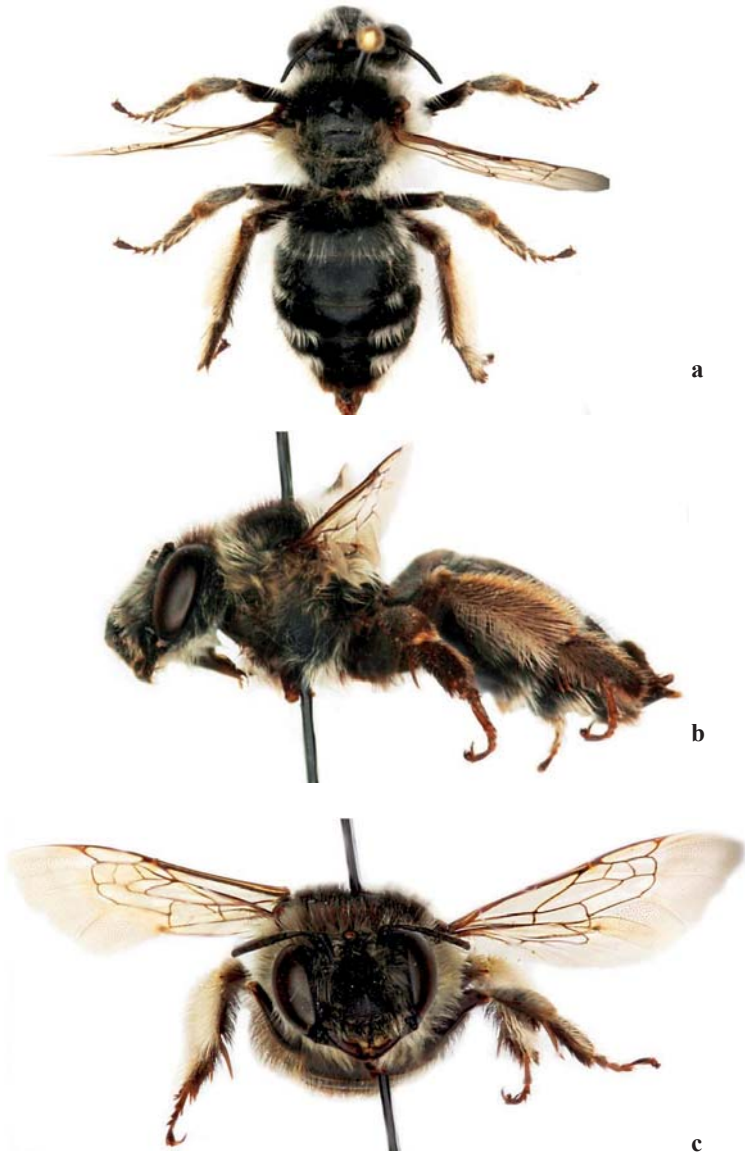

Fig. 2. Dorsal (a), lateral (b) and face (c) view of *Andrena ornata*

Bees are undoubtedly keystones species, because loss of their critical ecological functions could collapse ecosystems balance. Knowledge of exact geographic distributions of bees results in conserving and managing their biodiversity. As a result, noting geographic records of bee species can provide useful data for these purposes.

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ANDRENA FEROX SMITH, 1848 I *ANDRENA ORNATA* MORAWITZ, 1866 (HYMENOPTERA, APOIDEA: ANDRENIDAE) – NOWE GATUNKI PSZCZÓŁ DLA FAUNY BIAŁORUSI

Streszczenie

Dwa gatunki pszczół z rodziny *Andrenidae*: *Andrena ferox* Smith, 1848 oraz *Andrena ornata* Morawitz, 1855 zebrano w lipcu 2018 roku na kwiatach, w ogrodzie botanicznym Białoruskiego Uniwersytetu Państwowego w południowo-wschodniej części Mińska. Oba gatunki są po raz pierwszy zarejestrowane na Białorusi.

Słowa kluczowe: Hymenoptera, Andrenidae, *Andrena ferox, Andrena ornata*, pierwsza informacja, Białoruś