



Review of the *Nomada roberjeotiana* species-group (Hymenoptera: Apidae) of Russia, with description of new species

MAXIM YU. PROSHCHALYKIN & ARKADY S. LELEJ

Institute of Biology and Soil Science, Far Eastern Branch of Russian Academy of Sciences, Vladivostok-22, 690022, Russia.

E-mails: maxim@ibss.dvo.ru; lelej@biosoil.ru

Abstract

The twelve species and two subspecies of *Nomada roberjeotiana* species-group from Russia are reviewed. Two new species, *Nomada mitaii* **sp. nov.** (Russia, Mongolia), and *N. setteri* **sp. nov.** (Russian Far East) are described and illustrated. A female lectotype is designated for *Nomada palmeni* Morawitz 1888. *Nomada esana* Tsuneki 1973 and *N. hokusana hokusana* Tsuneki 1973 are recorded for the first time from Russia. *Nomada rufipes* Fabricius 1793 is newly recorded from the Russian Far East and Kazakhstan, and *N. roberjeotiana roberjeotiana* is newly recorded from Mongolia. The distribution data for other species are enlarged. An identification key is presented for both sexes of this species-group.

Key words: taxonomy, lectotype, bees, new species, Palaearctic region

Introduction

Russia is a country that stretches over a vast expanse of Eurasia between the Baltic Sea on the West and Pacific Ocean on the East. The southern border of Russia is 41°11' N in the Caucasus and 42°N in the Primorskiy Territory. Russia is the northern part of the Palaearctic region. Most of the Russian territory is occupied by the provinces of the Euro-Siberian subregion and only the south of the Russian Far East belongs to the Manchurian province of the East Asian (Palaearctic) subregion. Some Mongolian insects reach the Russian region of Transbaikalia.

The genus *Nomada* Scopoli 1770 (type species: *Apis ruficornis* Linnaeus 1758, by designation of Curtis 1832: pl. 419) is the single genus of the tribe Nomadini in the subfamily Nomadinae. All Nomadinae species are cleptoparasitic. Although most species of *Nomada* are parasites in nests of *Andrena* Fabricius and *Panurgus* Panzer (Andrenidae), some are parasites of *Agapostemon* Guérin-Méneville, *Halictus* Latreille, *Lasioglossum* Curtis, and *Lipotriches* Gerstaecker (Halictidae), *Melitta* Kirby (Melittidae), and probable parasites of *Colletes* Latreille (Colletidae), *Exomalopsis* Spinola, and *Eucera* Scopoli (Apidae) (Michener 2007 and references therein). The genus *Nomada* numbers over 800 species and occurs on all continents (except Antarctica), although most are restricted to the northern hemisphere (Alexander & Schwarz 1994). In the Palaearctic region the faunas of Europe (202 species) (Schwarz 1967, 1986; Celary 1995; Polaszek 2007) and Japan (49 species) (Tsuneki 1973, 1975, 1976a, b; Mitai & Tadauchi 2007) are the best studied of all. Ninety species of *Nomada* occur in Russia (64 of them in the European part—Pesenko 1974, Osytshnjuk *et al.* 1978; 28 species in Siberia—Proshchalykin 2009, and 30 species in the Russian Far East—Proshchalykin 2009, Quest 2009).

The *Nomada roberjeotiana* species-group is distributed in the Palaearctic, Nearctic, and Afrotropical regions and comprises 43 species and six subspecies (Alexander & Schwarz 1994). Recently, *N. ecarinata* Morawitz 1888 (Siberia) was removed to the *Nomada ruficornis* species-group (Mitai *et al.* 2008b) after the description of the male; *N. buyoo* Tsuneki 1976 (Hokkaido) and *N. okamotoi kaiensis* Tsuneki 1976 (Honshu) were synonymized (Mitai *et al.* 2003). Ten species of this group occur in Japan and eight species