



# Article

urn:lsid:zoobank.org:pub:52849D6C-1711-4A25-9D92-5A6D49FA4F4A

## The digger wasps of the genus *Prionyx* Vander Linden (Hymenoptera: Sphecidae) of Russia and Central Asia, with a key to species, new synonymies, and lectotype designations

YURIY N. DANILOV<sup>1,2</sup>

<sup>1</sup>*Institute of Systematics and Ecology of Animals, Russian Academy of Sciences, Siberian Branch, Frunze Street 11, Novosibirsk 630091, Russia. E-mail: prionyx@mail.ru*

<sup>2</sup>*Novosibirsk State University, Pirogova Street 2, Novosibirsk 630090, Russia.*

### Abstract

Seventeen species of *Prionyx* Vander Linden, 1827 are recorded from Russia and Central Asia. The new synonymies proposed are *Sphex haberhaueri* Radoszkowski 1871 = *Enodia vittata* Kohl 1884, **syn. nov.**; *Sphex niveatus* Dufour 1854 = *Podium maracandicum* Radoszkowski 1877, **syn. nov.**, = *Sphex afghaniensis* de Beaumont 1970, **syn. nov.**; *Sphex viduatus* Christ 1791 = *Sphex leuconotus* F. Morawitz 1890, **syn. nov.**; *Enodia argentata* Mocsáry 1883 = *Sphex gobiensis* Tsuneki 1971, **syn. nov.** The lectotypes are designated for ten species: *Podium maracandicum* Radoszkowski 1877, *Sphex sirdariensis* Radoszkowski 1877, *Sphex stschurowskii* Radoszkowski 1877, *Sphex persicus* Mocsáry 1883, *Sphex hispidus* F. Morawitz 1890, *Sphex leuconotus* F. Morawitz 1890, *Sphex melanotus* F. Morawitz 1890, *Sphex tenuicornis* F. Morawitz 1890, *Sphex suavis* F. Morawitz 1893, and *Sphex zarudnyi* Gussakovskij 1933. A key to the species is given.

**Key words:** lectotypification, Apoidea, Prionychini, *Prionyx*, distribution, synonymy

### Introduction

The genus *Prionyx* Vander Linden includes 59 described species and is represented in all zoogeographical regions, predominantly in the Palearctic (Pulawski 2012). The genus is a characteristic component of arid and semiarid areas. Among 32 Palearctic species, five occur in the Central Europe and south of European Russia, three penetrate into Southern Siberia, and one is founded in the Russian Far East. Twenty-two species occur in North Africa, Middle East and Central Asia (Kazenas 1978, 2001, 2002).

The first member of the genus was described by Linnaeus (1758) (as *Sphex fervens*) from the Caribbean (West Indies). Christ (1791) described the first Palearctic representative, *Sphex viduatus* from Provence (France). Later Vander Linden (1827) proposed the genus *Prionyx* for the single species *kirbii*. This generic name remained unused for a long time, and the species which currently are treated as *Prionyx* were placed in *Sphex* Linnaeus or in *Calosphex* Kohl, *Parasphex* F. Smith, *Enodia* Dahlbom, *Harpactopus* F. Smith, *Gastrosphaeria* A. Costa, and *Priononyx* Dahlbom. The generic name *Prionyx* began to be used in the nineteen sixties and it became universally accepted since the generic revision of digger wasps by Bohart and Menke (1976).

Morphologically, the genus is well distinguished from the related genera, *Palmodes* Kohl and *Chilosphex* Menke. Females of *Prionyx* differ in having a convex clypeus with a straight or arched free margin, in some species with a small median notch. The female clypeus of *Palmodes* and *Chilosphex*, two closely related genera, is more or less flattened, and its free margin is notched and divided into three lobes, developed to varying degrees in different species. The males of *Prionyx* are distinguished by structural features of the genitalia, especially the shape of volsella. Differences in the structure of the genitalia at the species level are not clear enough and may be used only at the level of subgenera.

The main differences between the subgenera or groups of species within the genus are in the structure of the distitarsus (number of teeth near the base of claws), flagellum of the males (presence of tyloids) and clypeus of females (presence of the median incision).