

Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology,
Institute of Biology and Soil Sciences,
Vladivostok

Number 167: 1-4

ISSN 1026-051X

December 2006

A NEW GENUS OF DIGGER WASPS (HYMENOPTERA, CRABRONIDAE, BEMBICINAE) FROM NORTH AND CENTRAL AMERICA

P. G. Nemkov

*Institute of Biology and Soil Science, Far East Branch of the Russian Academy
of Sciences, Vladivostok-22, 690022, Russia*

A new genus of digger wasps, *Saygorytes* Nemkov, **gen. n.** (type species – *Gorytes phaleratus* Say, 1837) is described for seven North and Central American species now considered to be members of the *phaleratus* species group of the genus *Pseudoplisus* Ashmead, 1899: *S. phaleratus* (Say, 1837), **comb. n.**, *S. apicalis* (Smith, 1859), **comb. n.**, *S. guadalajare* (Bohart, 1969), **comb. n.**, *S. notipilis* (Bohart, 1969), **comb. n.**, *S. oraclensis* (Bohart, 1969), **comb. n.**, *S. tritospilus* (Bohart, 1969), **comb. n.**, and *S. weneri* (Bohart, 1969), **comb. n.**

KEY WORDS: Hymenoptera, Crabronidae, Bembicinae, new genus, America.

П. Г. Немков. Новый род роющих ос (Hymenoptera: Sphecidae, Bembicinae) из Северной и Центральной Америки // Дальневосточный энтомолог. 2006. N 167. С. 1-4.

Описан новый род роющих ос, *Saygorytes* Nemkov, **gen. n.** (типовой вид – *Gorytes phaleratus* Say, 1837), включающий семь видов из Северной и Центральной Америки, которые до этого рассматривались в составе видовой группы *phaleratus* рода *Pseudoplisus* Ashmead, 1899: *S. phaleratus* (Say, 1837), **comb. n.**, *S. apicalis* (Smith, 1859), **comb. n.**, *S. guadalajare* (Bohart, 1969), **comb. n.**, *S. notipilis* (Bohart, 1969), **comb. n.**, *S. oraclensis* (Bohart, 1969), **comb. n.**, *S. tritospilus* (Bohart, 1969), **comb. n.**, and *S. weneri* (Bohart, 1969), **comb. n.**

Биолого-почвенный институт, Дальневосточное отделение Российской академии наук, Владивосток-22, 690022, Россия.

INTRODUCTION

Even though the genera *Pseudoplisus* Ashmead, 1899 and *Gorytes* Latreille, 1805 from the subtribe Gorytina are closely allied and similar (Bohart & Menke, 1976; Nemkov & Lelej 1996; Nemkov, 1999), the genus *Pseudoplisus* has a narrower gastral segment I (normally rather wide in *Gorytes*) and smooth propodeal enclosure (mostly rugose in *Gorytes*). A study of collection material and essential literature data has demonstrated that the genus *Pseudoplisus* is heterogeneous. The *phaleratus* species group, established by Bohart (1969a, 1969b) and never revisited since, differ considerably from other species of *Pseudoplisus* and those closely related to them, of the genus *Gorytes*, in several important diagnostic characteristics – certainly enough to describe the *phaleratus* group as a separate genus.

MATERIALS AND METHODS

The following materials have been used: *Pseudoplisus phaleratus* (Say, 1837) (type species of the new genus), 3♀ and 4♂ from Canada and USA; *P. smithii* (Cresson, 1880) (type species of the genus *Pseudoplisus*), 1♀ and 1♂ from USA; *Gorytes quinquecinctus* (Fabricius, 1793) (type species of the genus *Gorytes*), 15♀ and 27♂ from Germany, Poland, Bulgaria, Turkey, Kazakhstan, and Russia as well as numerous comparative material – about 800 digger wasp specimens from different genera of the subtribe Gorytina. Descriptive terminology follows Bohart & Menke (1976).

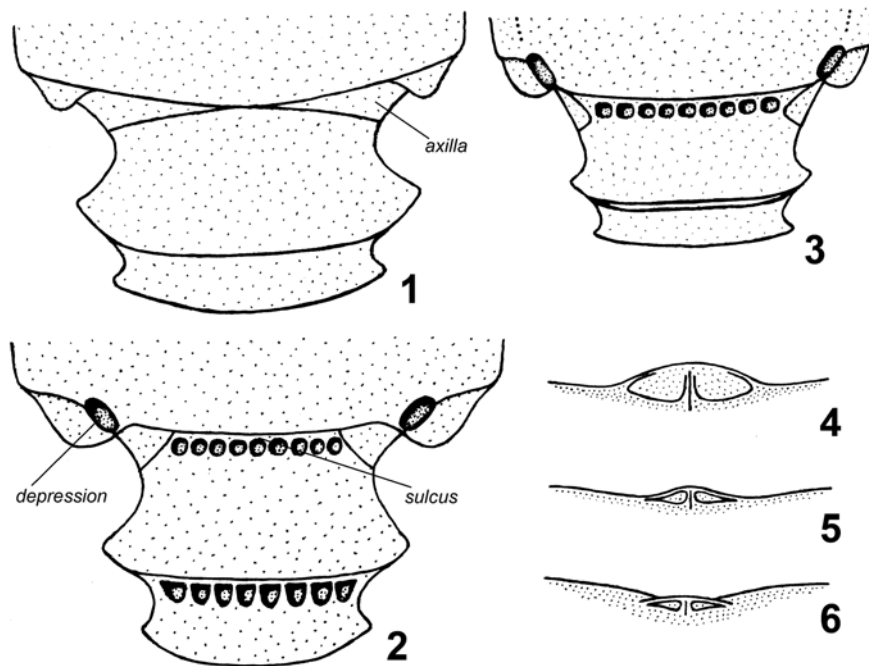
Genus *Saygorytes* Nemkov, gen. n.

TYPE SPECIES. *Gorytes phaleratus* Say, 1837 (USA: Indiana), designated here.

ETYMOLOGY. The genus is dedicated to the pioneer American entomologist Thomas Say who described the type species of the new genus. Gender masculine.

SPECIES INCLUDED. *S. phaleratus* (Say, 1837), comb. n.; *S. apicalis* (Smith, 1859), comb. n.; *S. guadalajare* (Bohart, 1969), comb. n.; *S. notipilis* (Bohart, 1969), comb. n.; *S. oraclensis* (Bohart, 1969), comb. n.; *S. tritospilus* (Bohart, 1969), comb. n.; *S. weneri* (Bohart, 1969), comb. n. These species were included by previous authors (Bohart, 1969a, 1969b, 2000; Bohart & Menke, 1976) in the *phaleratus* species group of the genus *Pseudoplisus*. The key to the species has been proposed by Bohart (1969a).

DIAGNOSIS. The new genus belongs to the subtribe Gorytina wherein it is related to *Pseudoplisus* and *Gorytes* in following characteristics: inner eye margins conspicuously converging toward clypeus, flagellomeres simple, pronotal collar not closely adherent to scutum, posterolateral oblique scutal carina and sternaulus present, scrobal sulcus continues forward in almost straight line to omaulus, hindwing media diverging before *cu-a*, midtibia with two apical spurs, female arolia nearly equal in size, female fore basitarsus with two long setae before apex, male sternum VIII narrowly blade-like distally. *Saygorytes* can be distinguished from these genera by its



Figs. 1-6. Details of digger wasps *Saygorytes phaleratus* (Say) (1, 4), *Pseudoplisus smithii* (Cresson) (2, 5), and *Gorytes quinquecinctus* (Fabricius) (3, 6): 1-3) posterior part of scutum, scutellum and postscutellum, female; 4-6) acetabular carina, female, back view.

efoveate prescutellar sulcus (Fig. 1), unusually elevated acetabular carina (Fig. 4), and lack of oblong depression near posterolateral oblique scutal carina (Fig. 1). In *Pseudoplisus* and *Gorytes*: the prescutellar sulcus is foveolate (Figs. 2, 3), the acetabular carina is not elevated (Figs. 5, 6), the scutum has an oblong depression near posterolateral oblique carina (Figs. 2, 3).

DESCRIPTION. Medium sized wasps, body length 9.0-13.0 mm. Female mandible with two inner teeth. Labrum inconspicuous. Inner eye margins conspicuously converging toward clypeus. Antennal sockets about one diameter from clypeus. Apical four flagellomeres of male simple. Thorax practically impunctate. Pronotal collar rather thin, rounded, even all across, not closely adherent to scutum. Acetabular carina short but unusually elevated medially, its height subequal to midocellus diameter (Fig. 4). Omaulus and sternaulus present. Scrobal sulcus continues forward in almost straight line to omaulus. Posterolateral oblique scutal carina present, without oblong depression medially of it. Axilla large (Fig. 1). Prescutellar sulcus simple, efoveate. Metapleural posterior suture simple. Spiracular sulcus present. Propodeal enclosure ("metapostnotum" sensu Brothers, 1976) polished, with seam-like lateral sulcus. Forewing costal margin bulged out abruptly toward base, media

diverging before *cu-a*, stigma moderate, veinlet of submarginal cell II between recurrent veins about one-fourth length of submarginal cell II, jugal lobe considerably larger than tegula. Hindwing media diverging before *cu-a*. Female foretarsal rake well developed, fore basitarsus with two long setae before apex. Female arolia nearly equal in size. Midtibia with two apical spurs. Gastral segment I slightly pedunculate, segments I-IV largely impunctate. Male with seven terga normally exposed, sterna without obvious fimbriae, sternum VIII narrowly bladelike distally. Female pygidium rather closely punctate or striatopunctate.

DISTRIBUTION. All of the seven named species are North and Central American. *S. phaleratus* is recorded from Canada (Ontario, Quebec), USA (California, Arizona, Colorado, New Mexico, North Dakota, Nebraska, Illinois, Indiana, New York, Massachusetts, Connecticut, Pennsylvania, New Jersey, Maryland, North Carolina, Florida), and Mexico (Guerrero); *S. apicalis* - from USA (New Mexico, Nebraska, Georgia); *S. guadalajare* - from Mexico (Jalisco); *S. notipilis* - from Mexico (Morelos, Oaxaca); *S. oraclensis* - from USA (Arizona); *S. tritospilus* - from Mexico (Chiapas), Guatemala (Amatitlan), El Salvador (Quezaltepeque), and Costa Rica (Liberia, Alajuela, Guanacaste); *S. werneri* - from USA (Arizona, Colorado).

NATURAL HISTORY. Unknown.

ACKNOWLEDGEMENTS

I sincerely thank Prof. A.S. Lelej (Vladivostok, Russia) and Dr. W.J. Pulawski (San Francisco, USA) for valuable comments.

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Editor-in-Chief: S.Yu. Storozhenko

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

E-mail: entomol@ibss.dvo.ru

FAX: (4232) 310 193