

SCIENTIFIC NAME: *Paranomada californica*
COMMON NAME: None; a cleptoparasitic bee
CLASS, FAMILY: Insecta, Apidae (subfamily Nomadinae)

ORIGINAL DESCRIPTION: Linsley, E.G. 1945. A new species of *Paranomada* with notes on *Melecta thoracica* Cresson. Entomological News 56(6):149.

TYPE MATERIAL: *Holotype:* Female – CALIFORNIA: San Bernardino County, Yucca Valley, 28 Sep 1944, collected by P.H. Timberlake. *Allotype:* Male, same data as holotype. The holotype (type #14861) and allotype are deposited at the California Academy of Sciences. Both were collected flying close to the ground near flowers of *Gutierrezia microcephala* (= *Gutierrezia lucida* in paper), in the company of the pollen-collecting bee species *Exomalopsis verbesinae*, which may be its host.

RANKING/STATUS: G1S1 (NatureServe – CNDDDB).

GENERAL DESCRIPTION: Length about 7 mm; this genus is oddly flattened and elongate. The females, being nest parasites in other solitary bees, lack pollen collecting structures. The body is black, shiny, practically impunctate, and has bands of pubescence on the abdominal tergites.

DIAGNOSTIC CHARACTERS: The pubescence on the abdominal tergites is white, broadly interrupted at the middle of the second tergite, and narrowly on the third. The pygidial plate is somewhat narrowly triangular with a shallowly emarginate apex.

OTHER ILLUSTRATIONS: Michener (2000) illustrates the closely related *P. velutina* (fig. 91-2), which has a slightly different pattern of dark golden abdominal pubescence, and occurs in Arizona and Baja California.

DISTRIBUTION: Known only from two locations in San Bernardino County; the type locality near Yucca Valley (exact location unknown), and a 1971 collection from 9.5 miles NW of Pioneertown, on Burns Canyon Rd., made by T.J. Zavortink (CNDDDB 2006).

HABITAT: There is no information available from either collection regarding the habitat.

LIFE HISTORY/BEHAVIOR: There is no published information on the life history or behavior of this species. It is a cleptoparasite (nest parasite) of other solitary, ground-nesting bees, as evidenced by the lack of pollen-collecting structures on the female. Cleptoparasitic Nomadinae do not excavate their own nests or collect pollen for their larvae. Instead, the females enter the nests of pollen-collecting species and lay their eggs in the open, unfinished cells while the host females are absent. *Exomalopsis verbesinae* is likely a host species, as the type specimens of *P. californica* were collected flying in the same immediate vicinity.

SELECTED REFERENCES:

California Natural Diversity Database. 2006. California Department of Fish and Game.

Michener, C.D. 2000. The Bees of the World. 913 pp. Baltimore: Johns Hopkins University Press.

Written by Sandra Shanks, California Department of Fish and Game, Natural Diversity Database

Reviewed by Ronald J. McGinley, Illinois Natural History Survey