

STUDIES ON CALIFORNIA ANTS. 3. THE TAXONOMIC  
STATUS OF *PROCRATIUM CALIFORNICUM* COOK  
(Hymenoptera: Formicidae)

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ABSTRACT: Based upon the type male, *Proceratium californicum* Cook is redescribed. The presumed females are described for the first time and the relationships to the species of the Old World and New World are discussed. A key to the workers and females of described New World *Proceratium* is provided.

In his book *The Ants of California*, Cook (1953) described several taxa as new. All of these, with the exception of *Proceratium californicum*, have since been synonymized with common, well-known species (Wilson, 1955; Cole, 1967). The identity of the *Proceratium* presented difficulties which, while not yet solved, can now be somewhat clarified.

HISTORICAL RESUME

As its name implies, this species was originally based on a specimen from California. Brown (1958) indicated caution in acceptance of this record, since there were no prior records of *Proceratium* in the United States from west of the Great Plains. The members of this genus are all cryptobiotic in their habitats and show a decided preference for areas which maintain high summer humidity. There are few areas in California which can satisfy this requirement; the type locality of *P. californicum* (the Santa Cruz Mountains) is one such area. On this basis, at least, it was not too unreasonable to expect a species of *Proceratium* to occur here.

The species was described from a single male specimen. Males of *Proceratium* are extremely rare in collections, and Cook's inadequate and inaccurate original description indicated no characters by which his species could be separated from the males of the eastern forms. The figures given by Cook are poorly executed, but at least offered clues lacking in the verbal description.

During recent years several alate females of a distinctive *Proceratium* have been taken in California, but it has not been possible to secure any workers or additional males. Nonetheless, for reasons which I hope to justify below, I believe these to be conspecific with *P. californicum*. Before going further into a discussion of these females it is pertinent to review the status of the male which Cook originally described.

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