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# *Ammophila nancy* Menke, a new species in the *pruinosa* complex (Hymenoptera: Sphecidae: Ammophilinae)

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## Abstract

*Ammophila nancy* new species (Hymenoptera, Sphecidae), is described from Arizona, California, Nevada, New Mexico, Texas and Mexico (Sonora and Baja California). The new species is a member of the *pruinosa* complex which also contains *californica* Menke, 1964, and *pruinosa* Cresson, 1865. A key is provided for the identification of the three species.

**Key words:** New species, *Ammophila*, Sphecidae, *pruinosa* complex, *californica*, Arizona

## Introduction

The *pruinosa* complex consists of three known species, *pruinosa* Cresson, *californica* Menke, and the species described here, *nancy* Menke. The complex is characterized by the uniformly dense covering of appressed silver setae that obscure the integument of the thoracic pleura (Figs. 1–2). The dorsum of the thorax is less densely covered and the propodeal enclosure is glabrous laterally. The *pruinosa* complex belongs to the *azteca* species group as defined by me (Menke, 1967). In this group the episternal sulcus extends ventrad from the subalar fossa to the sternal region of the mesopleuron. In species of the *pruinosa* complex, the dense setal covering of the pleura obscures this sulcus.

Species discrimination in this complex is fairly easy for the taxa included in this paper. Useful features are the penis valve head of the male genitalia, shape of the clypeal free margin, shape of the labrum, length of mouthparts, and length of flagellomere I compared to the least interocular distance of the face.

Specimens of the *pruinosa* complex are abundant in collections. Male genitalia, male clypeal shape, and flagellomere proportions suggest that other cryptic species remain to be recognized. Sorting them out will require careful study, possibly including molecular analysis. The *pruinosa* complex would make a wonderful thesis problem.

My wife Nancy and I have been collecting *Ammophila* in southeastern Arizona for the past 10 years. The new species described below is a product of these surveys. A key to the three known *pruinosa* complex species is provided.

### Techniques

Measurements for proportions of facial dimensions and flagellomere lengths were made with an ocular micrometer at 50X on a Wild M5 dissecting microscope. Least interocular distance and upper interocular distance are abbreviated LID and UID. The UID is measured along a line tangential to lower edge of mid ocellus.

Images for plates were acquired through an EntoVision micro-imaging system. This system included a Leica M16 zoom lens attached to a JVC KY-75U 3-CCD digital video camera that feed image data to a desktop computer. The program Archimed 5.3.1 was then used to merge an image series (representing typically

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