A new species of *Pogonomyrmex* (Hymenoptera: Formicidae) from gallery forests of the Orinoco Watershed, Venezuela

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**Abstract**

*Pogonomyrmex stefani* sp.n. is described from gallery forests of the Orinoco Watershed in southern Venezuela. In contrast with other species of *Pogonomyrmex* MAYR, 1868 from northern South America that usually occur in more open, semiarid environments or occasionally in cloud forests, it nests in humid soil in the dense shade of gallery forest canopy. A key for identifying workers of *Pogonomyrmex* from northern South America is included.

**Key words:** *Pogonomyrmex*, new species, key, Venezuela, Orinoco, gallery forest.

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**Introduction**

Ants of the genus *Pogonomyrmex* MAYR, 1868 are a group of approximately 70 species found mostly in temperate South America, Mexico, and southwestern United States. Recent general works include an overview of the genus by TABER (1998), including identification keys and a proposed phylogeny, and JOHNSON (2000) who studied the ecology and biogeography of North American *Pogonomyrmex*, and other seed harvesting ants. The rich fauna of Argentina is poorly known, and only recently is being studied in detail. Since the pioneering work by KUSNEZOV (1949, 1951), no general studies of *Pogonomyrmex* from this region exist. VÁZQUEZ-BOLAÑOS & MACKAY (2004) describe a new species from dry forests in Michoacán, México. The greatest diversity is found in arid habitats (TABER 1998, JOHNSON 2001), but some species have recently been discovered in cloud forests of northern South America (LATTKE 1990, FERNÁNDEZ & PALACIO 1998). This paper reports the discovery of a new species in another mesic habitat, gallery forests of the Orinoco Watershed.

**Material and methods**

Using comparative methodology, a series of specimens of the ant genus *Pogonomyrmex* collected in one site in southern Venezuela were studied. A Nikon SMZ 1500 Stereoscopic Microscope with 10× ocular lens was used for observing the specimens.

**Collection Acronyms.** Specimens used in this study have been deposited in the following collections:

- BMNH The Natural History Museum, London, England, UK
- CASC California Academy of Sciences Collection, San Francisco, California, USA
- ICNB Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá, D.E., Colombia
- MCZC Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, USA
- MIZA Museo del Instituto de Zoología Agrícola, Universidad Central de Venezuela, Maracay, Aragua, Venezuela
- MZSP Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil
- NHMW Naturhistorisches Museum, Vienna, Austria
- WPMC William P. Mackay Collection, El Paso, Texas, USA

**Measurements.** Measurements were carried out using an ocular micrometer at 40×. All of the following measurements are expressed in millimeters:

- **HL** Head length: midline length of cephalic capsule, measured in full-face (dorsal) view, from anterior margin of clypeus to midpoint of a line drawn across pre-occipital margin.
- **HW** Head width: maximum width of cephalic capsule, measured in the same plane as HL, excluding eyes.
- **ML** Mandible length: straight-line length of mandible, measured from base at insertion into head capsule, to mandibular apex. Measured in same plane as HL.
- **EL** Eye length: maximum length of compound eye, in the same plane as HL.
- **SL** Scape length: maximum length of first antennal segment, excluding neck and basal condyle. Taken with head in posterior view.
- **PW** Maximum width of pronotum in dorsal view.
- **MsL** Mesosoma length: straight-line distance measured in lateral view from anterior margin of pronotum (excluding collar) to posterior extremity of metapleural lobe.

**Indices.** The following indices were calculated from the preceding measurements:

- **CI** Cephalic index: HW / HL
- **MI** Mandibular index: ML / HW
- **OI** Ocular index: ED / HW
- **SI** Scape index: SL / HW

**Results**

**Pogonomyrmex stefani** sp.n. (Figs. 1 - 4)

**Type material.** Holotype (worker). Venezuela, Bolívar: Fundo San Rafael, Río Villacoa, 165 m (6° 25’ N, 67° 01’ W), 6.XII.2004, leg. J.E. Lattke, #2964. Deposited in Mu-