

A new *Protanilla* TAYLOR, 1990 (Hymenoptera: Formicidae: Leptanillinae) from Sri Lanka

Cesare BARONI URBANI & Maria L. DE ANDRADE

Abstract

Protanilla schoedli sp.n. is described from a gyne collected in Sri Lanka. This first described *Protanilla* gyne has eyes and wings, two plesiomorphic traits not shared with *Leptanilla*. The new species, moreover, allows considerable extension of the geographic range of this southern Palaearctic and Oriental genus.

Key words: *Protanilla schoedli*, new species, Formicidae, Leptanillinae, Sri Lanka, Palaearctic, Oriental.

Prof. Dr. Cesare Baroni Urbani (contact author) & Dr. Maria L. de Andrade, Institut für Natur-, Landschafts- und Umweltschutz, Biogeographie, Universität Basel, St. Johannis Vorstadt 10, CH-4056 Basel, Switzerland.

E-mail: Cesare.Baroni-Urbani@unibas.ch

Introduction

Since its first description 15 years ago (TAYLOR in BOLTON, 1990), the species level systematics of the genus *Protanilla* has not been dealt with in an exhaustive way.

The description of the type species of the genus (*P. rafflesi* TAYLOR in BOLTON, 1990 from Singapore) consisted only of a set of measurements. In the same paper BOLTON (1990) figures a Pakistani species without describing it and mentions the existence of another five or six species widely distributed in the Oriental and Indo-Australian regions [sic] to be described elsewhere by Taylor. The relevant descriptions have not yet appeared. BOLTON (1994) published two scanning electron micrographs of a *Protanilla* species of which neither name nor provenance were given. Despite minor differences between these illustrations, we guess that these 1994 figures refer to the same Pakistani species previously illustrated by BOLTON (1990). More recently, XU (2002) published the first descriptions of two species from Yunnan and XU & ZHANG (2002) added a third taxon from that Chinese province.

In this paper we describe a new species from Sri Lanka. It is the first described *Protanilla* gyne and represents a remarkable extension of the known distribution of the genus. Measurements and indices are as in XU (2002).

***Protanilla schoedli* sp.n.** (Figs. 1 - 3)

Type material. Holotype dealate gyne (unique) from Sri Lanka labelled "CEYLAN, Uva, Ingirigala, 12.II.1970, Mussard, Besuchet & Löbl", in the Natural History Museum of Geneva, Switzerland. A damaged specimen. Only the left foreleg remains and the right antenna is also missing. The hairs are partly glued and the photographs were taken without coating the specimen.

Derivatio nominis. This species is named in memory of Dr. Stefan Schödl.

Diagnosis. A *Protanilla* species differing from the other species of the genus as follows: from *P. furcomandibula* XU & ZHANG, 2002 by the mandibles lacking lateroventral teeth and by the ventral margin of postpetiole being convex instead of concave; from *P. bicolor* XU, 2002 by the funicular joints being about as broad as long in-

stead of broader than long and by the body being concolorous instead of bicoloured; from *P. concolor* XU, 2002 by the anterolateral sides of the head close to the antennal insertion being weakly pointed instead of concave and by the anterior face of the first gastral tergite being gently concave instead of straight.

No convincing differences were detected from *P. rafflesi*, described from Singapore, based on the few published measurements available for the latter. Since the gyne-based *P. schoedli* and the worker-based *P. rafflesi* are known on different castes, differences in size could be caste-dependent. We are confident that the geographic heterogeneity of the two specimens will imply morphological heterogeneity as well.

Description. Head gently convex, about one fourth longer than broad and with sides converging anteriorly and ending in minute denticle. Vertex with sub-rounded corners and almost straight margin. Compound eyes large, slightly behind midlength of head, gently convex and with reduced interommatidial pilosity. Ocelli small and weakly salient. Posterior half of clypeus superficially raised, subrectangular and with internal median longitudinal line visible in transparency. Anterior part of clypeus broad, feebly protruding and declivous anteriorly; its anterior border almost straight. Antennal fossae superficially concave. Scapes sub-cylindrical and reaching vertexal margin posteriorly. Funicular joints 2 - 10 about as broad as long. Joints 1 and 11 longer than broad. Mandibles triangular, slightly shorter than one half of head length, downcurved apically, each with 16 "pencil-like denticles" and 3 long + 3 apical, short, probable trigger hairs, lower on internal face. These "denticles" are modified hairs since a medial, similar "denticle" is visible on the anterior border of the labrum (Fig. 3). Outer margin of mandibles with laterobasal pit subtended by distinct longitudinal groove running anteriorly and traversing width of mandibles before narrow apex.

Mesosoma elongate. Pronotum about as long as mesonotum in dorsal view. Parapsidal furrows superficially impressed. Scutellum sub-rounded. Propodeum in profile convex.