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THREE NEW *POLYRHACHIS SEXSPINOSA*-GROUP SPECIES FROM THE PHILIPPINES (HYMENOPTERA : FORMICIDAE)

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ABSTRACT

Eight species of the *Polyrhachis sexspinosa* species-group are recorded from the Philippines. Three (*P. exotica*, *P. ignota* and *P. scabra*) are described as new and two (*P. aureovestita* Donisthorpe and *P. calypso* Forel), previously described from elsewhere, are recorded from the Philippine Islands for the first time. A key to all species of the group known to occur in the Philippines is provided.

INTRODUCTION

The *Polyrhachis sexspinosa* species-group was revised recently by Bolton (1975). He recognised twelve species, two of which, *P. magnifica* Menozzi and *P. osiris* Bolton, are apparently endemic to the Philippines, and gave full reference citations, which are not repeated here. My studies on the systematics of Indo-Australian *Polyrhachis* have resulted in the recognition of three new species from Mindanao. They are described here as *P. exotica* n.sp., *P. scabra* n.sp. and *P. ignota* n.sp. The first two were originally received from a private collection, without data, but certainly originating from somewhere in the Philippines probably Mindanao. Their presence there was later confirmed by specimens received from the Bernice P. Bishop Museum, Hawaii, through the kindness of Dr Gordon Nishida. The occurrences of *P. aureovestita* Donisthorpe, *P. calypso* Forel and *P. sexspinosa* (Latr.) were also verified from this material, and the third new species (*P. ignota*) was discovered. This brings to eight the number of *P. sexspinosa*-group species found in the Philippines.

The illustrations were drawn using a Zeiss (Oberkochen) SR Stereomicroscope and camera lucida. Those of the new species and of *P. osiris* depict holotypes.

The conventions of measurements and indices used in this paper are identical to those of Bolton (1973, 1975).

The following abbreviations are used for institutions and depositories: ANIC = Australian National Insect Collection, CSIRO, Canberra; BMNH = British Museum (Natural History), London; BPBM = Bernice P. Bishop Museum, Honolulu; USNM = National Museum of Natural History, Smithsonian Institution, Washington, D.C.; QM = Queensland Museum, Brisbane; RJK = R.J. Kohout, Brisbane (private collection).

KEY TO *P. SEXSPINOSA*-GROUP SPECIES RECORDED FROM PHILIPPINES (BASED ON WORKER CASTE)

1. First gastral tergite covered with fine, rather dense pubescence, which is arranged in a characteristic midline pattern (Fig. 12) 2
First gastral tergite smooth and shining; pubescence almost completely absent from dorsal surface of the gaster (Fig. 9).....
..... *P. exotica*, sp. nov.
2. Petiolar spines relatively long, elevated, recurved and hook-like (Figs 18, 19)
..... *P. calypso* Forel
Petiolar spines relatively short, scarcely elevated, not developed into recurved hooks .
..... 3
3. Head strongly contracted behind eyes, the occipital margin narrow, neck-like; antennal scapes relatively long (SI > 190)..... 4
Head not strongly contracted behind eyes, the occipital margin broad; antennal scapes relatively short (SI < 190), (Fig. 16).....
..... *P. aureovestita* Donist.
4. Antennal scapes with numerous short erect hairs (Figs 5, 17) 5
Antennal scapes without erect hairs, or with only a few inconspicuous solitary short hair present (Figs 6, 13, 14)..... 6
5. Occipital margin with lateral angular prominences, which are visible in full face view (Fig. 17) *P. sexspinosa* (Latr.)
Occipital margin without lateral angular prominences, short and collar-like (Fig. 5) ...
..... *P. osiris* Bolton
6. Extensor surfaces of middle and hind tibiae with moderately long erect hairs 7