

Polyrhachis punjabi sp. n. (Hymenoptera: Formicidae: Formicinae) from India

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Abstract. *Polyrhachis punjabi* sp. n. from India is described and illustrated.

Taxonomy, Hymenoptera, Formicidae, *Polyrhachis punjabi* sp. n., India

Introduction

Genus *Polyrhachis* Smith, 1857 is distributed in the Old World tropics and represented by about 140 species from the Oriental region. From India, it is represented by 23 valid species (Bolton 1995). During recent studies of Indian Formicidae, a new species of *Polyrhachis* has been discovered that differs remarkably from other described species of this genus.

The types of the new species are presently kept by author, but will be deposited in Indian Agricultural Research Institute (IARI), PUSA National Collections New Delhi, India, after publication of this work.

Polyrhachis punjabi sp. n.

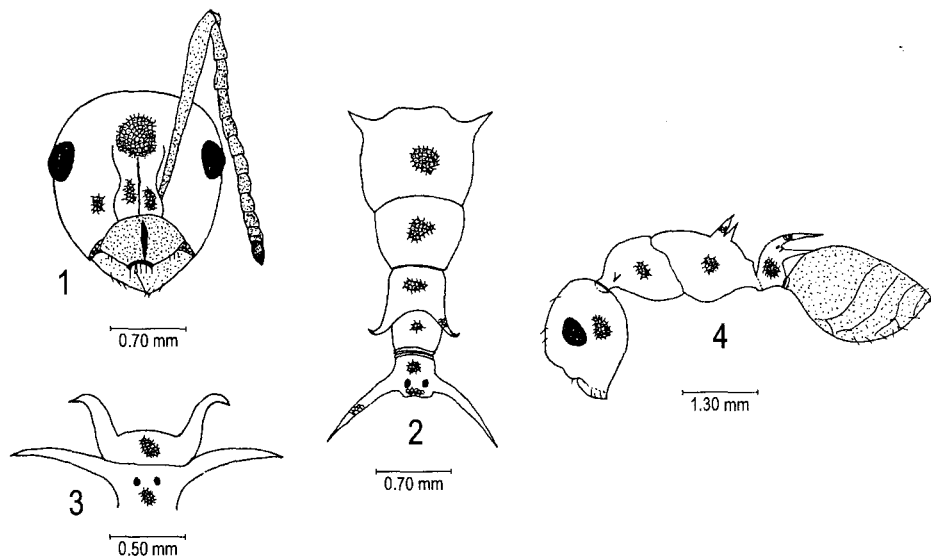
(Figs. 1-4)

Type locality. NW India, Punjab, Malakpur nr. Pathankot, 400 m.

Type specimens. Holotype, worker: India, Punjab, Malakpur nr. Pathankot, 400 m, 5.vii.2000, H. Bharti leg. Paratypes, 15 workers: same data as a holotype; 2 workers: India, Himachal Pradesh, Dunera, 700 m, 7.vii.2000, H. Bharti leg.

Description (holotype, worker). Total length 6.33 mm, head length 1.48 mm, eye diameter 0.30 mm, head width 1.35 mm, cephalic index 86.5, scape length 1.90 mm, scape index 141.0, pronotal width 0.99 mm, alitrunk length 1.90 mm.

Head (Figs. 1, 4). Slightly longer than broad, narrowing anteriorly; scape crosses top of head by half of the length; eyes placed more towards front, above mid-line of head; frontal carinae strong, diverging posteriorly, crossing mid-line of eyes; median carina in frontal ridges, extending along entire length; clypeus with strong median carina, vertically placed; anterior margin of clypeus raised, emarginated, fringed with setae, lateral margins with pits; whole surface of head rugulose with



Figs. 1-4. *Polyrhachis punjabi* sp. n. 1 – head in frontal view; 2 – upper view of alitrunk and petiole; 3 – propodeal and petiolar spines; 4 – body in profile.

broad, shallow punctures; clypeus with fine dense sculpture; mandibles punctate; pilosity wanting except few erect setae on vertex and frons, mandibles covered with setae; pubescence absent.

Alitrunk, petiole (Figs. 2-4). Alitrunk almost flat from dorsum; pronotum broader than long (3:2), with two short thick spines on anterior part, slightly elevated above upper margin of pronotum; promesonotal suture well impressed; mesonotum unarmed; metanotal groove rather poorly defined; propodeal spines (Fig. 3) stout and long, divergent, recurving outward at apices; propodeal declivity steep; petiole with anterior margin almost flat, posterior margin broadly convex; two divergent spines (Fig. 3) on petiole which bend towards gaster and touches anterior border; two short blunt teeth present in between long spines on petiole; sculpture of alitrunk and petiole like head, pilosity and pubescence absent; legs with scattered semi-erect pilosity and pubescence.

Gaster (Fig. 4). Finely punctured; pubescence thin scattered; few erect hair on second tergite, subsequent tergites covered with dense erect setae (pilosity).

Black more or less shining; pretarsal claws reddish; pilosity on head and gaster pale, on legs pale reddish.

Variability. Workers (paratypes) differ only in biometrics: total length 6.32-6.43 mm; head length 1.48-1.56 mm; eye diameter 0.30 mm; head width 1.35-1.38 mm; cephalic index 86.50-91.39; scape length 1.90-1.98 mm; scape index 141.0-146.7; pronotal width 0.99 mm; alitrunk length 1.89-1.98 mm (all specimens measured).

Distribution. NW India, Punjab, Himachal Pradesh.

Etymology. The species is named after the state Punjab (India) in which its type locality falls.

Habitat. Collected from the mango tree (*Mangifera indica*).

Differential diagnosis. This new species can be easily separated from related *Polyrhachis thompsoni* Bingham, 1903 by the following combination of characters: clypeus raised and emarginate in middle (clypeus with anterior margin advanced in *P. thompsoni*); frontal carinae diverging posteriorly (as broad posteriorly as in front in *P. thompsoni*); thorax almost flat in profile (thorax strongly arched in *P. thompsoni*); pronotal spines elevated above pronotal upper margin (below upper margin in *P. thompsoni*); legs with spines and erect hair (legs without these in *P. thompsoni*); petiole convex posteriorly, flat anteriorly (binconvex in *P. thompsoni*); upper margin of petiole with two short teeth (upper margin with three very short obtuse teeth in *P. thompsoni*).

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