

## A new species of the ant genus *Aphaenogaster* Mayr (Hymenoptera: Formicidae) from Iran

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**ABSTRACT.** A new species, *Aphaenogaster iranica* Kiran et Alipanah, **sp. nov.**, is described from Iran. This species, belonging to the *rothneyi* group, is measured, illustrated and compared with other species of the group. Additionally, a key to workers of *Aphaenogaster* species from Iran is prepared.

**Keywords:** ants, Formicidae, *Aphaenogaster*, taxonomy, Iran, new species.

### INTRODUCTION

*Aphaenogaster* is a speciose genus found everywhere except the Afrotropics. The genus has 214 extant and 19 extinct species in the world, of which 121 species and 23 subspecies are found in the Palaearctic Region (Collingwood 1961, Cagniant 1996, Bolton *et al.* 2007, Bolton 2011). Early literature suggests species-groups for the genus *Aphaenogaster* (Santschi 1932). Schulz (1994) defined six species groups: *obsidiana*, *gibbosa*, *subterranea*, *pallida*, *splendida* and *rothneyi*. His grouping did not include all known Palaearctic species but can be considered a useful first classification (Kiran *et al.* 2008).

The *rothneyi* group, which probably has a Himalayan origin, is distributed in the southern part of the Palaearctic Region – the Himalayas, Taiwan, Korea, Japan, Turkmenistan and Tadjikistan (Forel 1902, 1913; Arnoldi 1968, 1976) – and in the Oriental Region – Central India (Forel 1913). It includes five species (*A. rothneyi* (Forel), *A. tipuna* Forel, *A. fabulosa* Arnoldi, *A. januschevi* Arnoldi, and *A. cristata* (Forel)). Species of this group resemble the *splendida* group in the shape of mesonotum, which rises above the pronotum (seen in profile). Workers of

the *splendida* group and *rothneyi* group can be identified at first glance by their slender bodies and long extremities, their elongated heads and fine sculpture. On the other hand, species of the *rothneyi* group differ from the *splendida* group by their funicular segments which are three times longer than broad (maximum two times longer than broad in *splendida* group), and by the more-or-less parallel sides of the head in full-face view (oval in *splendida* group) (Schulz 1994).

Although a checklist of the ant fauna of Iran has recently been published, and other species have been recorded (Paknia *et al.* 2008, 2010; Ghahari, *et al.* 2009; Radchenko & Paknia 2010; Firouzi *et al.* 2011), the ant fauna of Iran has received relatively little study and there are few publications in this regard, in which only four *Aphaenogaster* species, *A. gibbosa* (Latreille), *A. kurdica* Ruzsky, *A. obsidiana* (Mayr) and *A. syriaca* Emery, have been reported from the country.

With this article we describe a new *Aphaenogaster* species from northeast Iran.

### MATERIALS AND METHODS

Material was collected from northeast Iran. Collection details are given with the description.