A New Oribatid Mite of the Subgenus *Mancoribates* Hammer, 1961 (Oribatida: Haplozetidae) from Iran

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**ABSTRACT**

A new species of oribatid mite belonging to subgenus *Mancoribates* of genus *Indoribates* Jacot, 1929 of family Haplozetidae was established by Hammer in 1961 with South American species, *Mancoribates rostropilosus* Hammer, 1961, as the type species. This subgenus has been represented by only four species from Neotropical and Australian Regions (Subías, 2010).

During 2008-2009 in the course of faunistic survey of oribatid mites of Iran, a new species belonging to this subgenus from Guilan Province, north of Iran, was collected. In the present paper, the species is described as *Indoribates (Mancoribates) iranicus* n. sp. It is the first record of the subgenus from Palaearctic region.

**RESULTS**

*Indoribates (Mancoribates) iranicus* n. sp.  
(Figs 1-4)

**Integument:** Yellowish-brown in color. Cerotegument thin and smooth.

**Measurements:** Body length 396 μm, width 309 μm.

**Prodorsum:** (Fig. 1). Prodorsum nearly triangular. Rostrum rounded at tip. Rostral setae (*ro*) situated laterally in front of free tip of the tutorium, thin and barbed unilaterally. Lamellar setae (*le*) thicker than rostral and interlamellar (*in*) setae, barbed bilaterally and extending for 1/4 of its

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length beyond the tip of rostrum. Interlamellar setae as long as lamellar setae, longer than rostral ones, barbed bilaterally and with thick chitinous ring at the base. Exobothridial setae (ex) almost short, thin and smooth. Lamellae relatively narrow, thicker in middle, slightly narrowed distally, longer than half of the total length of prodorsum and with short cuspis. Sensillus (ss) with long and thin stalk and dilated head which is half as long as the stalk and distinctly barbed. Bothridium rounded, with wide opening.

**Notogaster:** (Fig. 1). Notogaster wide and round, its length slightly longer than width, dorsosejugal suture convex. Pteromorpha well developed, fully hinged. Ten pairs of nearly short, thin and smooth notogastral setae with different length present, setae c are the longest. With five pairs of thin and elongated porose sacculi, Sa very narrow and long, much longer than the others. Lyrifissures ia, im, ih and ips well developed. latero-opisthosomal gland (gla) opening situated laterally to sacculus S1.

**Ventral side:** (Fig. 2). Hypostomal surface smooth; setae a, m and h thin and barbed. Epimeral region with a few muscle sigillae. Apodemes I, II and Sj well developed and IV short; epimeral setae 1a, 1b, 1c, 2a and 3a barbed. Five pairs of genital, one pair of aggenital, two pairs of anal and three pairs of adanal setae, almost short and smooth. Lyrifissure iad situated in preanal region.
and parallel to anterior angle of the plate.

Legs: (Figs 3 & 4). All tarsi heterotridactylous, with lateral claws much thinner than empodial claw. Femora II-IV and trochantera III and IV with large, distally rounded ventral keels or blades. Femur I with short, rounded keel in its distal quarter, near the seta $v'$. Femora I-IV with large porose areas. All leg setae barbed. On tarsus I solenidion $\omega_1$ shorter than $\omega_2$; famulus $\epsilon$ short and slender, situated besides $\omega_1$. Tibia I with very long and thick solenidion $\varphi_1$, and a short and thin $\varphi_2$ inserted on projected apophysis. Genu I with long solenidion $\sigma$. Formula of leg setation (including famulus): I (1-5-3-4-19); II (1-5-3-4-15); III (2-3-1-3-15); IV (1-2-2-3-12); the formula of solenidia: I (1-2-2); II (1-1-2); III (1-1-0); IV (0-1-0).

Material examined: Two specimens (holotype and paratype) were collected at Pasikhan Village, Rasht City, Guilan Province, Iran, soil under Caspian Locust trees, *Gleditschia caspica* Desf. (Fabaceae), 37°00’ N, 49°42’ E, 45 m above sea level, 31- VIII- 2008, Sh. Mortazavi leg. Specimens are deposited in the Department of Plant Protection, Shiraz University, Shiraz, Iran.

Etymology: The specific name “iranicus” refers to the region of the type locality of this species, Iran. Latinized word, adjective.

Remarks: The subgenus *Indoribates* (*Mancoribates*) has, until now, been represented by four
species; all with thin and elongated sacculi. The new species is distinguishable from them by five pairs of sacculi (other four species have four pairs of sacculi) and the adanal lyrifissure *iad* that is situated in preanal region (in other four species it is situated in paraanal region). In having very peculiar shape of the sacculi, the shape of the lamellae, thin notogastral setae and the thick chitinous ring at the base of the interlamellar setae, the new species resembles *Indoribates (Mancoribates) rostropilosus* (Hammer, 1961). However, *I. (M.) rostropilosus* has rounded rostrum with two apophyses, bilateral barbed rostral setae and shorter notogastral setae. Also, *I. (M.) acutirostrum* (Hammer, 1968) has pointed rostrum, bilateral barbed rostral setae and lamellar setae that are barbed distally. *I. (M.) rotundirostrum* (Hammer, 1968) has longer notogastral setae and

*Figs. 3 & 4. Indoribates (Mancoribates) iranicus n. sp., Holotype. 3, leg I; 4, leg IV.*
seta c (＝ta) is very short and arched and *I. (M.) sphaeroclava* (Pérez-Iñigo and Baggio, 1996) has round rostrum with two short apophyses, bilateral barbed rostral setae, sensillus with rounded head and shorter notogastral setae. Here is an identification key for species of *Indoribates* (*Mancoribates*):

1. With five pairs of porose sacculi; lyriffisure iad situated in preanal region
   - ............................................................ *I. (M.) iranicus* n. sp.
2. - With four pairs of sacculi; lyriffisure iad situated in paraanal region ................................. 2
3. - Rostrum pointed at tip .................................................................................. *I. (M.) acutirostrum* ................................. 3
4. - Sensillus with rounded head ........................................................................... *I. (M.) sphaeroclava* ................................. 4
5. - Sensillus with dilated and pointed head ................................................................................ 4
6. - Seta c arched and much shorter than other notogastral setae; rostrum without apophysis ................................. *I. (M.) rotundirostrum* ................................. 4
7. - Seta c the same as other notogastral setae; rostrum with two apophyses ................................. *I. (M.) rostropilosus* ................................. 4

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**REFERENCES**


