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Remarks on *Birjandtrombella* Noei, 2020 (Acari: Trombidiformes: Prostigmata)

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Birjandtrombella farniae Noei, 2020, originally placed in Trombellidae Thor, 1935, was described from larvae ectoparasitic on moths, from Birjand city, South Khorasan province, Iran (Noei and Rabieh 2020). According to Mąkol and Wohltmann (2012, 2013) the family Neotrombidiidae Feider, 1955 consists of four genera: *Discotrombidium* Feider, 1977, *Monunguis* Wharton, 1938, *Neotrombidium* Leonardi, 1901 and *Anomalothrombium* André, 1936. *Discotrombidium* and *Anomalothrombium* are based on post-larval forms only, the monotypic genus *Monunguis* (parasitic on bat flies, Streblidae) is based on larva only (Womersley 1963; Lindquist and Vercammen-Grandjean 1971) and *Neotrombidium* (parasitic on subcortical beetles of the families Cerambycidae, Cleridae, Elateridae and Tenebrionidae, and on the ground beetle family Carabidae) is based on both larval and post-larval forms (Noei *et al.* 2017). The family Neotrombidiidae and Trombellidae can be distinguished by the number of normal setae on femur I (7 vs. with less than seven normal setae in Trombellidae) and reticulated area on coxae I and III (present vs. absent). In this paper, the monotypic genus *Birjandtrombella* Noei, 2020 (parasitic on Lepidoptera: Crambidae, Noctuidae, Pyralidae) is transferred from Trombellidae to the family Neotrombidiidae and the generic diagnosis is amended. The modified drawing of the Fig. 3 [after Noei and Rabieh (2020)] is also presented.

Neotrombidiidae Feider, 1955 ***Birjandtrombella* Noei, 2020**

Diagnosis of larva

Leg segmentation formula 7-6-6; number of solenidia on genua 3-2-2; number of solenidia on femora 2-3-3; sternal setal formula 2-0-2.

Remarks

The re-examination of the specimens of *Birjandtrombella* shows that this genus belongs to the family Neotrombidiidae based on the following characters: seven normal setae on femur I (in Trombellidae with less than seven normal setae) and coxae I and III ornamented with an area of reticulation based on Fig. 1. The genus *Birjandtrombella* differs from *Monunguis* in leg segmentation formula (7-6-6 vs. 6-6-6 in *Monunguis*), crista-like strip on scutum (absent vs. with a crista-like median strip outlined subcutaneously from base of nasus to posterior margin), shape

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of scutum (posterior margin of scutum convex vs. posterior margin of scutum deeply emarginated on either side), sternal formula (2-0-2 vs. 2-2-2) and body setae (36 vs. with numerous body setae, over 200); and differs from *Neotrombidium* in the number of solenidia on genua (3-2-2 vs. 3-1-1 or 2-1-1) and femora (2-3-3 vs. 2-2-2). The three known genera of Neotrombidiidae larvae may be separated as follows:

1. Leg segmentation formula 6-6-6, with numerous body setae, over 200
 *Monunguis* Wharton, 1938
 – Leg segmentation formula 7-6-6, without numerous body setae 2
2. Number of solenidia on genua 3-1-1 or 2-1-1 and femora 2-2-2
 *Neotrombidium* Leonardi, 1901
 – Number of solenidia on genua 3-2-2 and femora 2-3-3 *Birjandtombella* Noei, 2020

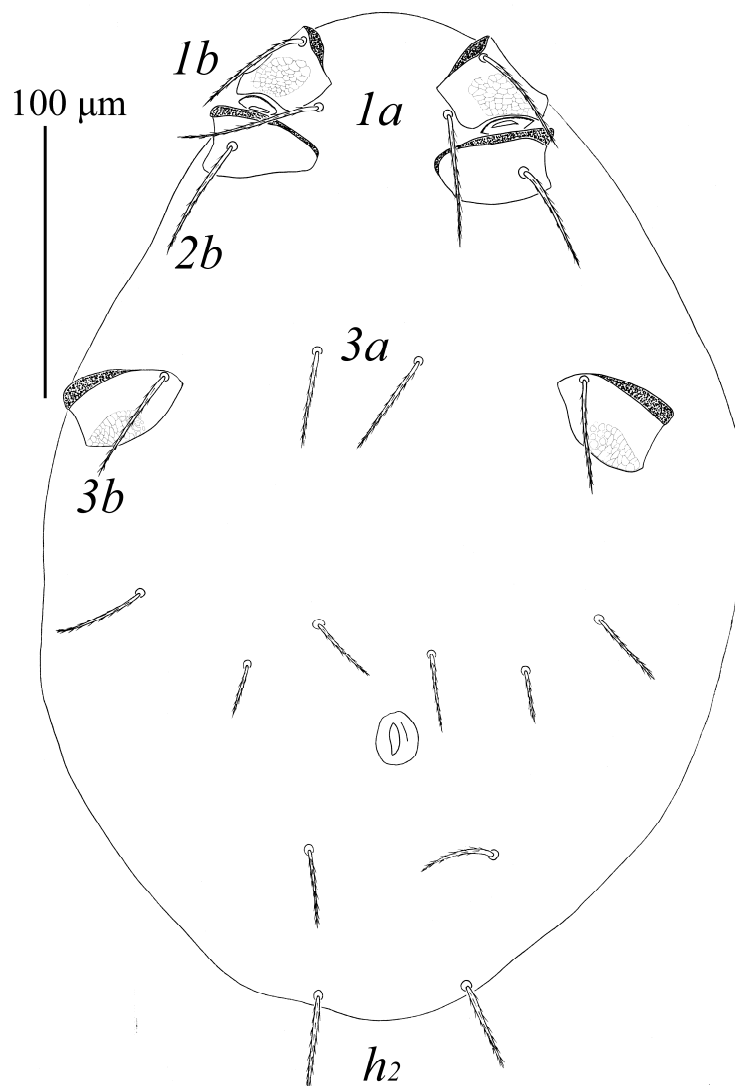


Figure 1. *Birjandtombella farniae* Noei, 2020 (larva) – Ventral view of idiosoma [the modified drawing of the Fig. 3 after Noei and Rabieh (2020)].

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