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Re-description of *Amblyseius pseudaequipilus* **Wainstein & Abbasova (Acari: Mesostigmata: Phytoseiidae) based on material collected from Iran**

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According to the database of Demite *et al.* (2021), about 90 valid species of Phytoseiidae have been recorded for the fauna of Iran. Here, we present a new report on *Amblyseius pseudaequipilus* Wainstein & Abbasova (1974) collected from decayed wood material in Zanjan Province, northwest of Iran. *Amblyseius pseudaequipilus*' original description was adequate for identification purposes. However, due to a mistake in adenotaxy, we decided to re-describe the species accompanied by detailed illustrations and a complete set of measurements.

The mite was collected by direct removal from decayed wood material under a stereomicroscope. The phytoseiid specimen was cleared in lactophenol and mounted in Hoyer's medium. Drawings were made with the aid of a camera lucida (drawing tube) attached to an Olympus phase contrast microscope. The notations used for dorsal and ventral setations follow those of Lindquist and Evans (1965) as adapted by Rowell *et al.* (1978), and Chant and Yoshida-Shaul (1991), respectively. The notation for gland pores (solenostomes) or lyrifissures (poroids) is according to Athias-Henriot (1975). All measurements are given in micrometers (µm). The classification systems follow those of Chant and McMurtry (2007). The voucher specimen is deposited in the Acari collection of MITOX Consultants/Eurofins, Amsterdam Science Park.

Amblyseius pseudaequipilus Wainstein & Abbasova, 1974

Neoseiulus pseudaequipilus — Moraes et al. (1986). Amblyseius pseudoaequipilus [sic] — Chant and McMurtry (2004); Chant and McMurtry (2007).

Female (Figs. 1–6) – One specimen measured. Idiosomal setal pattern: 10A:9B/JV–3:ZV.

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Dorsal idiosoma (Fig. 1) – Dorsal shield reticulated but faintly at podonotal area between j_3 – J_2 setae, 398 long and 253 wide at j_6 level, with 19 pairs of dorsal setae (r_3 and R_1 included); dorsal shield setae smooth, except for Z_5 , slightly serrated; lengths: $j_1 21, j_3 33, j_4, j_6, J_5 \& S_4 9, j_5 \& z_5 7, J_2 11, z_2 26, z_4 26, Z_1 14, Z_4 53, Z_5 59, s_4 44, S_2 15, S_5 11$; setae $r_3 18$ and $R_1 14$ on lateral integument; dorsal shield with 7 pairs of solenostomes ($gd_1, gd_2, gd_4, gd_5, gd_6, gd_8, gd_9$) and 12 pairs of small poroids.

Peritreme – Extending to the level of setae *j*₁ (Figs. 1, 4).



Figures 1–6. Amblyseius pseudaequipilus Wainstein & Abbasova (Female) – 1. Idiosoma, dorsal view; 2. Idiosoma, ventral view; 3. Spermatheca; 4. Peritreme, peritremal plate and exopodal plate; 5. Leg IV; 6. Chelicera.

Ventral idiosoma (Fig. 2) – Sternal shield wider than long, posterior margin slightly concave, smooth at the central area with a few lateral striae, 58 long, 84 wide at level of setae ST_2 , three pairs of setae and two pairs of pores (*iv*₁ and *iv*₂), ST_1 and ST_2 33, ST_3 32; distances between ST_1 – ST_3 64, ST_1 – ST_1 53 and ST_2 – ST_2 70; metasternal setae ST_4 31 and a pair of pores (*iv*₃) on small platelets; genital shield smooth width at widest point 103, ST_5 33; two pairs of metapodal shields, primary 31 long and accessory 13 long; ventrianal shield pentagonal and reticulated (Fig. 2), length 130, width at level of setae ZV_2 , 111, and width at level of paranal setae 85; with three pairs of preanal setae (JV_1 and JV_2 26, ZV_2 25); four pairs of setae surrounding ventrianal shield on integument (JV_4 15 JV_5 47, ZV_1 25, ZV_3 16), five pairs of pores and one pair of small platelets surrounding ventrianal shield with a pair of small round pores (gv_3) posteromesad to JV_2 , distance between these pores 58.

Spermatheca – Calyx bell-shaped 16 long, 7 in diameter at the middle part of the calyx; atrium V-shaped positioned half at base of the calyx (Fig. 3).

Chelicera – Fixed digit 28 long with 3 teeth and a pilus dentilis, the one close to pilus dentilis slightly larger; movable digit 30 long with one tooth (Fig. 6).

Legs – Leg IV (Fig. 5) with three pointed macrosetae, SgeIV 40, StiIV 27, StIV 54; other legs with no noticeable macrosetae; length of legs from the base of coxae to the tip of claws: leg I 437, leg II 315, leg III 325, leg IV 425; chaetotactic formulae of genua and tibiae I–II–III–IV with 10 (2-2/1, 2/1-2) – 8 (2-2/1, 2/0-1) – 7 (1-2/1, 2/0-1) – 7 (1-2/1, 2/0-1) and 10 (2-2/1, 2/1-2) – 7 (1-1/1, 2/1-1) – 6 (1-1/0, 2/1-1) setae respectively.

Distribution

Azerbaijan and Iran (this study).

Specimen examined

One female, 14 August 2011, decayed wood, Zieya abad, Zanjan, Iran (36° 41' 08.7" N 48° 11' 52.5" E), collector: Mohsen Zare.

Remarks

This is the first record of *A. pseudaequipilus* from Iran. The characteristics of the specimen found in Iran fit well with most of those of the described species (Wainstein and Abbasova, 1974). It is strange that setae z_4 are missing from the Figure 2-1 of the original description, whether those setae are detached and only the insertions are depicted or those are solenostome gd_2 . Setae z_2 and z_4 are subequal in our specimen while Wainstein and Abbasova (1974) mentioned z_2 longer than z_4 . There is also a mistake in the original description mentioning 5 pairs of solenostomes on dorsal shield while we detected 7 pairs of solenostomes. The Iranian specimen does show more reticulations on dorsal shield than that mentioned in the original description.

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