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TWO NEW SPECIES OF THE GENERA *METATYDAEOLUS* AND *TYDEUS* FROM EGYPT (ACARI: TYDEIDAE) *

**BY M. E. EL-BAGOURY** and F. M. MONEN ***

**ABSTRACT**: *Metatydaeolus longistriatus* n. sp. and *Tydeus artichokei* n. sp. are described and illustrated from soil in Giza region, Egypt, associated with roots of chamomile and artichoke, medicinal plants.

**RÉSUMÉ**: *Metatydaeolus longistriatus* n. sp. et *Tydeus artichokei* récoltés dans le sol en région de Giza, Égypte, associés aux racines de plantes médicinales, la Camomille et l'Artichaut, sont décrits et illustrés.

**INTRODUCTION**

Fauna extracted from soil and associated with roots of medicinal plants, chamomile and artichoke, included some tydeid mites of which two species proved to be new.

In the description, André's terminology (1980) is adopted. The holotypes and paratypes are deposited in the collection of Acarology Research Unit, National Research Centre, Dokki, Cairo, Egypt.

**Genus Metatydaeolus André 1980**

The genus was erected by André, 1980, and comprised only one species, *Metatydaeolus joannis* André. The genus is characterised by a procurved prodorsum and clublike sensillum. Dorsal chaetotaxy: I1 (I2 missing); genital organotaxy: (0-4-3), epimeral formula: (3-1-4-3). Leg setal pattern as follows: I (12-5-4-4-1); II (8-2-4-4-1); III (7-2-2-3-1); IV (7-2-1-2-0). Femur IV undivided. Palp (5-2-2) + ω.

**Metatydaeolus longistriatus** n. sp.

(Fig. 1)

Female: Prodorsum procurved; gnathosoma visible from above. Movable chelae short. Palpus setal pattern (5-2-2) + ω (Fig. 1D); all setae simple except the thicker terminals. Body length except gnathosoma, 123 μm; width, 57 μm. Dorsum: Propodosomal setae p1 lies posteriorly to sensillum, p2 the shortest, p3 the longest, all simple and nude.

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Fig. 1: *Metatydaeolus longistriatus* sp. n., female.

FIG. 2: *Tydeus artichokei* sp. n., female.
except for the clublike sensillum (Fig. 1E). Striae on propodosoma longitudinal. Hysterosoma with longitudinal striae from d1 setae to behind d3 setae and transverse from d4 to the end of the body. 11 (l2 missing) pairs of hysterosomal setae present, 5 dorsals (d1-d5); 3 laterals, l1, l4 and l5 and h2 setae of segment H. l4, l5 and d5 are the longest of all. All dorsal body setae simple and nude (Fig. 1A). All legs possess claws and empodia, leg setal pattern as follows (Fig. 1C):

I (12(1)-5-4-4-1-2) III (7-2-2-3-1-3)  
II (8(1)-2-4-4-1-1) IV (7-2-1-2-0-2)

Ventrum with 3 pairs of ventral setae, 4 pairs of genital setae and 3 pairs of aggenitals (Fig. 1B).  
Male : Unknown.

Remarks : This species differs from Metatytidaeolus joannis André 1980 in the presence of longitudinal striae on hysterosoma from das furrow to behind a3 setae, in having simple and nude setae as opposed to serrate in M. joannis.

Holotype : Female collected from soil associated with roots of chamomille, Matricaria chamomella, January 15, 1988, Giza region, Egypt.

Paratype : 1 female with the holotype.

Genus Tydeus Koch new combination, André 1980

The genus is characterised by a recurved prodorsum, dorsal chaetotaxy : 10 (l2 and h1 missing); genital organotaxy : (0,4-6-4), epimeral formulae : (3-1-4-2). Leg setal pattern as follows : I (8-4-3-3-1); II (6-2-2-3-0); III (5-2-1-2-1); IV (5-2-1-1-0). Femur IV undivided. Palp (6-2-2) + ω. The generic concept followed here is that of André 1980.

Tydeus artichokei n. sp.  
(Fig. 2)

Female-Prodorsum recurved; gnathosoma visible from above, movable chelae of medium length. Palpus setal pattern (6-2-2) + ω (Fig. 2E); all setae simple except the terminal, blade-like; palp tarsus elongate. Body length except gnathosoma, 165 μm, width, 106 μm.

Dorsum : Propodosoma with longitudinal striae; p1, p2 and p3 all simple, short, and subequal in length, sensory setae filiform and about 4 times as long as propodosomal setae. Hysterosoma with longitudinal striae between the basis of d1, d2 and d4. Three transverse areas through the midway of d1, d2; d2, d3; and d5, h2 (Fig. 2A). Striae with oblong lobes (Fig. 2C). 10 (l2 and h1 missing) pairs of hysterosomal setae present, 5 dorsals, d1, to d5; 3 laterals, l1, l4 and l5, h2 setae for segment H. All dorsal setae, simple, short and nude. The distance between basis of d3 setae is the greatest of dorsal setae. Two pairs of rosettes are found, one laterad to d2 setae, the second above d3 and one pair of muscle attachment behind d1 setae. All legs possess claws and empodia. Empodia with claws, leg setal pattern as follows (Fig. 2d):

I (8(1)-4-3-3-1-2) II (6-1)2-2-3-0-1)
III (5-2-1-2-1-3) IV (5-2-1-0-1)

Ventrum with 3 pairs of ventral setae, 4 pairs of aggenital setae and 6 pairs of genitals (Fig. 2B).

Male : Unknown.

Remarks : This species resembles Paralorryia nikitensis Livshitz, 1973 in having longitudinal striae between d1 and d2 but differs in having an alternation of longitudinal and transverse striae (three zones with longitudinal and three with transverse striae); dorsal body setae simple and nude, rather than serrated in P. nikitensis.

Holotype : Female collected from soil, associated with roots of artichoke, Cynpra scolymus, from which the name of the species is derived, January 15, 1988, Giza region, Egypt.

Paratypes : 5 females with the same data.

REFERENCES

