

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

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MEDICINAL
PLANT ROOTS
ASSOCIATED
TYDEIDAE
EGYPT

TYDEIDAE
ASSOCIÉS
AUX RACINES
DE PLANTES
MÉDICINALES
ÉGYPTE

ABSTRACT : *Metatydaeolus longistriatus* n. sp. and *Tydeus artichokei* n. sp. are described and illustrated from soil in Giza region, Egypte, associated with roots of chamomile and artickoke, 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 prodor-

sum and clublike sensillum. Dorsal chaetotaxy : 11 (2 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 *p*1 lies posteriorly to sensillum, *p*2 the shortest, *p*3 the longest, all simple and nude

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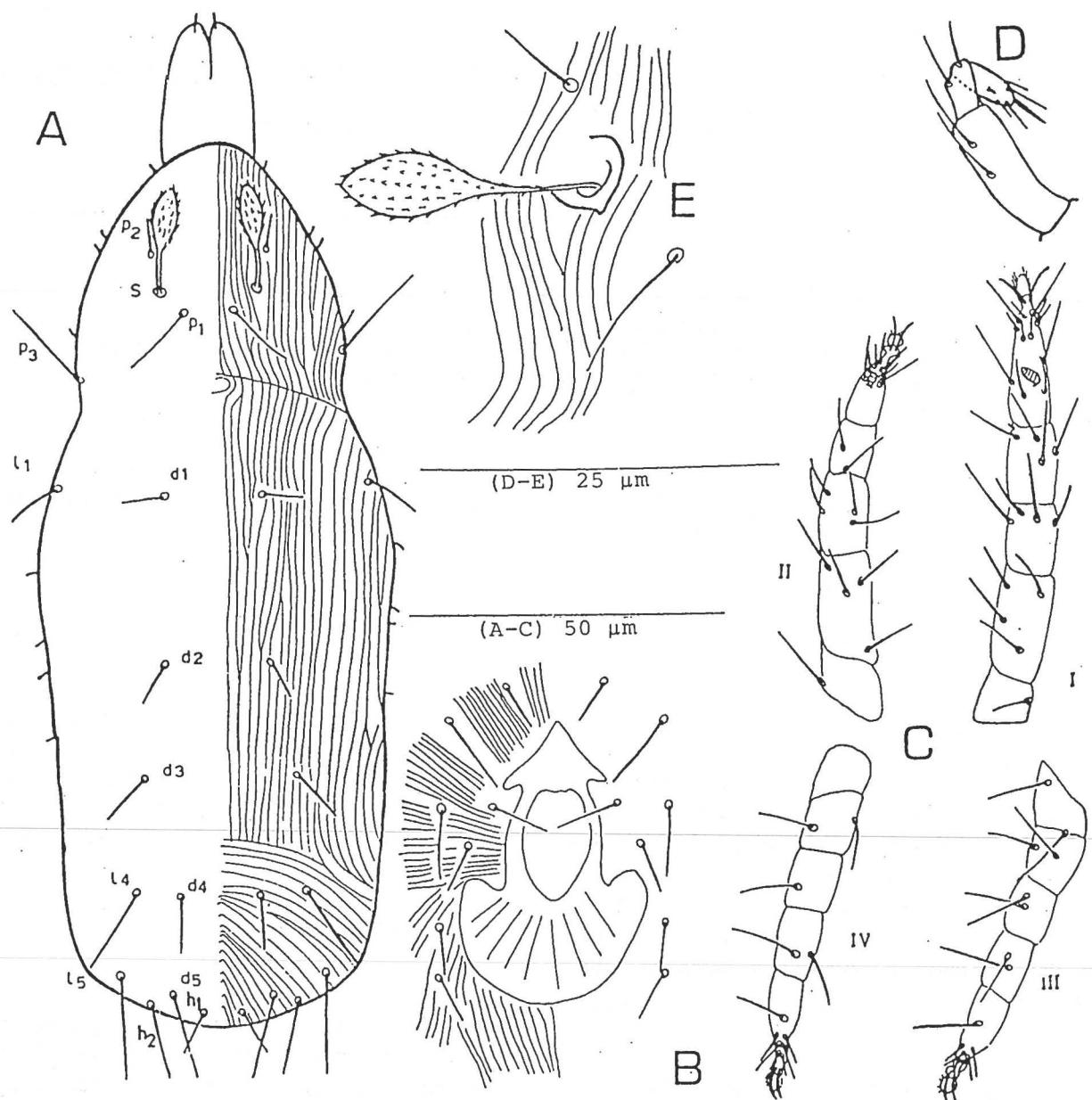


FIG. 1 : *Metatydaeolus longistriatus* sp. n., female.

A. — Body dorsum. B. — Genital. C. — Chaetotaxy of legs I-IV. D. — Palp. E. — Sensillum.

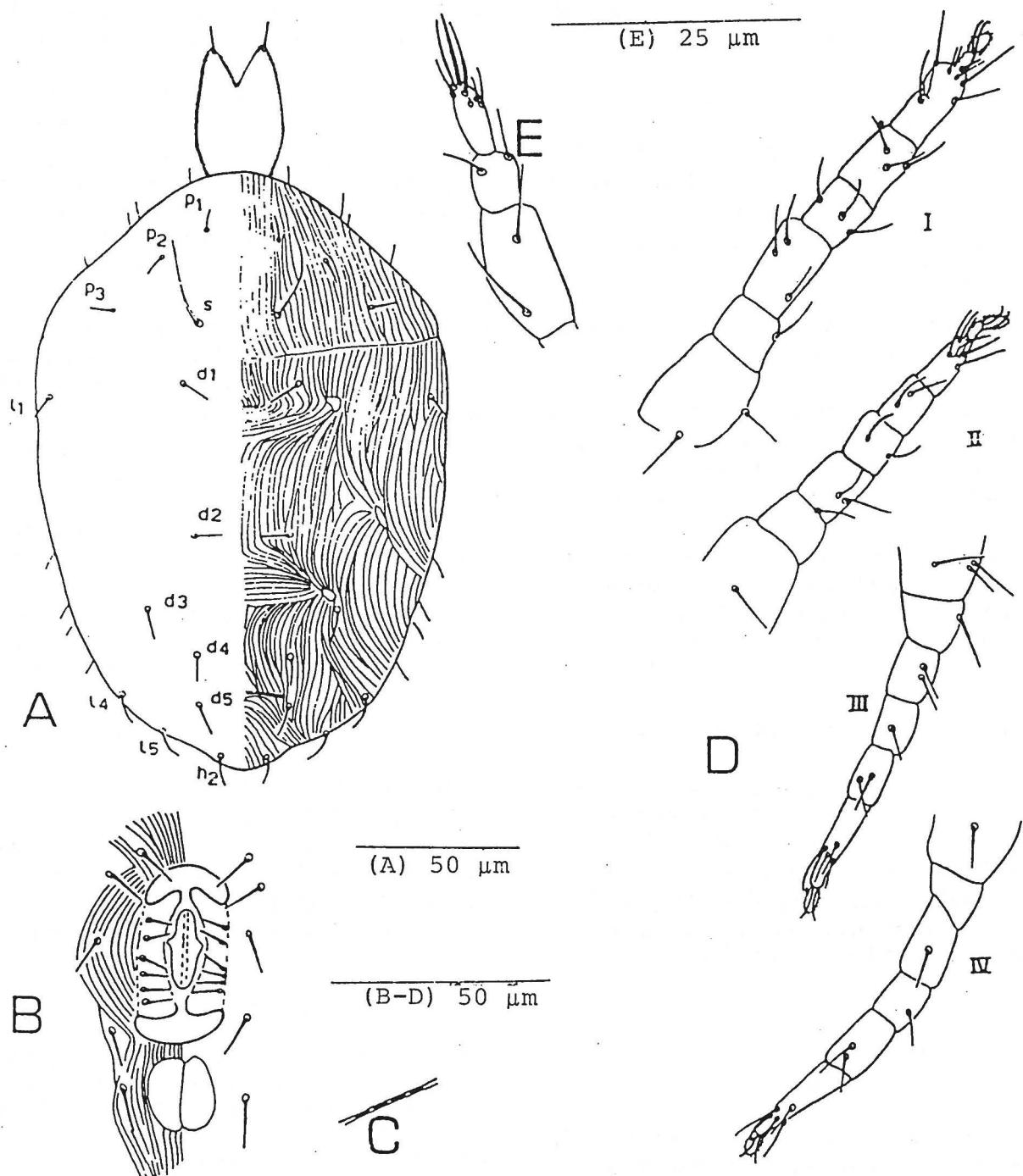


FIG. 2 : *Tydeus artichokei* sp. n., female.

A. — Body dorsum. B. — Genital. C. — Lobes of striae. D. — Chaetotaxy of legs I-IV. E. — Palp.

except for the clublike sensillum (Fig. 1E). Striae on propodosoma longitudinal. Hysterosoma with longitudinal striae from d_1 setae to behind d_3 setae and transverse from d_4 to the end of the body. 11 (l_2 missing) pairs of hysterosomal setae present, 5 dorsals (d_1-d_5) ; 3 laterals, l_1 , l_4 and l_5 and h_2 setae of segment H . l_4 , l_5 and d_5 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 *Metatydaeolus joannis* André 1980 in the presence of longitudinal striae on hysterosoma from *das* furrow to behind d_3 setae, in having simple and nude setae as opposed to serrate in *M. joannis*.

Holotype : Female collected from soil associated with roots of chamomile, *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 (l_2 and h_1 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 μ mm, width, 106 μ m.

Dorsum : Propodosoma with longitudinal striae ; p_1 , p_2 and p_3 all simple, short, nude and subequal in length, sensory setae filiform and about 4 times as long as propodosomal setae. Hysterosoma with longitudinal striae between the basis of d_1 , d_2 and d_4 . Three transverse areas through the midway of d_1 , d_2 ; d_2 , d_3 ; and d_5 , h_2 (Fig. 2A). Striae with oblong lobes (Fig. 2C). 10 (l_2 and h_1 missing) pairs of hysterosomal setae present, 5 dorsals, d_1 , to d_5 ; 3 laterals, l_1 , l_4 and l_5 , h_2 setae for segment H . All dorsal setae, simple, short and nude. The distance between basis of d_3 setae is the greatest of dorsal setae. Two pairs of rosettes are found, one laterad to d_2 setae, the second above d_3 and one pair of muscle attachment behind d_1 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 (5-2-1-1-0-1)

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 d_1 and d_2 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, *Cynara scolymus*, from which the name of the species is derived, January 15, 1988, Giza region, Egypt.

Paratypes : 5 females with the same data.

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