

A REDESCRIPTION OF *TUCKERELLA NILOTICA* ZAHER AND RASMY (ACARINA : TUCKERELLIDAE) WITH DESCRIPTIONS OF THE IMMATURE STAGES

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ACTINEDIDA
IMMATURE
STAGES

ABSTRACT : The tuckerellid mite, *Tuckerella nilotica* Zaher and Rasmy is redescribed. Descriptions of the immature stages are included.

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IMMATURES

RÉSUMÉ : L'Acarien Tuckerellidae *Tuckerella nilotica* Zaher et Rasmy, 1970 est redécrit. Ses stases immatures sont décrites.

INTRODUCTION

Zaher and Rasmy (1969) described the adult female of *Tuckerella nilotica* Zaher and Rasmy from Egypt, but gnathosoma and ventral region were not illustrated. However, the female of *T. nilotica* is herein redescribed as well as the descriptions of the immature stages are included. This species was collected from fruits and buds of orange trees.

Family : Tuckerellidae Baker & Pritchard, 1953

Tuckerella nilotica Zaher & Rasmy, 1970

Female (Fig. 1, A, B and C).

Body elongate oval and red ; dorsum reticulated, with suture lines between propodosoma metapodosoma and between latter and opisthosoma. Dorsum with typical fan-shaped or palmate setae characteristic of family, distributed as follows :

propodosoma with four pairs of palmate setae ; hysterosoma with 18 pairs of palmate setae, 7 laterals and 11 in 4 transverse rows (4, 3, 2, and 2), the two posterior female hysterosomals are the smallest and with the outer pair subequal to the inner ; the last four laterals large and elongate. Propodosoma with two pairs of eyes, the anterior smaller than the posterior. Caudal region with six pairs of long ciliated flagellate setae as long as the body, these arising from dorsal tubercles arranged in a straight line and extending caudally. Two small foliaceous setae in a mediocaudal position between the long flagellate setae and a similar single seta between the second and third flagellate setae on either side. Rostrum with 2 vertical setae placed just above coxae of palpi ; stylets recurved basally. Palpus five segmented, first segment short, fifth segment long and slender, bearing distally a blunt sensory rod. Three tactile setae on fifth segment ; fourth segment with curved claw slightly shorter than tarsus and with three tactile setae. Third segment larger than

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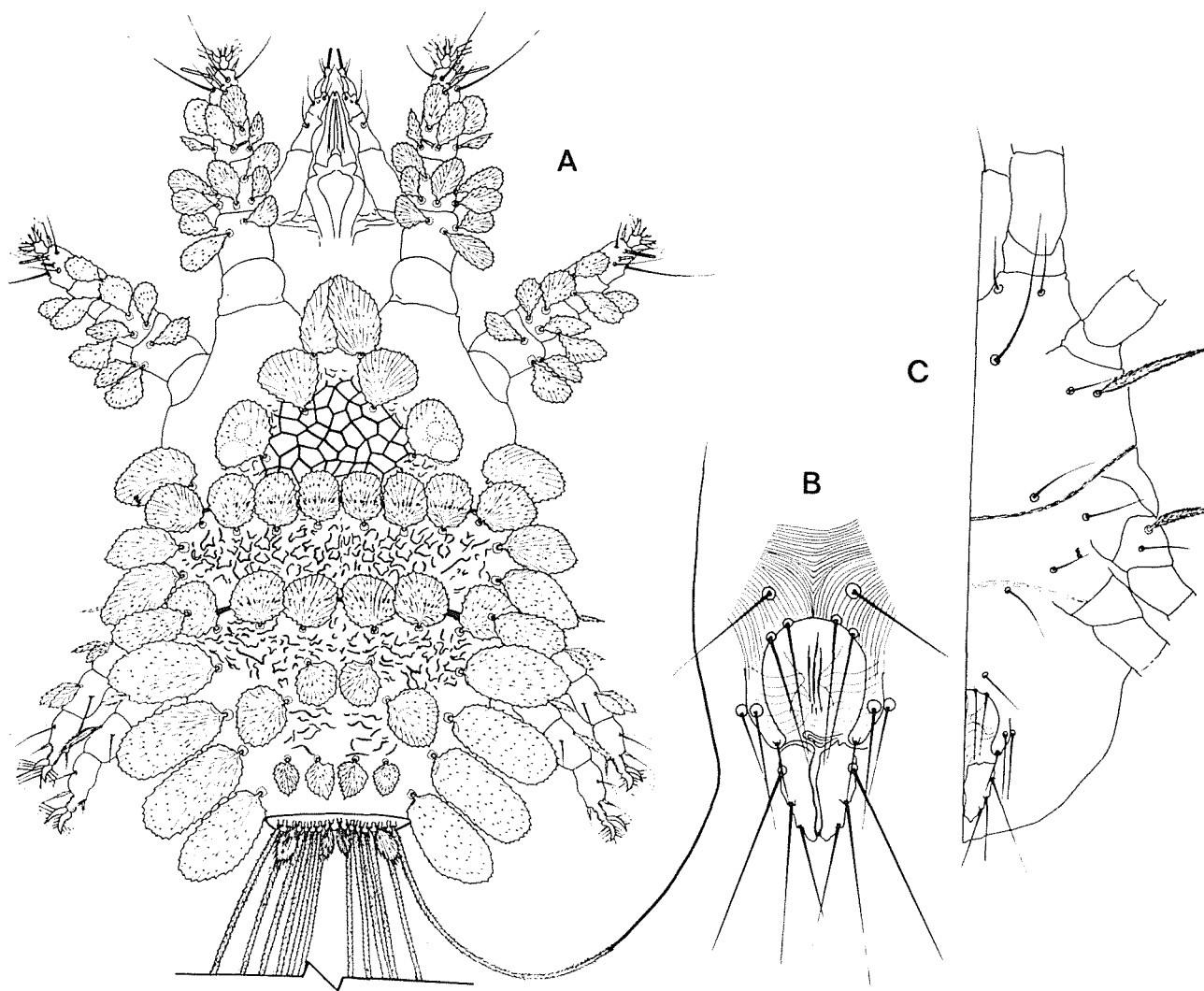


FIG. 1 : *Tuckerella nilotica* Zaher and Rasmy, 1970 :

A. — Dorsal view of adult female. B. — Genito-anal region of adult female. C. — Ventral view of adult female.

fourth segment and with one tactile seta. Legs short and thick. Tarsi with two claws and empodium ; pectinate series of tenent hairs from bases of claws and empodium. Tarsus I with two distal blunt sensory rods, the anterior one being slightly the longer posterodistal ; tibia I with small sensory rod ; tarsi II with anterior sensory rod very much longer than the posterior ; tibia, genu and femur of legs I, II and III with dorsal palmar setae while tibia and genu IV with long serrate setae. Genital region with nine pairs of setae arranged as follows : 3 pairs of primary genital

setae along sides of vulvae, 2 pairs of secondary genital setae anterior to these ; 2 pairs of ventral setae on anterior margin of the oviduct. Anterior to these two medioventral setae and a single mediolateral seta on either side of the genital area.

Male : Unknown.

Larva.

Delicate and similar to female but dorso-lateral foliaceous setae on propodosoma and hystero-

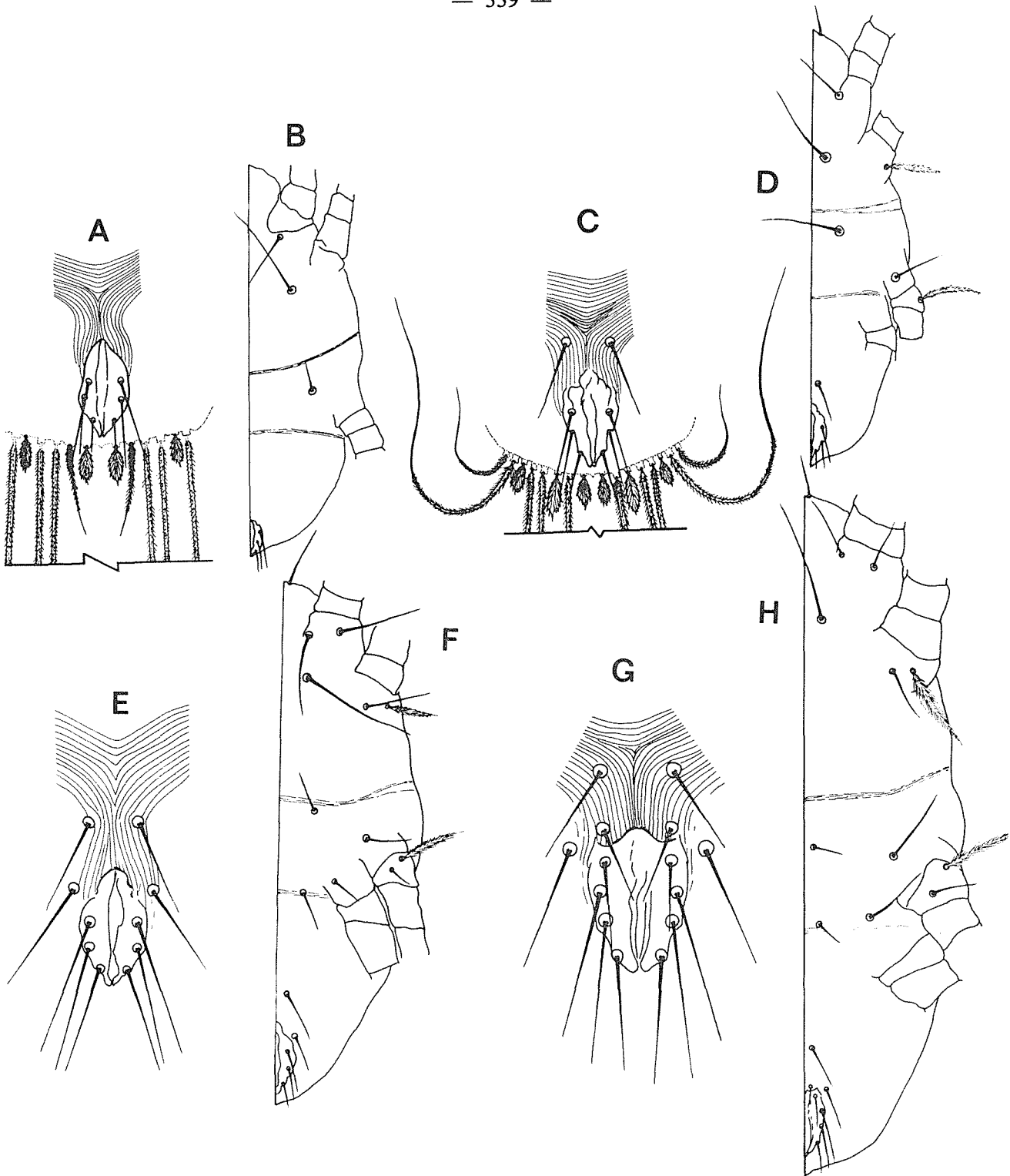


FIG. 2 : *Tuckerella nilotica* Zaher and Rasmy, 1970 :

A. — Genito-anal region of larva. B. — Ventral view of larva. C. — Genito-anal region of protonymph. D. — Ventral view of protonymph. E. — Genito-anal region of deutonymph. F. — Ventral view of deutonymph. G. — Genito-anal region of tritonymph. H. — Ventral view of tritonymph.

soma more pointed. Caudum with only four pairs of flagellate setae ; the two mediocaudal flagellate setae being very shorter than the external ones. Two small foliaceous setae in amediodcaudal position and a similar single seta between the first and the second flagellate setae on either side. Fifth segment of palpus bearing distally a blunt sensory rod. Legs, 6, short. Tarsus I with only one sensory rod. Tibia I and tarsus II each with single sensory rod. Genito-anal region with three pairs of primary genital setae (Fig. 2, A, B).

Protonymph.

Dorso-lateral setae of similar shape to those in larva. Last four palmate setae on dorsum arranged as in female. It possess five pairs of ciliated flagellate setae of which the outer pair being the shortest. Two small foliaceous setae in a mediocaudal position between the caudal flagellate setae and a similar single seta between the second and third and another single one between the fourth and fifth flagellate setae on either side. Legs, 8. Tarsus I with single sensory rod as in larva. Genital region with four pairs of setae, of which three pairs are primary genital setae and anterior to these a pair of medio-ventral setae (Fig. 2, C, D).

Deutonymph.

Can be recognized from protonymph by presence of two sensory rods on tarsus I, and from

the female by size and ventral setation (fig. 2, E, F). In the genital region there are five pairs of setae, i.e., a pair of mediolateral setae additional to those of the protonymph.

Tritonymph.

Similar to the deutonymph except for size and ventral setation (Fig. 2, G, H). In the genital region seven pairs of setae, i.e., two pairs of secondary genital setae anterior to the primary genital setae in addition to those of the deutonymph.

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