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A NEW SPECIES OF *TREATIA* KRANTZ AND KHOT (ACARI : OTOPHE IDOMENIDAE) WITH A NEW RECORD OF *AMBLYSEIUS* BERLESE (ACARI : PHYTOSEIIDAE) FROM INDIA

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ABSTRACT

Treatia indicus sp. nov. is described and illustrated. *Amblyseius* (*Neoseiulus*) *paspalivorus* (DeLeon) is recorded for the first time from India.

INTRODUCTION

Treatia Krantz and Khot is so far known only from two species from the world, *viz.*, *Treatia phytoseoides* (Baker and Johnston, 1959) known from Florida and collected on hemipteran bug and *Treatia dieuches* Ramsey, 1973 from East Africa and collected on a lygaeid bug. The senior author collected a species of this genus which is new to science and the same is described here. It is interesting to note that both the species of this genus so far known were collected from hemipterous bugs but this species was collected on malformed mango inflorescence and was collected through Berlese's funnel. In addition, a species of Phytoseiidae *viz.*, *Amblyseius* (*Neoseiulus*) *paspalivorus* (De Leon) is recorded for the first time from India and is redescribed here. The measurements given in text are in microns.

Treatia indicus sp. nov.

(Fig. 1)

Female : Dorsum covered with 2 shields, podonotal and opisthonotal. The former 331 long, 454 wide, lateral and posterior margin reticulate, with 11 pairs of setae ; latter shield 309 long, 450 wide, reticulate, anterior margin grooved with 4 pairs of setae J5 extends beyond the base of S5 ; S5 71 long. Dorsocentral setae on podonotal shield measure 22-24 ; those dorsolateral series measure 35-49 ; r3 on dorsal shield 44 long, R1 on lateral integument 47 long. Sternal shield very poorly sclerotized, with 3 pairs of sternal setae, metasternal setae on membraneous plates. Genital shield much longer than wide, narrowed anteriorly, truncated posteriorly, anterior portion with fimbriate pattern, reticulate posteriorly, genital setae 1 pa red lie outside shield margin. Ventrianal shield

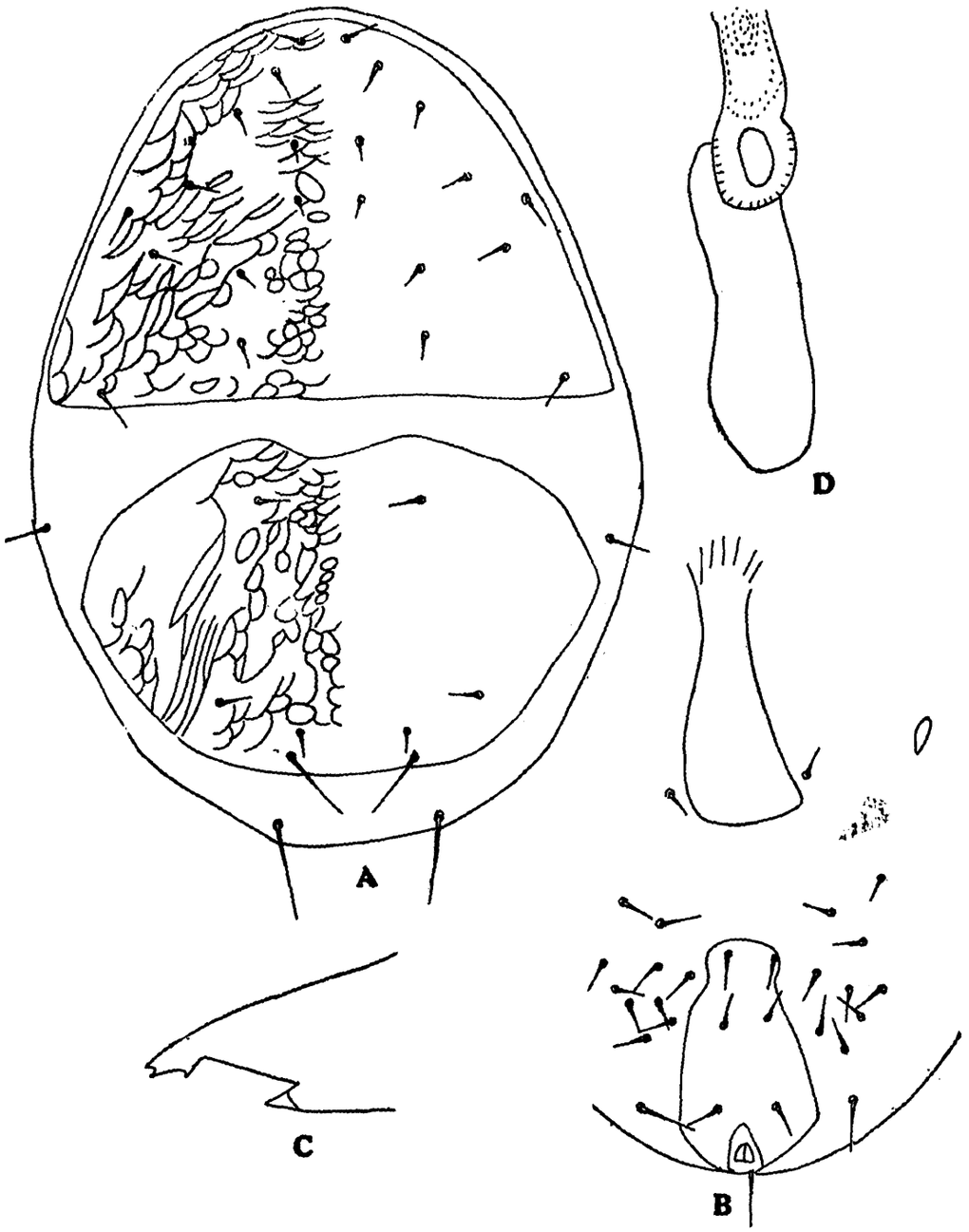

Fig. 1 (A-D). *Treatia indicus* sp. nov. : A—Dorsal shield, B—Posteroventral surface, C—Chelicera, D—Peritreme

shaped as figured, 204 long, 127 wide, with 2 pairs of preanal setae and a strong postanal seta, 70 long. At least 10 pairs of setae present on the membrane around ventrianal shield ; a pair of metapodal plates present, 35 long. Fixed digit of chelicera small, peg like, movable digit large with sharp teeth. Peritreme short, extending anteriorly upto middle of coxae II, shield fuses anteriorly with podonotal shield. Spermatheca not discernible. All femora and tarsi II-IV appear to be subdivided. Leg chaetotaxy

	I	II	III	IV
Coxa	2	2	2	1
Trochanter	5	5	5	4
Femur	10	8	5	5
Genu	10	6	6	6
Tibia	10	6	5	5
Tarsus	27	11	12	12

(Approx.)

Macrosetae on femur	I	2 (70 each)
	II	2 (56 each)
	III	1 (67)
	IV	1 (56)
Length of leg :	I	423
	II	408
	III	408
	IV	485

Palpal femora with strong macroseta, longer than the segment.

Male : Unknown.

Material : *Holotype* ♀, INDIA : Delhi, ex malformed mango inflorescence (Coll. *S. Ghai*).

Paratypes : 6 ♀ ♀, data same as holotype. All types are depositsd in National Pusa Collection, Division of Entomology, I. A. R. I., New Delhi.

Remarks : Only two species of this genus are so far known. From *Treatia phytoseoides* (Baker & Johnston, 1959), this species differs in the presence of genital setae, fixed digit of chelicera (though may be very much reduced), in shape of ventrianal shield and in difference of leg chaetotaxy. From *T. dieuches* Ramsey, 1973, it differs in presence of genital setae outside genital shield, in having palpfemur macroseta being longer than the length of the segment, in shape of ventrianal shield and in leg chaetotaxic character.

Amblyseius (Neoseiulus) paspalivorus (De Leon) (Fig. 2)

Typhlodromus paspalivorus De Leon, 1957, *Florida Ent.*, **40** : 140.

Typhlodromus (Amblyseius) paspalivorus, Chant, 1959, *Can. Ent.*, **19** (Suppl.-12) : 79.

Cydnodromus paspalivorus, Muma, *Bull. Fla. Sta. Mus.*, **5** (7) : 290.

Amblyseius paspalivorus, Corpuz & Rimando, 1966, *Philip., Agr.* **50** : 128-129.

Female : Dorsal shield elongated, narrow, distinctly reticulate, 350 long, 155 wide, with 17 pairs of setae. j1=j3=z2=z4 ; s4>j3, S4=S6, S2>Z1. Measurements of setae : j1-11, j4-j6-11-13, J2-J5-11-13, j3-12, z2-10, z4-10, S4-15, Z1-13, S2-16, S4-25, S5-25, Z5-89, z5-11, Z4-25, r3 and R1 both on lateral integument measuring 9-10 each. Sternal shield 106 long, 68 wide, with postlateral angulation and 3 pairs of setae ; 4th pair lie on metasternal plates. Genital shield adjacent to ventrianal shield with a pair of genital setae. Ventrianal shield shaped as figured, imbricate, with 3 pairs of preanal setae and a pair of rounded preanal pores below the level of 3rd pair of preanal setae ; 4 pairs of setae present around ventrianal shield, JV5-29 long ; 2 pairs of metapodal plates present, primary one-33 long. Peritreme extends anteriorly upto j1. Fixed digit of chelicera with 3 teeth anterior to *pilus dentilis* and 1 tooth posterior to it ; movable digit with a sharp tooth. Spermatheca as figured. Macroseta present on basitarsus IV-44 long. Leg chaetotaxic formula : genu II $2\ \frac{2}{0}\ \frac{2}{0}\ 1$, tibia II $1\ \frac{1}{1}\ \frac{2}{1}$, genu III $1\ \frac{2}{1}\ \frac{2}{0}\ 1$, tibia III $1\ \frac{1}{1}\ \frac{2}{1}\ 1$.

Material examined : 12 ♀ ♀, Rajasthan, Udaipur, ex malformed mango inflorescence, 10.ii.1962 (Coll. S. Ghai), deposited in NPC,

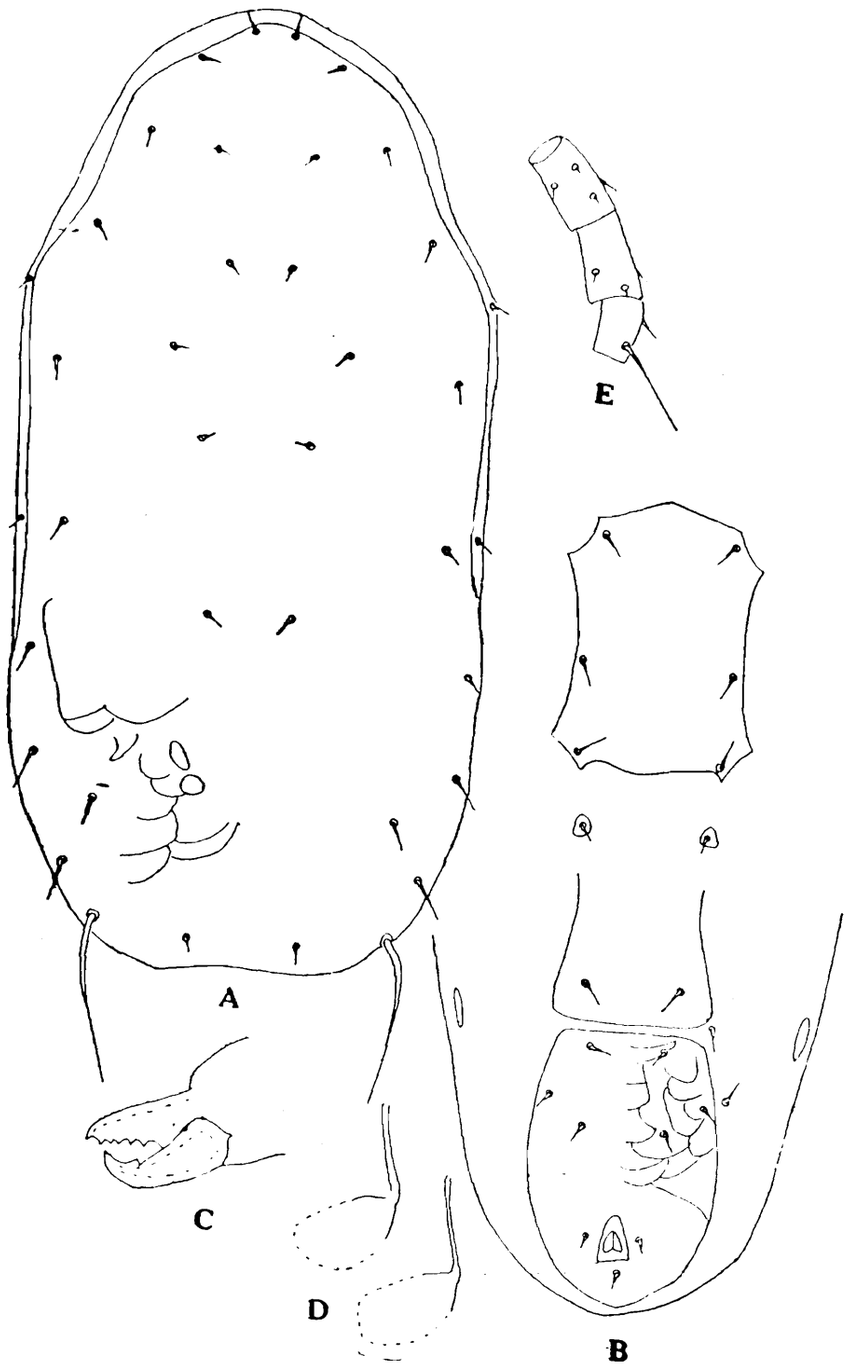

Fig. 2 (A-E). *Amblyseius* (*Neoseiulus*) *paspalivorus* (De Leon) A—Dorsal shield, B—Ventral surface, C—Chelicera, D—Spermatheca, E—Genu, tibia and basitarsus of leg IV.

I. A. R. I., New Delhi-110012 ; 1 ♀, Andhra Predesh, Anakapalli, ex. paddy, 2.xii.1980, (Coll. *A. Venusopal Rao*), ZSI, Reg. No. 3433/17.

Remarks : This species was earlier known from Florida and latter was recorded from Philippines. This is the first record of the species from India.

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