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ON A COLLECTION OF TETRANYCHOID MITES FROM MADHYA PRADESH, INDIA, WITH A DESCRIPTION OF A NEW *EOTETRANYCHUS* (ACARI : TROMBIDIFORMS)

Y. N. GUPTA and S. K. GUPTA

Zoological Survey of India, 14 Madan Street, Calcutta-700 013, India

ABSTRACT

Ten species of Tetranychidae and Tenuipalpidae belonging to seven genera are reported from Madhya Pradesh. A new species of *Eotetranychus* is described and illustrated.

INTRODUCTION

Only two species of tetranychid mites, *Tetranychus macfarlanei* Baker and Pritchard and *Petrobia latens* (Muller), reported by Bindra and Kittur (1961), are so far known from Madhya Pradesh. During the course of a survey for tetranychoid mites in India, the junior author collected some of the mites in Madhya Pradesh and the present paper is based on this material.

Altogether, a total of 10 species belonging to two families and 7 genera are treated including a new species of *Eotetranychus*. Types are deposited in the Zoological Survey of India, Calcutta.

Family TETRANYCHIDAE

Eotetranychus frosti (McGregor)

Tetranychus frosti McGregor, 1952, *Proc. ent. Soc. Wash.*, 54 : 142.

Eotetranychus frosti : Gupta and Gupta, 1976, *Acar. Newsl.*, 3 : 6-7.

material examined : 7 ♀♀, 1♂, Raipur, Lavandi Agricultural Farm, 21. iv. 1974, ex citrus.

Distribution in India : Gujarat, Madhya Pradesh (new record).

Remarks : One tydeid mite (*Pronematus* sp.) was seen associated with this mite.

Eotetranychus hirsti Pritchard and Baker

Tetranychus fici Hirst 1926, *Proc. zool. Soc. Lond.*, 2: 828 (preoccupied).

Eotetranychus hirsti Pritchard and Baker, 1955, *Pacif. Coast ent. Soc. Mem. Ser.* 2 : 200.

Material examined: 19 ♀♀, 33 ♂♂, Raipur, Dhamtari, 21. iv. 1975, ex *Ficus religiosa*; 4 ♀♀, 43 ♂♂, Shivpuri National Park, 15. v. 1975, ex *Ficus carica*.

Distribution in India: Andhra Pradesh, Bihar, Delhi, Karnataka, (M.P.), Panjab, Tamil Nadu, West Bengal.

Remarks: *Amblyseius alstoniae* Gupta was found feeding on the eggs of this species.

Eotetranychus syzygii sp. nov.

(Figs. 1-7)

Male: Body 288 μ long, 150 μ wide. Palpus with terminal sensillum absent; dorsal sensillum slender. Tarsus I with three tactile and three sensory setae proximal to duplex setae; tibia I with nine tactile and one sensory setae. Tarsus II with three tactile and one sensory setae proximal to duplex setae; tibia II with six tactile setae. Dorsal setae of idiosoma longer than intervals between their bases. Aedeagus as in fig. 3.

Female: Body 348 μ long, 220 μ wide. Terminal sensillum on palp as in fig. 6. Tarsus I with five tactile and one sensory setae proximal to duplex setae, tibia I with eight tactile and one sensory setae. Tarsus II with three tactile and one sensory setae proximal to duplex setae, tibia II with six tactile and one sensory setae. Dorsal setae of idiosoma slender, slightly enlarged at the base, thickly pubescent; 1st pair of dorsal hysterosomal setae shorter than the distance between succeeding pairs, while others are longer. Outer sacral setae shorter than inner sacral setae. Postanal setae thin and small. Dorsal striation of idiosoma as in fig. 8. Medioventral setae of moderate length. Genital flap with transverse striae.

HOLOTYPE: ♂, INDIA: Madhya Pradesh: Raipur, Gandhi Udyan, 24. iv. 1975, ex *Syzygium cumini*. *PARATYPES*: 2 ♀♀, data same as for holotype.

Remarks: This new species comes close to *Eotetranychus cactorum* Baker and Pritchard (1969) but differs from it in shape of aedeagus and also in the number of tactile and sensory setae of tibia and tarsus of leg I and II.

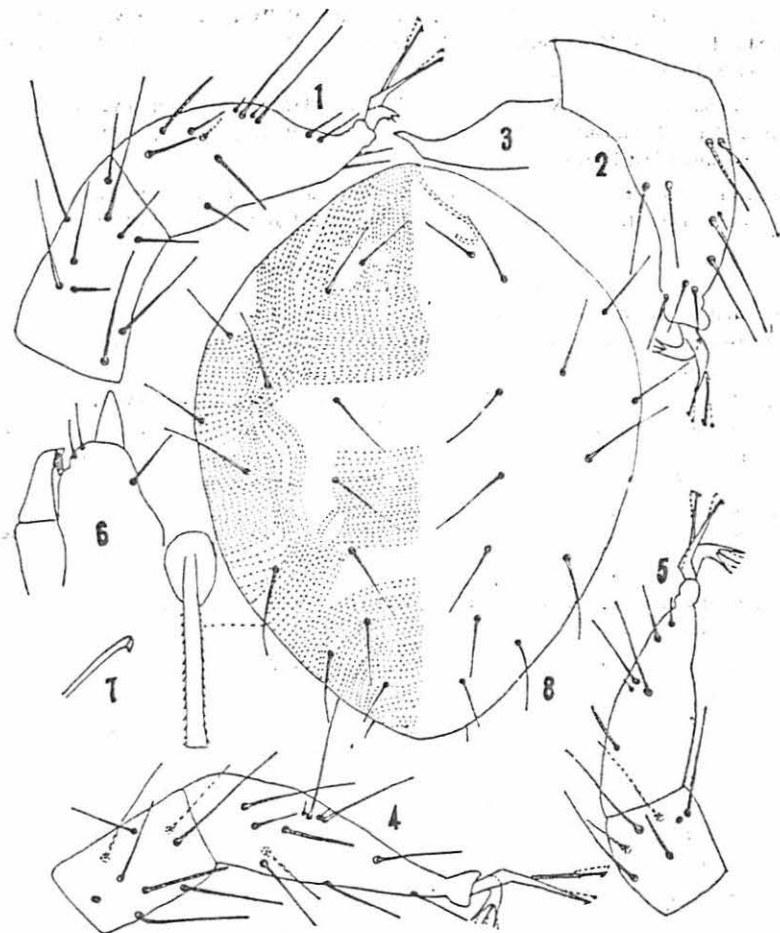
Eutetranychus orientalis (Klein)

Anychus orientalis Klein, 1936, *Bull. agric. Res. Sta. Rehovot*, 21: 3.

Anychus ricini Rahman and Sapra, 1940, *Proc. Indian Acad. Sci. (B)*, 11: 194.

Eutetranychus orientalis: Baker and Pritchard, 1960, *Hilgardia*, 29: 464-467.

Material examined: 2 ♀♀, 23 ♂♂, Mandasor, Agricultural Farm, 8. v. 1975, ex citrus and guava; several ♀♀, ♂♂, Mandu Forest Farm, 2. v. 1975, ex castor; 15 ♀♀ Pachmarhi, 28. iv. 1975, ex citrus; 20 ♀♀, 23 ♂♂ Mandasor, Dhodhar, 9. v. 1975, ex



Figs. 1-8. *Eotetranychus syzygii* sp. nov.: 1. Tibia and tarsus of leg I (male); 2. Tibia and tarsus of leg II (male); 3. aedeagus; 4. Tibia and tarsus of leg I (female); 5. Tibia and tarsus of leg II (female); 6. palp (female); 7. Peritreme; 8. Dorsum (female).

Tabernaemontana coronaria; 4 ♀♀, Shivpuri National Park, 15.v. 1975, ex fig; 50 ♀♀ Mandu, 3.v. 1975, ex peach; 10 ♀♀, Dhar, 13.v. 1975, ex rose; 10 ♀♀, Pachmarhi, 11.v. 1975, ex *T. coronaria*.

Distribution in India: Assam, Delhi, Gujarat, Haryana, Jammu and Kashmir, Karnataka, Maharashtra, Madhya Pradesh (new record), Orissa, Punjab, Uttar Pradesh and West Bengal.

Remarks: In these specimens, the dorsal idiosomal setae were longer than in those examined earlier from Orissa, Gujarat and Assam and also in published descriptions.

Oligonychus sacchari (McGregor)

Paratetranychus sacchari McGregor, 1942, *J. Univ. Puerto Rico.*, 26 : 91.

Oligonychus sacchari: Pritchard and Baker, 1955, *Pacif. Coast ent. Soc. Mem. Ser.*, 2 : 355-357.

Material examined: 2♀♀, 1♂, Shivpuri Government Garden, 13.v. 1975, ex bamboo. *Distribution in India*: Assam, Gujarat, Madhya Pradesh (new record) and West Bengal.

Remarks: This mite was previously recorded on sugarcane from West Bengal and Assam. This is, therefore, a new host record.

Oligonychus mangiferus (Rahman and Sapra)

Paratetranychus mangiferus Rahman and Sapra, 1940, *Proc. Indian Acad. Sci. (B)*, 11 : 192.

Oligonychus mangiferus: Pritchard and Baker, 1955, *Pacif. Coast ent. Soc. Mem. Ser.*, 2 : 330.

Material examined: 8♀♀, 1♂, Shivpuri National Park, 15.v. 1975, ex *Syzygium cumini*; 7♀♀, 1♂, Madhab National Park, 15.v. 1975, ex blackberry; 18♀♀, 2♂♂, Piparia, 29.iv. 1975, ex mango; 3♀♀, 1♂, Mandu, 4.v. 1975, ex undetermined host; 10 ♀♀, Pachmarhi, 28.iv. 1975, ex blackberry.

Distribution in India: Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh (new record), Punjab, West Bengal.

Remarks: The infestation of this mite on mango was very heavy.

Tetranychus macfarlanei Baker and Pritchard

Tetranychus macfarlanei Baker and Pritchard, 1960, *Hilgardia*, 29 : 537-540.

Material examined: 3♀♀, 2♂♂, Mandu Forest Farm, 3.v. 1975, ex castor.

Distribution in India: Madhya Pradesh, Nicobar Islands, West Bengal.

Remarks: This mite has earlier been reported from various cucurbitaceous vegetables. The present record of this mite on castor is interesting.

Family TENUIPALPIDAE

Brevipalpus phoenicis (Geijskes)

Tenuipalpus phoenicis Geijskes, 1939, *Meded. Landbouwh. Wageningen*, 42: 230

Brevipalpus phoenicis: Sayed, 1946, *Bull. Soc. Fouad. Ier Ent.* 30 : 99.

Material examined: 6♀♀, Dhodhar, 7.v. 1975, ex brinjal; 1♀, Chhindwara, 25.iv. 1975, ex guava; 2♀♀, Mandasor Agricultural Farm, 8.v. 1975, ex brinjal; 8♀♀, Raipuri, 24.iv. 1975, ex sunflower; 2 ♀♀, Lavandi Agricultural Farm, 21.iv. 1975, ex pomegranate; 10♀♀, 1♂, Dhodhar, 9.v. 1975, ex brinjal.

Distribution in India: Assam, Bihar, Delhi, Himachal Pradesh, Karnataka, Madhya Pradesh (new record), Maharashtra, Meghalaya, Orissa, Punjab, Tamil Nadu.

Remarks: This polyphagous species was reported on a number of host plants in India (Nageshachandra and Channa Basavanna, 1976).

Tenuipalpus punicae Pritchard and Baker

Tenuipalpus punicae Pritchard and Baker, 1958, *Univ. Calif. Publ. Ent.*, 14: 240-242.

Material examined: 6♀♀, INDIA : M.P. : Chhindwara, 25. iv. 1975, ex *Hibiscus rosasinensis*; 4♀♀, Shivpuri National Park, 15.iv. 1975, ex *Punica granatum*.

Distribution in India: Madhya Pradesh (new record), Meghalaya, Punjab.

Remarks: This species is recorded only on *Punica granatum*. *H. rosasinensis* being a new host record.

Raoiella indica Hirst

Raoiella indica Hirst, 1924, *Ann. Mag. nat. Hist.*, (9) 14 : 522.

Material examined: Several ♀♀, ♂♂, Raipur, 24.iv. 1975, ex coconut.

Distribution in India: Gujarat, Karnataka, Madhya Pradesh (new record), Orissa, Punjab, Tamil Nadu.

Remarks: *Amblyseius alstoniae* Gupta was found feeding on the eggs of this mite which had heavily infested the coconut palms.

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