ORIBATEI FROM A BIRD NEST

BY

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Oribatid mites are usually considered to be soil and litter inhabitants but there are records of their presence on tree bark, twigs and leaves (GARMAN, 1948 ; PSHORN-WALCHER and GUNHOLD, 1957 ; DALENIUS, 1960). TRAVÉ (1963) investigated the arboreal habitats of oribatids in southern France and was able to observe their life cycles in the field. Many bird nests, because they are constructed of materials taken from the litter and soil, might be expected to harbor these mites. The following collection serves as an example.

In November, 1960, while at the Huntington Wildlife Forest, Newcomb, New York, a bird nest was found in a sugar maple (*Acer saccharum* Marsh) sapling. The locality was in an area of old growth northern hardwoods (beech-birch-maple). The nest was constructed of twigs and grass and held together with mud, indicating the probable former inhabitant to be a species of thrush. The mites were extracted from the nest by use of a Berlese funnel.

Below is a list of the Oribatid mites taken from the nest.

n. gen., n. sp.
Fuscozetes fuscipes (C. L. Koch)
Anachipteria achipteroides (Ewing)
Ceratoppia bipilis (Hermann)
Eueremaeus silvestris (Forsslund)
Carabodes (near *areolatus* Berlese)
Phthiracarus setosellum Jacot [2]

I am indebted to Dr. Max SELLNICK for the above identifications.

On further study, the specimens SELLNICK listed as n. gen., n. sp. appear to belong to *Trichoribates* Berl., agreeing with the description of the genus as given

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by SELLNICK (1928, 1960) and WILLMAN (1931) ; namely, wide leaflet-like lamellae, notched cuspides, translamella, pteromorphs immovable and not reaching beyond the anterior edge of the hysterosoma, setae of the propodosoma, hysterosoma and legs (in part) barbed, 4 areae porosae present, the a. p. adalaris being larger than the other 3.

These specimens most closely resemble *T. trimaculatus* (C. L. Koch) in the shape of the lamellae and translamella, tectopedia and pteromorphs and in the size and position of the setae and areae porosae. There is a question only in the position of the rostral setae which appear to arise from tectopedia I according to SELLNICK (1928, fig. 1) but arise on the lateral side of the rostrum near the base of tectopedia I in specimens of *T. trimaculatus* from New York State and of the specimens herein described.

Trichoribates spatulasetosus sp. nov.

(Fig. 1-7)

Diagnostic characters : The specimens differ from *T. trimaculatus* in the following respects : (1) color light brown instead of dark brown, (2) rostrum indented on either side of apex, appearing nose-like, (3) notch of cuspis deeper, (4) head of sensillus two times as thick, (5) interlamellar setae two times as thick, (6) extra thick, barbed setae of genu and tibia I to IV are lacking, (7) spatulate solenidia on tibia II to IV and, (8) smaller size, averaging 470 × 332 microns compared to 680 × 490.

Description : Rostrum indented on either side of apex making apex appear nose-like ; rostral setae thin, barbed, inserted laterally on prodorsum immediately anterior to insertion of tectopedia I, directed anteriorly and medially, crossing anterior to tip of rostrum ; tectopedia I inserted laterally on rostrum about level with translamella, extending anteriorly nearly to insertions of lamellar setae ; posterior border of propodosoma overlapped by anterior edge of hysterosoma covering bothridium and insertions of interlamellar setae.

Lamellae cuspidate, broadest in middle ; translamella joining lamellae near middle, straight posteriorly (53 μ long), concave anteriorly arching to cusps, narrowest in middle (5 μ wide) ; cusps incised at tip to receive lamellar setae ; lamellar setae (65 μ long, 68 μ between insertions) shorter than rostral setae, thicker, barbed ; interlamellar setae (97 μ long, 72 μ between insertions) inserted under anterior edge of hysterosoma near point where medial edge of lamellae joins posterior edge of prodorsum, extend beyond tip of rostrum, thicker than lamellar setae, barbed similar to rostral and lamellar setae.

Sensillus (37 μ long) inserted under anterior edge of hysterosoma, short stalked, minute haired, head large, nearly globular, bent medially.

Dorsosejugal suture concave, anteriorly even with anterior edge of pteromorphs ; pteromorphs large, extending ventrally to coxa III and posteriorly nearly ½ length of hysterosoma, without suture between pteromorphs and hysterosoma ; dorsal

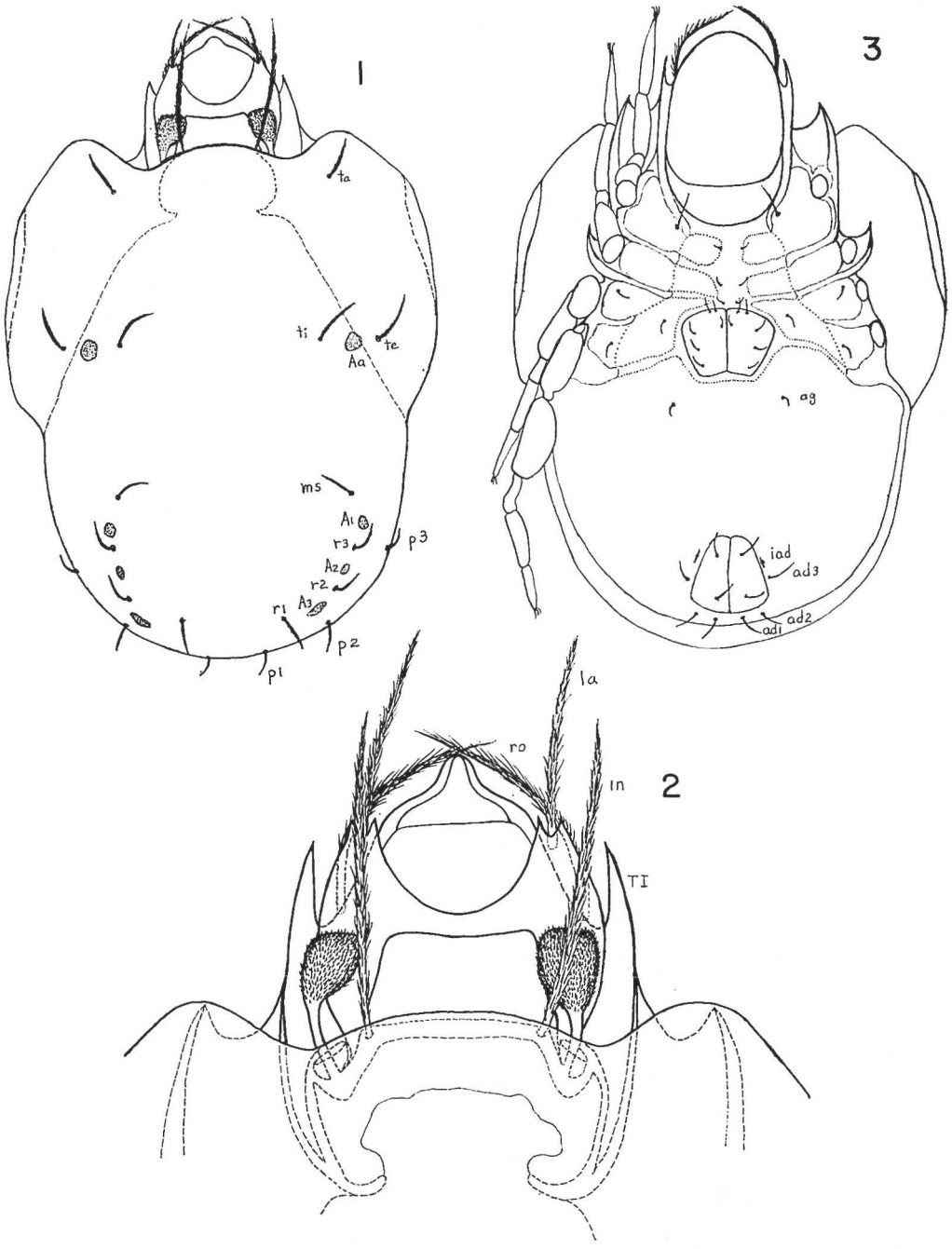

FIG. 1-3. — *Trichoribates spatulasetosus* n. sp.
1. Dorsal view ; 2. Dorsal view of propodosoma ; 3. Ventral view.

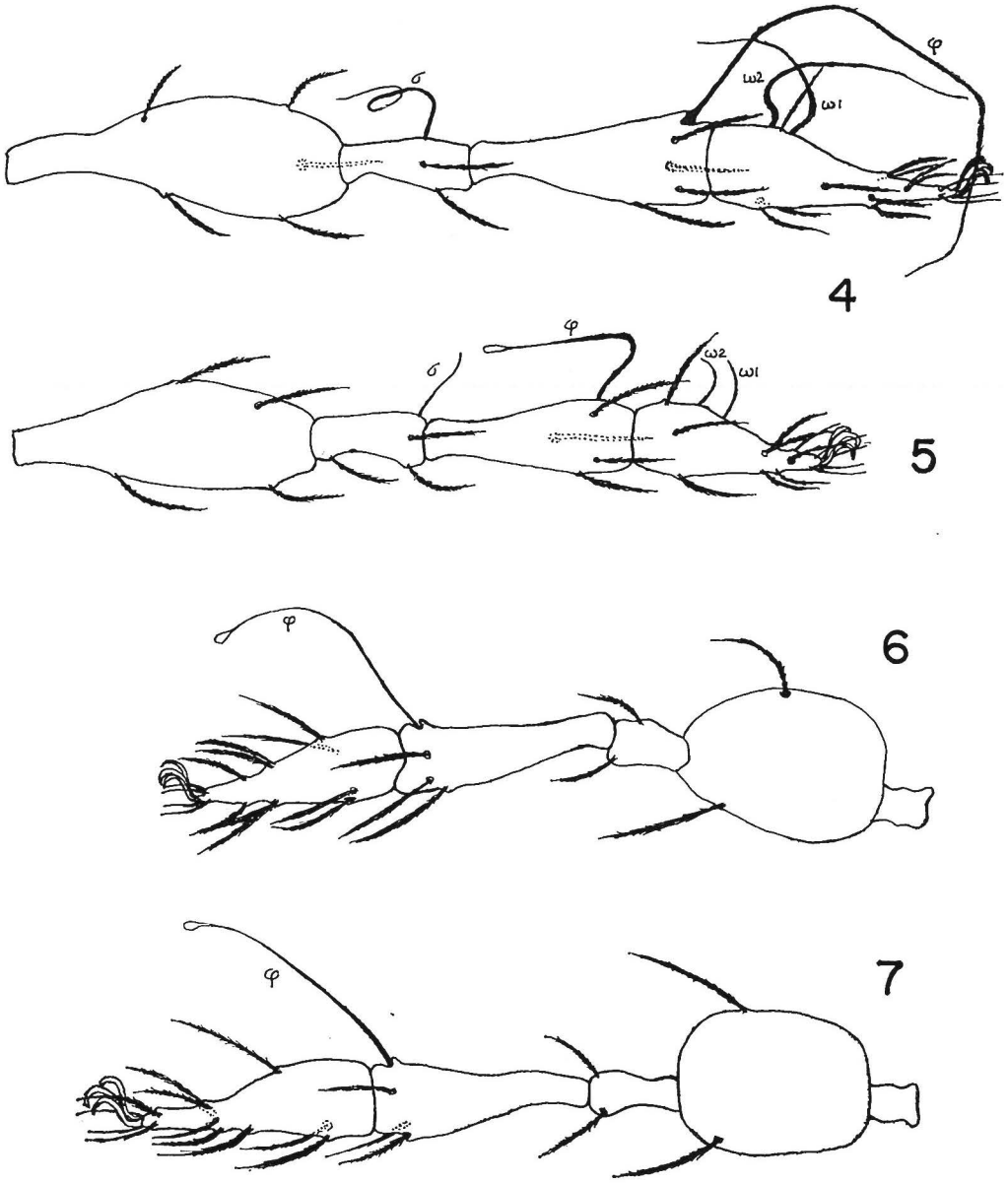

FIG. 4-7. — *Trichoribates spatuletosus* n. sp.

4. Leg I, right side ; 5. Leg II, right side ; 6. Leg III, right side ; 7. Leg IV, right side.

Note : Legs III and IV are directed posteriorly on the mite and thus are drawn in an opposite direction to legs I and II.

surface of hysterosoma smooth ; areae porosae 4, Aa the largest ; 10 pair of dorsal hysterosomal setae thin, finely barbed, ta, te and ti (31 μ long) longer than posterior seven.

Genital plates with six pair of setae ; anal plates with 2 and sometimes 3 pair of setae ; 3 pair of adanal setae (ad1-3) and one pair of adanal pores (iad) near anal plates ; aggenital setae (ag) between genital and anal plates ; epimeral setal number (2-1-2-2), seta 1b longer than rest and near anterior edge of epimera 1.

Tarsi tridactyl, medial claw larger than lateral claws ; femur I and II club-shaped, femur III and IV flat and oval-rectangular ; setal formula for femur, genu, tibia and tarsus : I(5-4-5-16), II(5-4-5-16), III(2-2-4-14), IV(2-2-4-12) and for solenidia : I(1-1-2), II(1-1-2), III(0-1-0), IV(0-1-0) ; solenidia of tibia II III, and IV spatulate distally giving rise to the name *spatulasetosus*.

TABLE 1. Body and ventral plate measurements of *Trichoribates spatulasetosus* n. sp. All. measurements in microns.

Specimen Number	Body Length	Body Width	Genital Plate Length	Genital Plate Width	Anal Plate Length	Anal Plate Width	Distance between Plates
Females :							
3	487	337	54	76	85	99	120
5	—	—	60	75	77	92	—
7	472	308	58	72	78	88	102
8	495	315	61	73	80	95	117
Average	485	320	58	74	80	92	113
Males :							
1	450	300	50	65	73	82	110
2	—	—	52	68	—	—	102
4	—	—	58	68	81	88	112
6	443	352	44	61	72	75	92
Average	446	326	51	66	72	82	104

Locality : 4 males, 4 females ; Huntington Wildlife Forest, Essex County, Newcomb, N. Y. ; November 6, 1960 ; collected by R. M. REEVES.

Holotype and 2 paratypes (specimens 1, 3 and 6) will be deposited in the United States National Museum.

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