

SPELEOGNATHINE MITES (ACARI: EREYNETIDAE) FROM BIRDS IN THE HAWAIIAN ISLANDS, WITH DESCRIPTION OF A NEW SPECIES¹

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Abstract. Two species of nasal mites of the family Ereynetidae are recorded from birds in the Hawaiian Islands: *Boydaia (Coboydaia) nigra* from the House Sparrow, *Passer domesticus*, and *Ophthalmognathus tenorioae*, n. sp. from the Black-crowned Night Heron, *Nycticorax nycticorax hoactli*.

Ectoparasites collected from birds in the Hawaiian Islands include 2 species of nasal mites of the family Ereynetidae, subfamily Speleognathinae, 1 of which is described as new below. All measurements are given in micrometres.

Boydaia (Coboydaia) nigra Fain, 1955

This species is common in the nasal cavities of the House Sparrow, *Passer domesticus*, in Europe and the United States, but has not previously been recorded from the Hawaiian Islands. In fresh material, most of the specimens are brown or black (blood of host ?) but turn light brown or yellow when mounted in Hoyer's medium.

Specimens examined. 37 (29♀, 5♂, 3 larvae) from *Passer domesticus*, HAWAII I: Honokaa, 9.I.1962; OAHU I: Honolulu, 25.V.1962.

Ophthalmognathus tenorioae Fain & Goff, new species FIG. 1-3

Diagnosis. This species is similar to *Ophthalmognathus schoutedeni* (Fain, 1955) (= *Ophthalmognathus dogieli* Dubinin, 1957) described from the nasal cavities of *Ardeola idae* in central Africa, from which it may be distinguished by several small but consistent characters: (1) femur I with 6 setae (3 ventral, 3 dorsal), femur IV with 3 setae (femur I with 5 setae and femur IV with 2 setae in *O. schoutedeni*) (FIG. 5); (2) 5 pairs of genital setae (4 pairs

in *O. schoutedeni*); (3) pairs of thick foliate setae at apex of tarsi I-IV are symmetrical (asymmetrical in *O. schoutedeni*, with apex recurved internally); (4) solenidion of tarsus I slightly thicker and a thin seta situated between this solenidion and base of the segment (this seta distal to solenidion in *O. schoutedeni*) (FIG. 4); (5) lines at the bases of the sensilla are less developed in this species than in *O. schoutedeni*.

Description of species. ♀ holotype 460 × 390 (idiosoma); 3 paratypes 430-550 × 365-450. Cuticle striate-punctate. **Dorsum.** Sensilla piliform, 60 long, slightly inflated and striated on basal ½. Shield absent, but with a small network of lines on cuticle between sensillary bases. Pair of lenslike eyes anterior to and slightly lateral to *ve* setae. Dorsal setae cylindrico-conical and slightly denticulate ("Db" setae, see Fain 1963); *sci* (=sensilla), *vi*, *ve*, *d 1* to *d 4*, *ℓ 1* and *ℓ 4* present. **Venter.** Coxae with a well-formed network of lines. Coxae (I-IV) with 2-1-1-0 setae. Setae *ic 1*, *ic 3* and *ic 4* present; *d 5* ventral; 5 pairs of genital setae and 2 pairs of anal setae. **Gnathosoma.** Palps 2-segmented. Hypostome with distinct network of lines, bearing an anterior pair of *Na* setae and a posterior pair of *Db* setae. Palptarsus with 2 *Na* setae (Fain 1963) and a solenidion. **Legs** with distinct network of lines. Chaetotaxy (I-IV): trochanters 1-1-0-0; femora 6-4-3-3; genua 4-4-3-3; tibiae 5-3-3-3; tarsi 12-8-7-7. Tarsus I with solenidion 22-27 long; tarsus II with a short solenidion, partially embedded in tarsus.

♂ and larva. Unknown.

Type data. Holotype ♀ (BISHOP 11,897) and 10♀ paratypes, HAWAIIAN IS: Oahu I, Honolulu, Campbell Estate Road, ex *Nycticorax nycticorax hoactli*, 26.IX.1965, E. & D. Au. Holotype and 6 paratypes in collection of Bishop Museum, 4 paratypes in collection of A. Fain.

Additional specimens examined. AFRICA: Rwanda, 2♀ ex *N. nycticorax*, 1955.

Remarks. Fain (1956) listed 2 specimens from *Nycticorax nycticorax* taken in Rwanda (=Ruanda-Urundi) as *Ophthalmognathus schoutedeni*. Reexamination of these specimens by him has shown that they are, in fact, *O. tenorioae*.

This species is named in honor of Dr JoAnn M. Tenorio, Department of Entomology, Bishop Museum, who has collected numerous nasal mites from mammals in the Hawaiian Islands.

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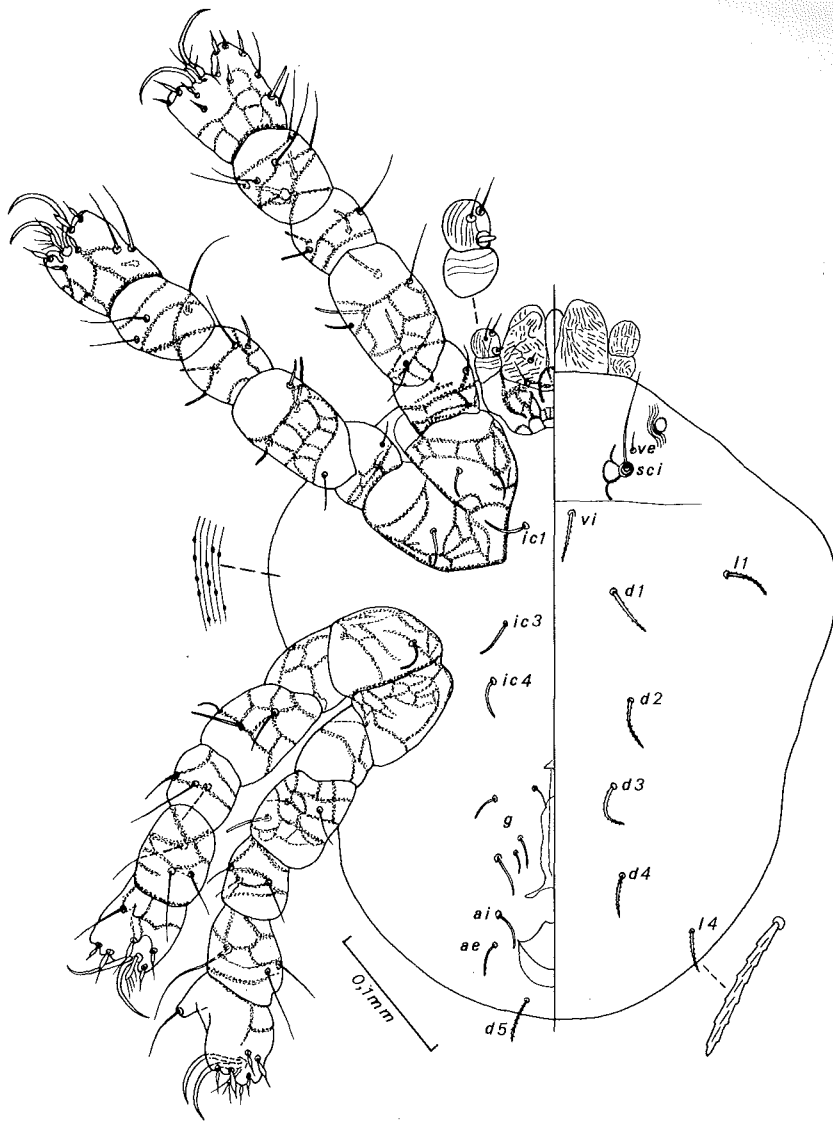


FIG. 1. *Ophthalmognathus tenorioae* Fain & Goff, n. sp. ♀ venter (left) and dorsum (right).

LITERATURE CITED

- Fain, A. 1956. Les acariens de la famille Speleognathidae Womersley au Ruanda-Urundi. *Rev. Zool. Bot. Afr.* **53**: 17-50.
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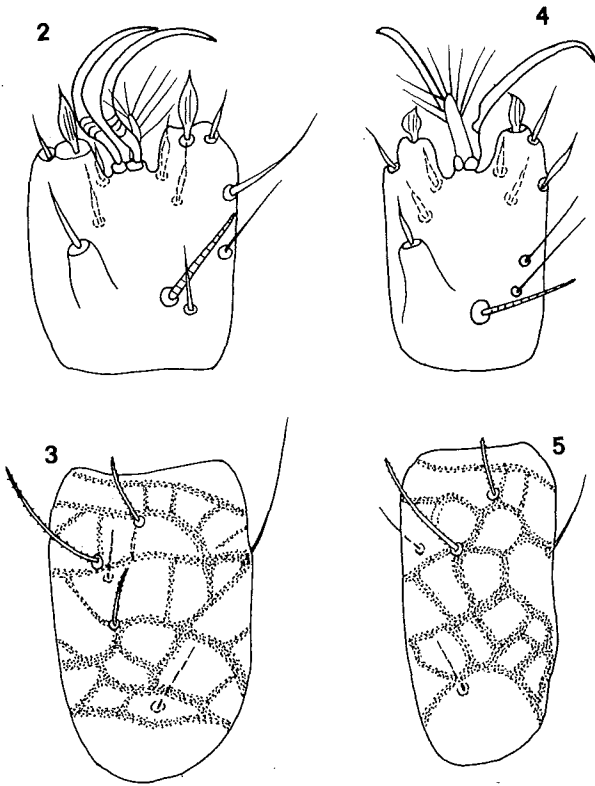


FIG. 2-5. 2-3. *Ophthalmognathus tenorioae* Fain & Goff, n. sp., ♀: 2, dorsal aspect of tarsus I; 3, dorsal aspect of femur I. 4-5. *Ophthalmognathus schoutedeni* (Fain, 1955), ♀: 4, dorsal aspect of tarsus I; 5, dorsal aspect of femur I.