

DESCRIPTION OF *NYCTERIGLYPHITES PANAMENSIS* SP. N.
AND NOTES ON *NYCTERIGLYPHOIDES DELAMAREI* FAIN, 1968
(ACARI, ROSENSTEINIIDAE)

BY A. FAIN¹ and E. MÉNDEZ²

ABSTRACT : *Nycteriglyphites panamensis* sp. n. is described from the nest of a bird (*Cochlearius cochlearius*) from Panama. The relations existing between *Nycteriglyphites* Fain *et al.*, 1982, and *Nycteriglyphoides* Fain, 1968, are discussed and other concepts are added to the description of the male of *Nycteriglyphoides delamarei* Fain, 1968.

RÉSUMÉ : *Nycteriglyphoides panamensis* sp. n. est décrit du nid d'un oiseau (*Cochlearius cochlearius*) de Panama. Les affinités existant entre les genres *Nycteriglyphites* Fain *et al.*, 1982, et *Nycteriglyphoides* Fain, 1968, sont discutées et la description du mâle de *Nycteriglyphoides delamarei* Fain, 1968, est complétée.

To date, the genus *Nycteriglyphites* Fain *et al.*, 1982, was known from the type species *N. pennsylvanicus* Fain *et al.*, 1982, found in the guano of *Myotis lucifugus* in U.S.A.

We describe herein a second species of this mite genus, which was collected from the nest of the Boat-billed Heron, *Cochlearius cochlearius* in Panama. This is not the normal habitat for mites of this group which generally live in bat guano or more rarely on bats. We assume that the mite (a single specimen) had been introduced accidentally into the nest of the bird.

Superficially, the genus *Nycteriglyphites* resembles *Nycteriglyphoides*. Both genera, however, are clearly distinct by several important characters. All the measurements are in microns (μm).

FAMILY ROSENSTEINIIDAE Cooreman, 1954

SUBFAMILY NYCTERIGLYPHINAE Fain, 1963

Genre *Nycteriglyphites* Fain,
Lukoschus and Withaker, 1982

Nycteriglyphites panamensis spec. nov.

This species is represented only by the holotype male taken from a nest of *Cochlearius cohlearius*, collected by L. DE LEÓN and R. ROJAS at El Rosario, Coclé Province, Panamá (1985).

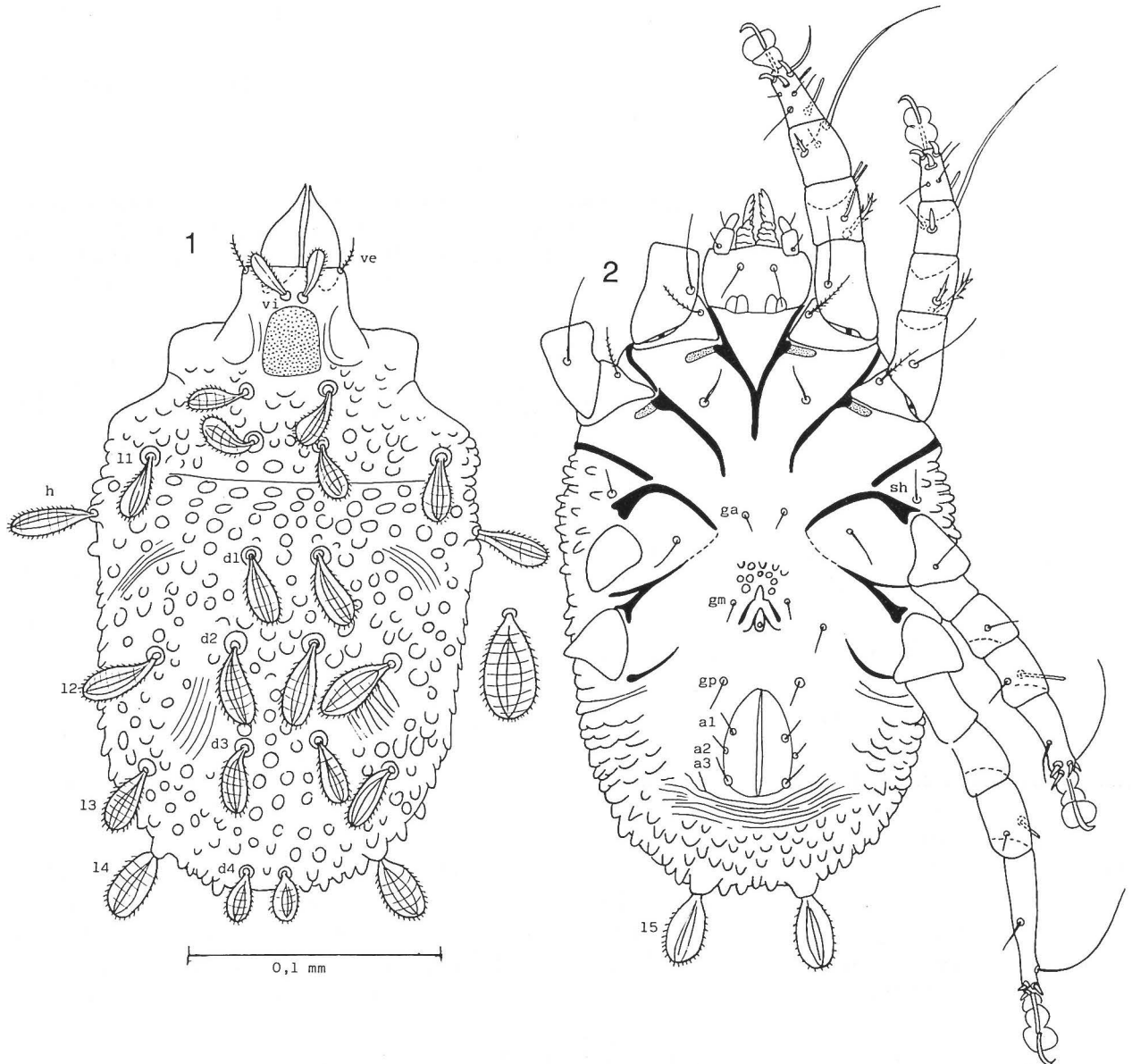
Male (figs. 1-7) : Holotype 240 long (idiosoma)

1. Institut Royal des Sciences Naturelles de Belgique, rue Vautier, 29, 1040 Bruxelles.

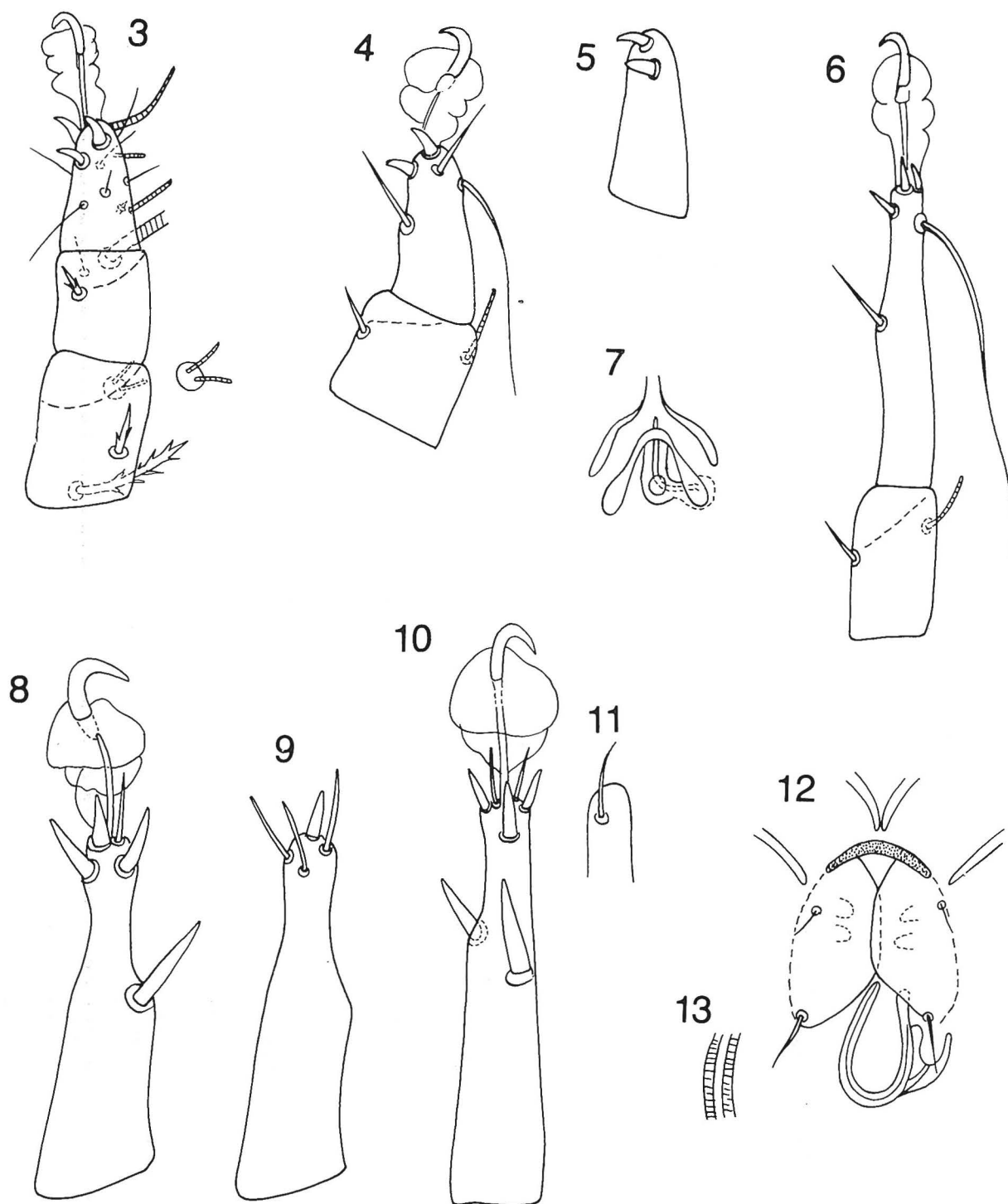
2. Laboratorio Commemorativo Gorgas, Apartado 6991, Panamá 5, Panamá.

and 155 wide. *Dorsum* : Cuticle with relatively large rounded or finger-like papillae. A few faint striations are visible only in 4 small areas on hysteronotum. Propodonotum with small punctate shield. All dorsal setae, except *ve*, are large, flattened and blade-like, with rounded apices, their margins bearing very small spinelets. Setae *ve* thin, short and barbed. Sejugal furrow poorly developed. Setae *d4* are distinctly smaller than setae *d1* and *d3*. Setae *s cx* not observed. *Venter* : Cuticular papillae present only between legs II and III and in the posterior

part of opisthogaster. Epimeres fused in a well-developed sternum. Anus equally distant from posterior extremity and genital organ. All ventral setae are thin and short except a pair (*l5*) situated on posterior margin and which is foliate as the dorsal setae. Setae *l5* are 30 long and 14 wide. Setae *d5* are lacking. Genital organ small, difficult to study due to dark material in the body of the mite. Genital suckers and an epiandrum have not been observed but we surmise that these structures are present but not visible in this specimen. Setae *ga* in



FIGS. 1-2 : *Nycteriglyphites panamensis* sp. n. Holotype male in dorsal (1) and ventral (2) view.



FIGS. 3-13 : *Nycteriglyphites panamensis* sp. n. : holotype male, Apical segments of leg I (3); antero-ventral surface of tibia and tarsus III (4); postero-ventral surface of tarsus III (5); tibia and tarsus IV in lateral view (6); genital organ (7); *Nycteriglyphoides delamarei* Fain, 1968 : paratype male, Tarsus III in latero-ventral view (8); tarsus III in latero-dorsal view (9); tarsus IV in ventral view (10) and in dorsal view (11); genital organ (12); striated sheet of penis containing the penis (13).

front of genital organ, *gm* very close to this organ, *gp* close to anal area. There is a neotrichial seta at one side, between coxa IV and *gm*. Legs strong. Length of tarsi I-IV 24-23-34-58. Number of setae : Tarsus I with 9 setae (3 recurved apico-ventral spines and 6 thin setae), tarsus II as tarsus I but with only 5 thin setae, tarsus III with 7 setae (4 apical or subapical spines, a thin subapical dorsal seta, a subapical lateral seta with dilated base and seta *w*, tarsus IV with 6 setae (4 spines and 2 thin setae). Solenidiotaxy : Tarsus I with 3 solenidions : $\omega 1$ is subbasal and flanked with a short famulus, $\omega 2$ thin and close to $\omega 3$. All tibiae with a solenidion. Genu I with two subequal and thin solenidions. Gnathosoma 42 wide (base); hypostomal membranes poorly developed.

Habitat.

Holotype male from the nest of a Boat-billed Heron, *Cochlearius cochlearius*, from Panama. Holotype in Institut royal des Sciences naturelles de Belgique.

Remarks.

This species differs from *N. pennsylvanicus* by the following characters :

1. Presence of two solenidions on genu I.
2. Absence of setae *s cx*.
3. Aspect of cuticle with very numerous rounded or finger-like papillae and with very few striations on the dorsum.
4. Different aspect of dorsal setae : blade-like and symmetrical.
5. (?) Absence of epiandrum and genital suckers.

The genus *Nycteriglyphites* is related to *Nycteriglyphoides*; it presents, however, important differences from the latter, as follows :

1. The male genital organ is situated at the level of coxae II in *Nycteriglyphoides*, and at the level of coxae IV in *Nycteriglyphites*. An epiandrum is also present in the first genus, but was not recorded in the original descriptions as it was not visible in the specimens we examined. We now have a few clear specimens from the typical series which show this structure very well (fig. 12). We have not seen this structure in *N. panamensis* as the genital area is opaque due to dark material in this area.
2. In the males of both species of *Nycteriglyphites* tarsi III are much shorter than tarsi IV respectively and in both, tarsi III and IV, the chaetotaxy is reduced. In *N. delamarei* tarsi III and IV are long and bear 9 and 8 setae, respectively, while in *N. pennsylvanicus* they bear 6 and 6, and in *N. panamensis* 7 and 6, respectively (figs. 3-11).
3. Setae *d5* are absent in both species of *Nycteriglyphites*; in *N. delamarei* they are present, but small. In both genera setae *l5* are similar to the dorsal setae and not long and thin as in other genera of Nycteriglyphinae.
4. Hypostomal membranes are present in both genera but in *Nycteriglyphites* they are poorly developed.

REFERENCES

- FAIN (A.), 1968. — Deux nouveaux acariens cavernicoles du Gabon. — *Biologia Gabonica* 4 : 195-205.
- FAIN (A.), LUKOSCHUS (F. S.) and WITHAKER (J. O. Jr.), 1982. — *Nycteriglyphites pennsylvanicus* n. g., n. sp. (Acari, Astigmata) from the guano of *Myotis lucifugus* in U.S.A. — *Bull. Ann. Soc. R. Belge Ent.* 118 : 187-192.

Paru en Décembre 1987.