

**Neocnemidoptes philetairus** sp.n.  
(Acari, Knemidokoptidae)  
parasitic on a bird **Philetairus socius** from Namibia\*

by A. FAIN\*\* and F.S. LUKOSCHUS\*\*\*

**Abstract**

*Neocnemidoptes philetairus* sp. n. (Acari, Knemidokoptidae) is described from the skin of the Social Weaver *Philetairus socius*, from Namibia, South Africa.

Genus *Neocnemidoptes* Fain, 1966

If we include the new species described herein, the genus *Neocnemidoptes* contains at present five species of which the female is known, all are parasitic of the skin of the body of birds.

Key to the genus *Neocnemidoptes* (females)

1. Absence of scales dorsally or ventrally . . . . .  
*N. columbigallinae* FAIN, 1974  
 With scales either on the dorsum or on both the dorsum and the venter . . . . . 2
2. Scales only on the dorsum . . . . . *N. passeris* (Fritsch, 1962)  
 Scales on the dorsum and on the venter . . . . . 3
3. Setae *sc e* approximately 3 times as long as *sc i*. Dorsum and venter with 8 to 9 rows of small scales. Propodonal shield extending widely beyond the sclerotized latero-longitudinal bands of the shield . . . . . *N. philetairus* sp. nov.

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\*\* Institut royal des Sciences naturelles de Belgique, 29, rue Vautier, B-1040 Bruxelles.

\*\*\* Laboratorium van Aquatische Oecologie, Universiteit Nijmegen, Nederland.

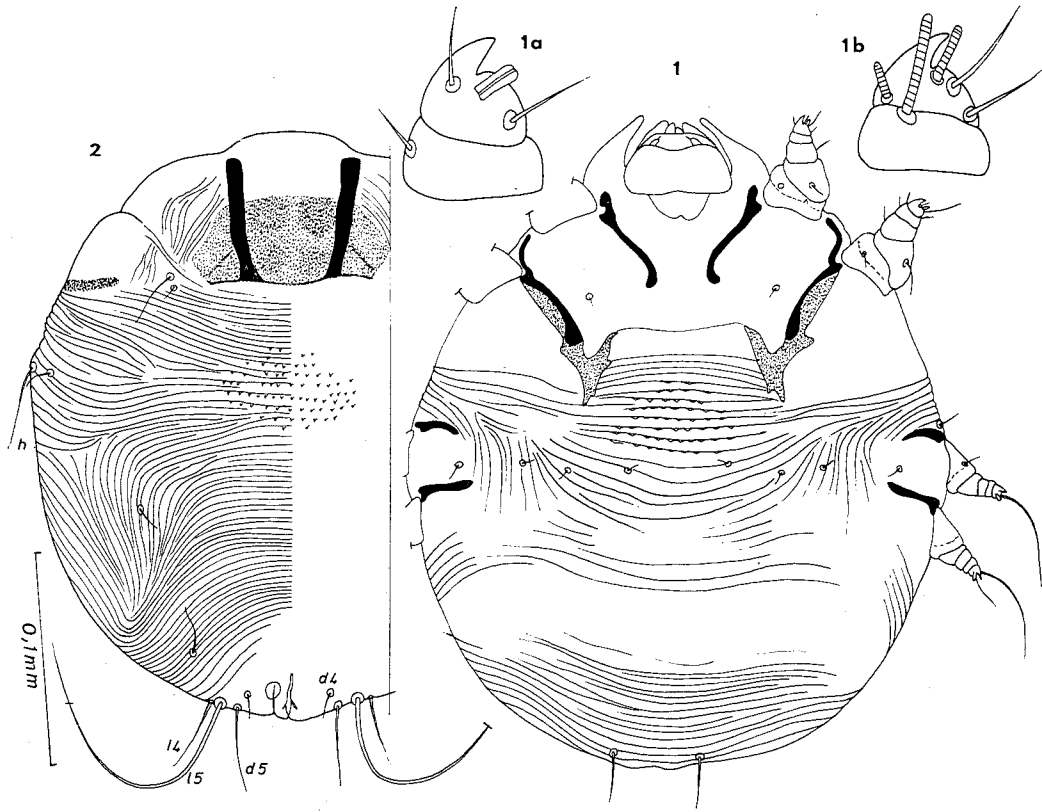


FIG. 1-2. — *Neocnemidocoptes philetairus* sp. n. Holotype female in ventral(1) and dorsal view(2). Tibia and tarsus I ventrally(1a) and dorsally (1b).

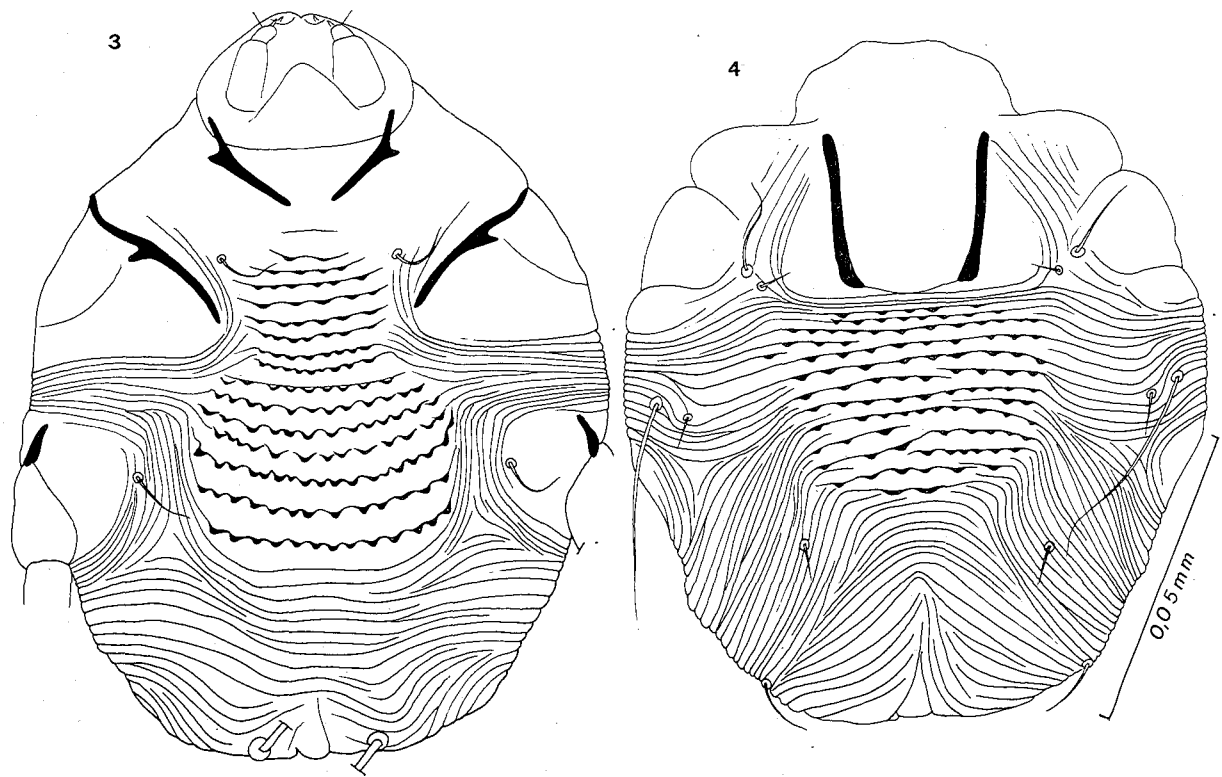


FIG. 3-4. — *Neocnemidocoptes philetairus* sp. n. Larva in ventral (3) and dorsal (4) view.

- Setae *sc e* slightly longer than *sc i*. Dorsum with 17 to 18 rows of scales. Propodonotal shield poorly developed beyond the sclerotized latero-longitudinal bands of the shield . . . 4
4. Hysterogaster completely striated *N. gallinae* (RAILLIET, 1887)  
Hysterogaster mostly bare . . . *N. columbicola* FAIN, 1974

*Neocnemidocoptes philetairus* sp. nov.

*Female* (fig. 1-2) : Length of body, including gnathosoma, in the holotype 305  $\mu\text{m}$ , maximum width 249  $\mu\text{m}$ . It contains a completely developed larva not enveloped in an egg shell. Dorsum striated with 8 to 9 rows of scales in the middle of the dorsum. Propodonotal shield 42  $\mu\text{m}$  long in the midline, 93  $\mu\text{m}$  wide. Behind the legs II there is a sclerotized band wider than long. Anus terminal. Sclerotized ring of the bursa longer (9  $\mu\text{m}$ ) than wide (7,5  $\mu\text{m}$ ). Venter : behind the vulva there are 8 to 9 rows of scales. Genital apodemes well developed. Epimeres I and II widely separated in the midline. Epimeres IV longer than epimeres III. Chaetotaxy (length of setae, in  $\mu\text{m}$ ) : *sc i* 8,5 ; *sc e* 24 ; *b* 33 ; *sb* 15 ; *d 2* 6 ; *d 3* 18 ; *d 4* 12 ; *d 5* 50 ; *l 4* 45 ; *l 5* 135 ; *ai* 27. The 3 pairs of genital setae are very short and situated almost on a straight line. Legs as in *N. gallinae*.

*Male and nymphs* : unknown.

*Larva* (fig. 3 and 4) : This specimen is still enclosed in the holotype female. It is 123  $\mu\text{m}$  long and 96  $\mu\text{m}$  wide. The dorsum bears 12 to 13 rows of scales ; the venter bears about 15 rows of scales larger than those on the dorsum.

*Host and locality* : Holotype, and only known female specimen, from the skin of the wing surface of a Social Weaver, *Philetairus socius*, from Areab, Namibia, South Africa, 20.X.1980. This bird was collected by F.S.L. during the Namaqualand-Namibia Expedition of the King Leopold III Foundation for the Exploration and the Protection of Nature (1980) partly with the aid of grant R87-111 by the Netherlands Foundation for the Advancement of Pure Research (Z.W.O.). Holotype in the Institut royal des Sciences naturelles de Belgique.

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