1142

A NEW SPECIES OF THE GENUS *METACHEYLETIA* FAIN, 1972 (ACARI: CHEYLETIDAE) PARASITIZING *SERINUS MOZAMBICUS* (PASSERIFORMES: FRINGILLIDAE) IN CENTRAL AFRICA

Alex Fain¹ and Andre V. Bochkov²

1. Institut royal des Sciences naturelles de Belgique, Rue Vautier 29, B-1000 Bruxelles, Belgique, e-mail (c/o Dr. G. Wauthy): wauthy@kbinirsnb.be; 2. Zoological Institute, Russian Academy of Sciences, St. Petersburg 199034, Russia, e-mail: prostigmata@zin.ru

ABSTRACT - A new mite species, *Metacheyletia degenerata* **n. sp.** (Acari: Cheyletidae), is described from the quills of *Serinus mozambicus* (Fringillidae) from Central Africa. **Key words** - Acari, Cheyletidae, parasites, parrots, systematics, *Metacheyletia*, *Serinus mozambicus*, Central Africa.

INTRODUCTION

The genus Metacheyletia Fain, 1972 included two species both described from quills of parrots (Psittaciformes: Psittacidae): Metacheyletia obesa Fain, 1972 from Psittacula sp. and M. longisetosa Atyeo et al., 1984 from Amazona finschi (Fain, 1972, 1980; Atyeo et al., 1984).

We describe in this paper a new species of *Metacheyletia* found in quill of *Serinus mozambicus* from Central Africa. The mites were collected by the junior author from an ethanol preserved *S. mozambicus*. This parrot died in the Antwerp Zoo during quarantine and was sent to the laboratory of Prof. Fain (Institut royal des Sciences Naturelles de Belgique, Bruxelles) for parasite examination. The bird, possibly, came from Tanzania.

Mites for this study, using light microscope, were mounted on slides in Hoyer's medium. The idiosomal setal designation follows Fain (1979).

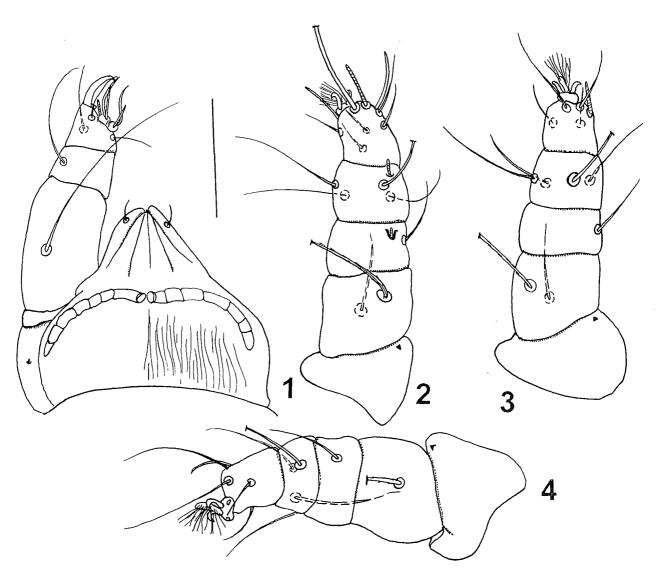
Genus Metachevletia Fain, 1972

Metacheyletia degenerata n. sp. (Figs. 1-6)

FEMALE (Holotype) - *Gnathosoma*: 75 μm long and 85 μm wide. All gnathosomal setae smooth (Fig. 1). Palpal femur 45 μm long, with a single dorsal seta; palpal genu with a dorsal seta; palpal tibia with 3 setae: dorsal,

ventral and inner lateral; palpal tarsus with 4 simple setae and a solenidion. Rostrum with 2 pairs of aboral setae, aol and ao2; subcapitular setae pm absent. Claw of palpal tibia with a basal tooth. Peritremes archlike, with 7 pairs of segments. *Idiosoma*: Ellipselike, 390 µm long and 285 µm wide maximally. Propodosomal shield lacking (Fig. 5), dorsal idiosomal surface striated, without any sclerites. All idiosomal setae thin and smooth. Vulvar region (Fig. 6) with 17 setae: 3 pairs of paragenital setae (pg1-pg3), 1 additional pg on one side, 2 pairs of anal setae a and 3 pairs of genital setae g. Length of setae: vi 28 µm, ve 33 μ m, sci 36 μ m, sce 40 μ m, h 90 μ m, d1 65 μ m, d2 60 μ m, 13 50 μm, 14 55 μm, 15 95 μm, pg1-pg3 about 25 μm, a1-a3 about 19 μ m, g1 and g2 about 23 μ m. Cupules not observed. Legs: Cuticular vestiges of legs IV completely lacking. Coxae of legs I-III sclerotized. All leg setae smooth (Figs. 2-4), except serrate dFI-dFIII. Leg chaetotaxy (coxa-tarsus): I 1-0-2-1 ($+\sigma$)-4 ($+\phi$)-8 ($+\omega$), II 0-0-2-1-4-5 (+ ω) and III 0-0-1-1-4-5. All tarsi bear 2 small claws and a rayed empodium.

Differential diagnosis - The female of this new species differs from the other 2 known species of this genus by the absence of the prodorsal shield and the presence of setae pg3. It differs from M. obesa Fain by the absence of the cuticular vestiges of legs IV. In addition, it differs from M. longisetosa Atyeo et al. by the shorter dorsal setae of idiosoma and by the smaller number of peritremal segments (7). According to the original de-



Figs. 1-4. *Metacheyletia degenerata* n. sp. (Holotype female) - 1. Gnathosoma, dorsal view; 2-4. legs I-III, respectively in dorsal view (scale line 50 μm).

scription (Atyeo *et al.*, 1984) of *M. longisetosa*, the setae measure: $vi~100~\mu m$, ve~ and $sci~106~\mu m$, sce,~d1~ and h~110~ μm , $d2~128~\mu m$, 13-15 and $d5~130~\mu m$ long; and number of peritremal segments are 10-11.

Host and locality - Female holotype and paratype nymph from the quill of remige-feathers of *Serinus mozambicus* (Passeriformes: Fringillidae), Central Africa (possibly western Tanzania), May 2001, Coll. A. Bochkov. The holotype and paratype are deposited in the Institut royal des Sciences naturelles, Bruxelles, Belgium.

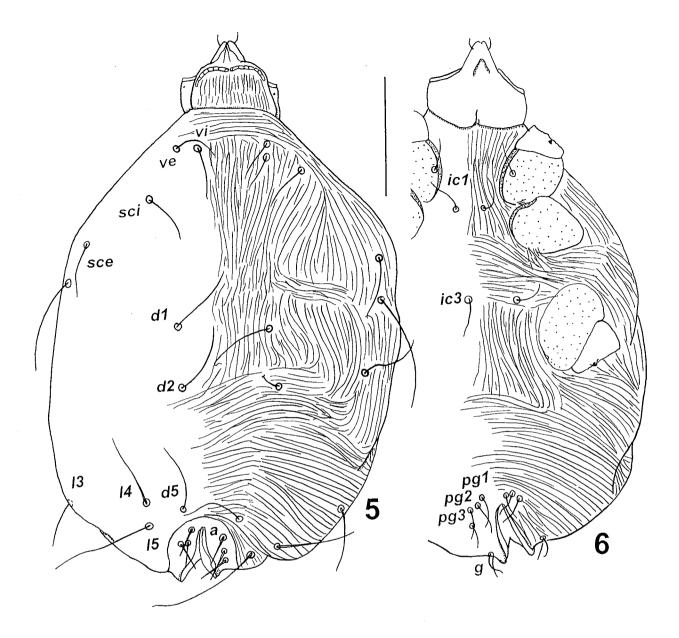
Remarks - (1) Seta *pg3* of the holotype is duplicated on the left side. (2) This is the first record of *Metacheyletia* species on passeriform birds. The 2 specimens of *M. degenerata* have been collected from a quill of host together with numerous syringophilid mites (Syringophilidae: *Syringophiloidus* sp.).

ACKNOWLEDGEMENTS

The present research was supported by a grant from the INTAS (International Association for the promotion of cooperation with scientists from the New Independent States of the former Soviet Union), grant YSF 2002-0116/F4, which is appreciated.

REFERENCES

Atyeo, W. T., J. B. Kethley and T. M. Perez. 1984. Paedomorphosis in *Metacheyletia* (Acari: Cheyletidae), with the description of a new species. J. Med. Entomol. 21(2): 125-131.



Figs. 5-6. Metacheyletia degenerata n. sp. (Holotype female) - 5. Dorsal view; 6. ventral view (scale line 50 μm).

Fain, A. 1972. Notes sur les Acariens des familles Cheyletidae et Harpyrhynchidae producteurs de gale chez les Oiseaux ou les Mammiferes. Acta Zool. Path. Antverp. 56: 37-60.

Fain, A. 1979. Idiosomal and leg chaetotaxy in the Cheyletidae. Internat. J. Acarol. 5(4): 305-310.

Fain, A. 1980. Notes on genera *Samsinakia* Volgin, 1965 and *Metacheyletia* Fain, 1972 (Acari: Cheyletidae). Internat. J. Acarol. 6(2): 103-108.
