Calamicoptes lomberti n. sp. (Acari, Laminosioptidae) from the quill walls of the Willow Ptarmigan, Lagopus lagopus (L.) (Galliformes, Tetraonidae) from Siberia

by A. FAIN and T.M. PEREZ

Summary

Calamicoptes lomberti n. sp. (Acari, Laminosioptidae) is described from the quill wall of a tail-covered feather of Lagopus lagopus (L.) from Siberia.

Key-words: Taxonomy - Parasitic Acari of birds - Siberia.

Résumé

Calamicoptes lomberti n. sp. (Acari, Laminosioptidae) est décrit de la base des tuyaux des plumes de Lagopus lagopus (L.) de Sibérie.

Mots-clés : Taxonomie - Acarien parasite - Oiseau - Sibérie.

Introduction

Recently we have described a new genus and species of Laminosioptidae (Fainocoptinae) from a psittacid bird originating from Mexico (FAIN and PEREZ, 1990). We describe now a new species in the same family of mites but belonging to the genus Calamicoptes LUKOSCHUS and LOMBERT, 1979. It is represented by 3 male specimens found in the quill walls of the Willow Ptarmigan, Lagopus lagopus, from Siberia.

The measurements used herein are in micrometers.

Family LAMINOSIOPTIDAE

Subfamily FAINOCOPTINAE

Genus Calamicoptes LUKOSCHUS & LOMBERT, 1979

This species is dedicated to Dr H.A.P.M. LOMBERT, in recognition for his work on this group of mites.

Male, holotype (figs 1-4) : Length of body including gnathosoma, 484, width at the level of setae h 162. Length and width of 2 male paratypes : 480 × 165 × and 453 × 159. Venter : Cuticular striations poorly developed. Opisthosoma with a pair of large punctate latero-ventral shields. A second pair of very small punctate platelets are present at the level of the anus. Posterior border of body excavated. Penis short, with a M-shaped sclerite. Lengths of setae : cx I 10; cx III 18; sh 28; ga 12; gm 3; gp 3; a absent; dS 550; I4 120; I5 260. Dorsum : Propodomatal shield oval, wider (72) than long (70) surrounded by a thick sclerotized U-shaped band. Cuticle of dorsum with few transverse striations. Opisthosoma with a large median shield wider than long and poorly sclerotized in its median part. Propodosoma with two large lateral wings. Lengths of setae : sc i 5; sc e 240; dI are microsetae; d2 are lacking; d3 and d4 are very small (3-4 long); I1 17; I2 180 long; I3 very small (3 long); h 195. There are no pores behind setae h. Gnathosomal trapezoidal 60 long and 65 wide with lateral margins rounded and posterior border concave. Gnathosomal wings very small. Legs : Anterior legs very small, posterior legs well developed. Tarsi I and II with 2 conical dorso-apical processes. On the anterior legs the genu and femur are fused. Chaetotaxy : Tarsi I-IV with 6-7-4-6 thin setae. Tibiae 1-1-1-1 Genua 2-2-0-0. Femora 1-1-0-0 Trochanters 1-1-1-1(0). Solenidia : Tarsi 2-1-0-0. Tibiae 1-1-1-1. Genua 1-1-0-0. Solenidion of tibia IV relatively very long and about four times as long (55-60) as that of tibia III (15).

Female and immatures : unknown.

Host and locality :

Holotype and 2 male paratypes from the quill walls of Lagopus lagopus (L.) from Nijni Kolymsk, Siberia. Bird collected on 19 October 1911 by J Koran (in the M.C.Z. 63995). Holotype and 1 paratype in the Museum of Comparative Zoology, Harvard. One paratype in the Institut royal des Sciences naturelles de Belgique.

Remarks :

This species presents all the main characters of the genus Calamicoptes LUKOSCHUS & LOMBERT, i.e. the presence of wings on gnathosoma and on propodosoma, the presence of a sejugal sclerite, the absence of a solenidion on genu III, the normal not inflate shape of posterior legs, the great length of setae I2 and I5, the presence of a seta on trochanters IV (in the holotype this seta is lacking at one side); coxa I with a seta. This genus includes at present 9 species but males are known only for 5 of these species. Calamicoptes lomberti is clearly distinct from the species where the male is described, by several characters and especially the great length of solenidia of tibia IV (55 long).
Our specimens could belong to one of the species which are known only by the female, however that seems very unlikely owing to the high specificity of these mites.

The only one other species described from Galliformes is *Calamicoptes galli* LOMBERT et al., 1984 represented only by female specimens collected from *Gallus gallus domesticus* from Morocco. These females differ from our specimens by the following characters: setae *d2* present, setae *gm* lacking, *d5* much longer.

**References**


A. FAIN,
Département d’Entomologie,
Institut royal des Sciences naturelles de Belgique,
Rue Vautier 29,
B-1040 Bruxelles,
Belgique

T.M. PEREZ,
Laboratorio de Acarologia,
Departamento de Biología,
Facultad de Ciencias,
Universidad Nacional Autonoma de Mexico,
04510 Mexico,
D.F. Mexico.