



Mites of the genus *Paracoroptes* Lavoipierre, 1955 (Acariformes: Psoroptidae)—skin parasites of the African monkeys of the family Cercopithecidae (Primates)

ANDRE V BOCHKOV^{1*} & PATRICK GROOTAERT²

¹Zoological Institute of the Russian Academy of Sciences, Universitetskaya Embankment 1, 199034 Saint Petersburg, Russia;
e-mail: andrevbochkov@gmail.com

²Royal Belgian Institute of Natural Sciences, Vautierstreet 29, B-1000 Brussels, Belgium;
e-mail: Patrick.Grootaert@naturalsciences.be

*Corresponding author

Abstract

Two new species of *Paracoroptes* Lavoipierre, 1955 (Acariformes: Psoroptidae: Paracoroptinae) are described: *Paracoroptes miopithecus* sp. n. from *Miopithecus talapoin* (Schreber) and *Paracoroptes piliocolobus* sp. n. from *Piliocolobus badius* (Kerr) (Primates: Cercopithecidae)—both are from the Democratic Republic of the Congo. A key to all 6 species of the genus is provided and host-parasite relationships of its representatives are discussed.

Key words: acariform mites, Africa, catarrhine primates, ectoparasites, systematics

Introduction

Mites of the subfamily Paracoroptinae (Acariformes: Psoroptidae) are permanent, highly specific skin parasites of the African primates of the parvorder Catarrhini (Primates: Catarrhini). Within the the Catarrhini, these mites are known from hosts of the families Hominidae and Cercopithecidae (Bochkov 2010, 2011).

The genus *Paracoroptes* Lavoipierre, 1955 (Psoroptidae: Paracoroptinae) was created by Lavoipierre (1955) for a single species, *Paracoroptes gordonii* Lavoipierre, 1955, from *Cercopithecus mona* (Schreber) (Primates: Cercopithecidae) from Cameroon. Initially, this genus was included in the family Acaroptidae Womersley (Lavoipierre 1955). Later on, Fain (1963a) established a new subfamily, Paracoroptinae Fain, 1963a, for this species and included the newly established subfamily in the family Psoroptidae. In his revision of the Psoroptidae, Fain (1963b) also transferred to the Paracoroptinae the second genus *Pangorillalges* Fain, 1962, which had been originally described in the family Psoralgidae Oudemans (Fain 1962). This genus parasitizes members of the Hominidae.

There are just a few works concerning systematics of paracaropine mites (Lavoipierre 1955; Gaud & Till 1957; Fain 1962, 1963a, b; Fain & Segerman 1978). Until now, this subfamily included only four and two species belonging to the genera *Paracoroptes* and *Pangorillalges*, respectively (Bochkov 2010). In the present work, we describe two new species of the genus *Paracoroptes*, provide a key to all six species of the genus and discuss host-parasite relationships of its representatives.

Material and methods

Type specimens (holotypes and paratypes) were examined for all representatives of the genus housed in the Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium (IRSNB) and the Musée Royal de l'Afrique Centrale, Tervuren, Belgium (MRAC). Drawings were made with a Diaplan microscope equipped with a camera

References

- Bochkov, A.V. (2010) A review of mammal associated Psoroptidia (Acariformes: Astigmata). *Acarina*, 18, 99–260.
- Bochkov, A.V. (2011) Evolution of parasitism in mammal-associated mites of the group Psoroptidia (Acari: Astigmata). *Parazitologiya*, 45, 257–272. [in Russian with English summary]
- Fain, A. (1962) *Pangorillalges pani* g. n., sp. n., acarien psorique du chimpanze (Psoralgidae - Sarcoptiformes). *Revue de Zoologie et de Botanique africaines*, 66, 283–290.
- Fain, A. (1963a) Diagnoses de nouveaux acariens parasites (familles Psoroptidae and Sarcoptidae). *Revue de Zoologie et de Botanique africaines*, 68, 153–156.
- Fain, A. (1963b) Les acariens producteurs de gale chez les lemuriens et les singes avec une etude des Psoroptidae (Sarcoptiformes). *Bulletin de l'Institut Royal des Sciences Naturelles de Belgique*, 39, 1–125.
- Fain, A. & Segerman, J. (1978) *Paracoroptes natalensis* n. sp. from South Africa (Acari: Psoroptidae). *Revue de Zoologie africaines*, 92, 700–702.
- Gaud, J. & Till, W. (1957) Analgesoidea ectoparasites de Singes et de Lemuriens. *Annales de Parasitologie*, 31, 136–144.
- Grandjean, F. (1941) La chaetotaxie comparee des pattes chez les oribates (ire serie). *Bulletin Societe Zoology France*, 66, 33–50.
- Griffiths, D.A., Atyeo, W.T., Norton, R.A. & Lynch, C.A. (1990) The idiosomal chaetotaxy of astigmatid mites. *Journal of Zoology (London)*, 220, 1–32.
<http://dx.doi.org/10.1111/j.1469-7998.1990.tb04291.x>
- Lavoipierre, M.M.J. (1955) A description of a new genus of sarcoptiform mites and of three new species of acarina parasitic on Primates in the British Cameroons. *Annals of Tropical Medicine and Parasitology*, 49, 299–307.
- Norton, R. (1998) Morphological evidence for the evolutionary origin of Astigmata (Acari: Acariformes). *Experimental & Applied Acarology*, 22, 559–594.
<http://dx.doi.org/10.1023/A:1006135509248>
- Wilson, D.E. & Reeder, D.M. (2005) *Mammal species of the world. A taxonomic and geographic reference*. 3th ed. The Johns Hopkins University Press, Baltimore, 2142 pp.