



Fur mites of the genus *Schizocarpus* Trouessart (Acari: Chirodiscidae) from the Eurasian beaver *Castor fiber tuvunicus* Lavrov (Rodentia: Castoridae) in the Azas River (Tuva Republic, Russia)

ANDRE V. BOCHKOV^{1,2,4} & ALEXANDER P. SAVELJEV³

¹Zoological Institute of the Russian Academy of Sciences, Universitetskaya Embankment 1, 199034 Saint Petersburg, Russia.

E-mail: andrevbochkov@gmail.com

²Museum of Zoology, University of Michigan, 1109 Geddes Ave., Ann Arbor, Michigan 48109 USA

³Russian Research Institute of Game Management and Fur Farming, Russian Academy of Agricultural Sciences, Engels street, 79, 610000 Kirov, Russia. E-mail: saveljev.vniioz@mail.ru

⁴Corresponding author

Abstract

Sixteen species of the genus *Schizocarpus* Trouessart, 1896 (Acari: Chirodiscidae) are recorded from six live individuals of the Eurasian beaver *Castor fiber tuvunicus* Lavrov (Rodentia: Castoridae) captured at the Azas River (Tuva, Russia). Six species are described as new: *Schizocarpus azasicus* sp. nov., *S. daberti* sp. nov., *S. heideckeii* sp. nov., *S. lavrovi* sp. nov., *S. unzhakovi* sp. nov., and *S. tuvunicus* sp. nov. Ten previously described species are as follows: *S. brachyurus* (Dubinina, 1964), *S. grandis* (Dubinina, 1964), *S. fedjushini* (Dubinina, 1964), *S. gozdziwskii* Bochkov *et al.*, 2012, *S. insignis* Fain and Lukoschus, 1985, *S. modestus* Fain and Lukoschus, 1985, *S. pusillus* Fain and Lukoschus, 1985, *S. radiatus* Fain and Lukoschus, 1985, *S. subornatus* Fain and Lukoschus, 1985, and *S. zurowskii* Bochkov *et al.*, 2012. *Schizocarpus intercalatus* Fain and Lukoschus, 1985 **syn. nov.** and *S. parabrachyurus* Fain and Lukoschus, 1985 **syn. nov.** are considered as junior synonyms of *S. brachyurus*; *S. ventricosus* Fain and Lukoschus, 1985 **syn. nov.** is considered as a junior synonym of *S. latus* (Dubinina, 1964).

Key words: Chirodiscidae, fur-mites, Eurasian beaver, Tuva, *Schizocarpus*, systematics

Introduction

Mites of the genus *Schizocarpus* Trouessart, 1896 (Acariformes: Chirodiscidae) are permanent and highly specialized parasites of beavers (Rodentia: Castoridae) inhabiting the undercoat of these hosts. The systematics of this genus is entirely based on male characters (Fain & Lukoschus 1985). To date, 38 species of the genus *Schizocarpus* are known from the Eurasian beaver (*Castor fiber* Linnaeus) and 18 species are known from the American beaver (*Castor canadensis* Kuhl) (Dubinina 1964; Fain & Lukoschus 1985; Bochkov *et al.* 2012). More than ten mite species can simultaneously parasitize a host individual, where they inhabit different fur zones (Dubinina 1964).

Based on exploration of three of the eight extant subspecies of the Eurasian beaver (for subspecies distribution see Durka *et al.* 2005), i.e. *C. f. orientoeuropaicus* Lavrov, *C. f. albicus* Matschie, and *C. f. belorussicus* Lavrov, it was predicted that faunas of *Schizocarpus* spp. on the other five beaver subspecies could significantly differ from each other (Bochkov *et al.* 2012). Newly obtained data on parasites of *C. f. tuvunicus* Lavrov from Tuva support this assumption.

In this paper we give the results of the examination of *Schizocarpus* specimens collected from *C. f. tuvunicus* captured at the Azas River (Upper Yenisei basin, Tuva, South Siberia). *Castor f. tuvunicus* is a critically endangered subspecies under protection of the Red Data books of the Russian Federation (Prisazhnuk 2001) and the Tuva Republic (Shurygin & Saveljev 2002). Beavers of this subspecies were widespread across the Upper Yenisei basin 150-200 years ago. During the end of the 19th and beginning of the 20th centuries, these animals were extirpated from all rivers except for the Azas River (Lavrov 1981). The present distribution of these beavers includes the orig-