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**Revision of the genus *Quadraseta* Brennan 1970 (Trombidiformes:
Trombiculidae): morphological studies and investigation of the presence
of *Rickettsia* spp.**

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ABSTRACT

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Larval stages of chigger mites (Trombidiformes: Trombiculidae) are parasites of terrestrial vertebrates, and can even parasitize humans. During feeding, these animals inject digestive enzymes into the host's skin, which can trigger inflammatory reactions, usually such as trombiculiasis. There is also the possibility, if the mites are infected, of pathogens transmission to host. In Brazil, the bacteria *Rickettsia felis*-like was detected in the chigger *Blankaartia sinamaryi* collected parasitizing a bird, and “*Candidatus Rickettsia colombianensi*” in the chiggers, *Herpetacarus hertigi*, *Quadraseta trapezoides* and *Trombewingia bakeri*, collected from rodents. Considering the lack of knowledge, and that there are indications of the possibility of the larvae participation in the transmission of pathogens, the investigative analysis of *Rickettsia* spp. becomes relevant. In Neotropical region, the genus *Quadraseta* is composed of parasitic species of birds and small mammals. In order to review the genus, national and international collections were consulted, and the type-series material of the species was examined. By the end of this study, the total number of species for the genus was updated from 15 to 14 species, with the synonymy of *Quadraseta brennani* with *Quadraseta antillarum*, and *Quadraseta akodonica* with *Quadraseta trapezoides*, new locality records are presented for Brazil, Venezuela and Paraguay, and an updated dichotomous key is presented for the genus. In addition, we provided 18S gene sequences for *Quadraseta brasiliensis* and *Quadraseta pazca* species, increasing the genebank for this genus.

Keywords: Neotropical. Trombiculiasis. Bacterium. Chiggers. Trombiculid.