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CHIGGER MITES (ACARI: TROMBICULIDAE) OF TURKEY

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Abstract

Chigger mites of Turkey were studied on the base of three expeditions (in 1969, 1998, and 2009) and revision of all previously published data on this subject. In total, 43 species from 14 genera parasitizing rodents, soricomorphs, and reptiles in Turkey are considered, 37 of which are identified exactly. Eight new species from the Western and Central Taurus Mts are described: *Xinjiangsha lyciaensis* **sp. nov.**, *Kepkatrombicula ciliciensis* **sp. nov.**, *K. taurensis* **sp. nov.**, *Neotrombicula kizlarsivrisiensis* **sp. nov.**, *N. kolebinovae* **sp. nov.**, *N. bolkaensis* **sp. nov.**, *Miyatrombicula attaliaensis* **sp. nov.**, and *Cheladonta deserticola* **sp. nov.** Twelve species were recorded in Turkey for the first time; moreover, some new records from other countries were reported (four species were for the first time recorded in Russia, and by one species were recorded in Armenia, Azerbaijan, Israel, Turkmenistan, and Uzbekistan). For seven chigger genera (*Xinjiangsha* Wen and Shao, 1984, *Hirsutiella* Schluger and Vysotzkaya, 1970, *Lacertacarus* Schluger and Vasilieva, 1977, *Miyatrombicula* Sasa, Kawashima and Egashira, 1952, *Brunehaldia* Vercammen-Grandjean, 1960, *Cheladonta* Lipovsky, Crossley and Loomis, 1955, and *Matacarus* Vercammen-Grandjean, 1956), the complete lists of species in the world fauna are provided. Four new synonyms and 18 new combinations were established: *Xinjiangsha* Wen and Shao, 1984 (= *Aboriginesia* Kudryashova, 1993, **syn. nov.**), *Neotrombicula vulgaris* (Schluger, 1955) (= *Trombicula acomys* Radford, 1957, **syn. nov.**), *Brunehaldia brunehaldi* (Vercammen-Grandjean, 1956) (= *Eushoengastia (Brunehaldia) aegypti* Vercammen-Grandjean and Kolebinova, 1966, **syn. nov.**), *Brunehaldia curtinae* (Kepka, 1966) (= *Eushoengastia (Brunehaldia) lucida* (Schluger, 1966), **syn. nov.**), *Xinjiangsha blanci* (Vercammen-Grandjean, 1956), **comb. nov.**, *X. danieli* (Kolebinova, 1974), **comb. nov.**, *X. feideri* (Daniel and Brelih, 1959), **comb. nov.**, *X. galla* (Kolebinova, 1970), **comb. nov.**, *X. iberica* (Schluger, 1957), **comb. nov.**, *X. imlilica* (Brown, 2008), **comb. nov.**, *X. ludmilae* (Kováčik and Kalúz, 2010), **comb. nov.**, *X. montana* (Kudryashova, 1965), **comb. nov.**, *X. monticola* (Kolebinova, 1974), **comb. nov.**, *X. obuchi* (Kováčik and Kalúz, 2010), **comb. nov.**, *X. raissae* (Hushcha and Kharadov, 1987), **comb. nov.**, *X. talpae* (Kolebinova, 1977), **comb. nov.**, *X. tarda* (Schluger, 1957), **comb. nov.**, *X. theodori* (Hushcha, 1986), **comb. nov.**, *X. tshatkalica* (Hushcha and Kharadov, 1985), **comb. nov.**, *X. variabilis* (Schluger and Vshivkov, 1967), **comb. nov.**, *Brunehaldia spalaxia* (Radford, 1957), **comb. nov.**, and *Matacarus demrei* (Kepka, 1962), **comb. nov.** A key to genera and species of chigger mites from Turkey is provided.

Key words: acari, chiggers, ectoparasites, fauna, systematics, Asia Minor

Introduction

The history of chigger mite research is dramatic. It experienced a violent bloom in 1950s, when medical significance of these mites attracted attention of the military in US and other countries; chigger studies had a worthy continuation in 1960–70s, connected with the name of P.H. Vercammen-Grandjean. This outstanding specialist was the only who synthesized the large volume of taxonomic information on chiggers of the World which had become available. Although many of his taxonomic decisions were not generally accepted, his revisions retain their significance to the present, such as the unique monograph on the genus *Leptotrombidium* (Vercammen-Grandjean & Langston 1976), revision of chigger mites of the Far East (Vercammen-Grandjean 1968), and the mimeographed paper containing full list of Trombiculinae of the World, which was distributing by the author among persons interested in chigger taxonomy (Vercammen-Grandjean 1965). In later decades, chigger taxonomy goes on with numerous descriptions of new taxa. The leading specialist in 1970–90s was M.L. Goff, who made a valuable contribution with a renewal of trombiculid study, especially his publications on chigger terminology (Goff *et al.* 1982), bibliog-