



## Two new species of the genus *Longicheles* Valle, 1953 from the Kelkit Valley, Turkey, with redescription *Longicheles lagrecai* (Valle, 1963) (Acari: Macrochelidae)

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### Abstract

The Kelkit Valley is geographically a transitional zone between the Middle Black Sea and Inner Anatolia regions in Turkey. Two new species of Macrochelidae are described from this area—*Longicheles ozkani* sp. nov. and *Longicheles ayyildizi* sp. nov. *Longicheles lagrecai* (Valle, 1963) is recorded for the Turkish fauna and redescribed on the basis of specimens collected from the Valley. A world-wide key to species of *Longicheles* Valle is provided.

**Key words:** Acari, Macrochelidae, *Longicheles*, new species, Kelkit Valley, Turkey

### Introduction

The family Macrochelidae includes 20 genera and about 480 species world-wide (Emberson 2010; Haritini & Takaku 2012; Krantz & Moser 2012; Takaku *et al.* 2012; Özbek & Bal 2013), but the fauna of Turkey is very poorly known, with only 15 species (Evans & Hyatt 1963; Göksu & Güler 1968; Çobanoğlu & Bayram 1998; Çobanoğlu & Kırgız 2001; Ekiz & Urhan 2001; Bayram & Çobanoğlu 2005; Erman *et al.* 2007; Kılıç *et al.* 2012; Özbek & Bal 2012, 2013).

*Longicheles* was proposed as a subgenus of *Geholaspis* by Valle (1953), and was considered as a subgenus by many later authors (Krauss 1970; Bregetova 1977; Hyatt & Emberson 1988; Mašán 2003). It was elevated to genus rank by Athias-Henrot (1968), but that change was not widely accepted. Emberson (2010) recently revised the family Macrochelidae and again elevated *Longicheles* to genus rank. Species of *Longicheles* are widespread in the Palearctic region, especially in Europe and Asia (Valle 1953, 1963; Valle & Mazzoleni 1967; Balogh 1958; Bregetova & Koreleva 1960; Krauss 1970; Hyatt & Emberson 1988; Mašán 2003; Özbek & Bal 2012). It is also been recorded from Australia and New Zealand, apparently as a result of human agency (Halliday 2001; Emberson 2010).

The Kelkit Valley in northeastern Turkey is geographically a transitional zone between the Middle Black Sea and Inner Anatolia regions, and is also a transitional zone between the Euro-Siberian and Irano-Turanian phytogeographic regions. The mean altitude of the surrounding mountains is 1400–1500 m (Karaer & Kılınç 2001; Doğan 2009). This study shows that *Longicheles* abundant and diverse taxon in the Kelkit Valley, where it is easily found in moss, litter and leaf litter. *Longicheles hortorum* (Berlese, 1904) and *L. longisetosus* (Balogh, 1958) have previously been reported here (Özbek & Bal 2012); *L. mandibularis* (Berlese, 1904) is newly reported from the Kelkit Valley, *L. lagrecai* (Valle, 1963) is newly recorded from Turkey, and *L. ozkani* and *L. ayyildizi* are newly described.