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## **Eriophyoid mites (Acari: Prostigmata: Eriophyoidea) from Hungary: a new species on *Agrimonia eupatoria* (Rosaceae) and new record on *Convolvulus arvensis* (Convolvulaceae)**

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### **Abstract**

A new species of eriophyoid mite, *Aculus castriferrei* n. sp., associated with *Agrimonia eupatoria* (Rosaceae) is described and illustrated from Hungary. Morphological differences distinguishing this vagrant species from other rosaceous inhabiting congeners are discussed. *Aceria malherbae* Nuzzaci is a new record for the eriophyoid fauna of Hungary after it was found causing severe damage symptoms to *Convolvulus arvensis* L. (Convolvulaceae).

**Key words:** Trombidiformes, Eriophyidae, *Aculus*, common agrimony, Rosaceae, *Aceria malherbae*, Convolvulaceae, Hungary

### **Introduction**

The plant family Rosaceae is a dominant feature of the Hungarian flora with 167 recognised species in 28 genera (Király 2009), representing 6.1 % of vascular plants in Hungary. An extraordinary range of eriophyoid mites occupy rosaceous plants and in Hungary, 13.5 % of known eriophyoid species live on such hosts (Ripka 2007). Based on current information from Hungary, there are only two other plant families inhabited by a similar number of eriophyoid species, namely Salicaceae (9 %) and Asteraceae (8 %) (Ripka 2007 & 2008).

The genus *Aculus* Keifer, 1959b (Eriophyidae) is a large genus represented by 248 species worldwide across 76 plant families so far (Amrine & Stasny 1994; Amrine *et al.* 2003). In Europe, this genus currently includes approximately 103 described species which are mostly leaf vagrants on woody plants from a range of dicotyledonous families (de Lillo 2012). In Hungary, three other *Aculus* spp. on Rosaceae, namely *Aculus fockeui* (Nalepa & Trouessart, 1891), *Aculus parakarensis* (Bagdasarian, 1972) and *Aculus schlehtendali* (Nalepa, 1890) are known to date which is similar in number to the four each that have been found in Serbia and Montenegro, Poland and Bulgaria (Ripka 2007; Petanović *pers. comm.* Jan. 2014; Skoracka *et al.* 2005; Nachev 2008). Up until now, the following *Aculus* species have been described from woody hosts of the Rosaceae: *Aculus amygdali* Xue & Hong, 2005; *A. fockeui*; *Aculus latiloba* (Keifer, 1955); *Aculus persicae* Xue & Hong, 2005; *A. schlehtendali* and *Aculus wagnoni* (Keifer, 1959a).

Herein, I describe a new species of *Aculus* from common agrimony, *Agrimonia eupatoria* L. (Rosaceae). It is the first time that an eriophyoid mite has been found on this plant host. In addition, this is the first *Aculus* species to be described from an herbaceous member of the Rosaceae family (Amrine & Stasny 1994, 1996; Davis *et al.* 1982; Liu *et al.* 2013). So far, the only other eriophyoid mite known from the plant genus *Agrimonia* is *Calepitrimerus pilosus* Xue, Guo & Hong, 2013 which was described recently on *Agrimonia pilosa* Ledeb.

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