

## ***Atropacarus* (*Hoplophorella*) (Acari: Oribatida: Phthiracaridae) from China, with descriptions of two new species**

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### **Abstract**

The subgenus *Atropacarus* (*Hoplophorella*) (Acari: Oribatida: Phthiracaridae) was represented in China by only one known species prior to this work. In this paper, four species of *Atropacarus* (*Hoplophorella*) are identified, including two new species, *Atropacarus* (*Hoplophorella*) *inflatus* **sp. nov.** and *Atropacarus* (*Hoplophorella*) *minimus* **sp. nov.**, and a newly recorded species from China, *Atropacarus* (*Hoplophorella*) *vitrinus* (Berlese, 1913). Some new data and remarks on known and newly recorded species from China are presented. A key to all known species of *Atropacarus* (*Hoplophorella*) in China is given.

**Key words:** Soil mites, Oribatida, Phthiracaridae, *Atropacarus* (*Hoplophorella*), new species, new record, key, China

### **Introduction**

Berlese (1923) proposed the subgenus *Phthiracarus* (*Hoplophorella*) with *Hoplophorella cucullatum* Ewing, 1909 as type species. Based on analysis of the morphological characters of Phthiracaroida, Niedbala (1986) treated *Hoplophorella* as a subgenus of *Atropacarus*. This subgenus is characterized by 15 pairs of notogastral setae and only two pairs of lyrifissures, *ia* and *im*, present; nine pairs of genital setae arranged in a single row and five pairs of anal and adanal setae present; setae *ad*<sub>2</sub> remote from the paraxial margin; setae *d* of tibiae IV minute and coupled with solenidia (Niedbala 2011).

The species of the subgenus *Atropacarus* (*Hoplophorella*) occur widely throughout the world except for the sub-Antarctic and Antarctic Regions. According to our tally, the subgenus currently has about 49 described species in the world. China is one of the earth's megadiverse countries and is known to be a hot spot for new mite species discovery in the last six years (Liu *et al.* 2013). However, only one species of this subgenus, *Atropacarus* (*Hoplophorella*) *cucullatus* (Ewing, 1909), has been recorded from China (Chen *et al.* 2010). During taxonomic study on Chinese ptyctimous mites, we identified four species of *Atropacarus* (*Hoplophorella*), including two new species and one newly recorded species from China. In this paper, detailed descriptions of these new species and a key to known Chinese species of *Atropacarus* (*Hoplophorella*) are given. Some new data and remarks on known and newly recorded species from China are provided.