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Eriophyoid mite fauna of Shaanxi Province, China, with descriptions of five new species (Acari: Eriophyoidea)

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Abstract

Prior to this research, 47 genera and 124 eriophyoid mite species have been known to occur in Shaanxi Province, north-western China. We described and illustrated herein five new species collected in Shaanxi Province. They are *Proartacris cathayensis* **sp. nov.** on *Carya cathayensis* Sarg. (Juglandaceae), *Acaphyllisa changqingiensis* **sp. nov.** on *Salix* sp. L. (Salicaceae), *Tegonotus albus* **sp. nov.** on *Cornus alba* L. (Cornaceae), *Phyllocopturta japonica* **sp. nov.** on *Lonicera japonica* Thunb. (Caprifoliaceae), *Anthocoptes albosinensis* **sp. nov.** on *Betula albosinensis* Burkill (Betulaceae). At the same time, one new eriophyoid mite record from China is provided, *Rhinotergum schestovici* Petanovic, 1988, rec. nov. on *Betula albosinensis* Burkill (Betulaceae). A list of eriophyoid mites from Shaanxi Province is provided. All the new species and new record described herein are vagrants on respective host plants.

Key words: taxonomy, new species, new record, host plant relationships, geographic distribution

Introduction

Shaanxi Province is in the hinterland of China. It is situated between 105°29'E to 111°15'E and 31°42'N to 39°35'N. Shaanxi Province is somewhat narrow in geographic aspect from east to west, with larger regions in the north and south, with northern and southern mountainous regions and a low central valley. Shaanxi has many landforms such as highlands, mountainous regions, plains and basins. Examples are the Loess Plateau of North Shaanxi Province, the Guanzhong Plain and the Qinba Mountainous Region. Main mountain ranges include the Qinling Mountains and the Daba Mountains. The Qinling Mountains form the boundary between the Oriental region in the south and the Temperate region of north China, and traverses the province from east to west (Figure 1) (Webpage of the Shaanxi Provincial Government, 2009).

During 2004 and 2005, field surveys were conducted by Xiao-Feng Xue and Zi-Wei Song in Shaanxi Province, China. These field surveys mainly focused on the Qinling Mountains, especially in the National Nature Reserves, such as the Foping National Natural Reserve, the Changqing Nature Reserve and Taibai Mountain. In total, 235 eriophyoid specimens were collected and more than 2000 slides made. One hundred and eighteen eriophyoid species were identified among which five new species and one new record were found.