



One new genus and four new species of Phyllocoptinae (Acari: Eriophyoidea) from Fujian Province, southeastern China

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Abstract

One new genus and four new species of the Phyllocoptinae from Fujian Province, southeastern China are described and illustrated. They are *Fujianacarus* gen. nov. and *Fujianacarus wisterianis* sp. nov. on *Wisteria sinensis* (Sims) Sweet (Fabaceae); *Eptrimerus buxsinica* sp. nov. on *Buxus sinica* (Rehd. et Wils.) Cheng (Buxaceae); *Shevtchenkella camelliae* sp. nov. on *Camellia sinensis* (L.) O. Ktze. (Theaceae) and *Jutarus dolichocladae* sp. nov. on *Bambusa dolichoclada* Hayata (Poaceae). All species are vagrant on the undersurface of leaves, causing no apparent damage to the host plant.

Key words: Eriophyidae, eriophyoid mites, taxonomy, host relationships

Introduction

Fujian Province, on China's southeastern coast, covers a land of 540 km from east to west and 550 km from north to south. It faces Taiwan Island across the Taiwan Strait. Neighboring provinces are Zhejiang to the north, Jiangxi to the west, and Guangdong to the south. Occupying an area of 121,400 sq km of land, the province has a year-round warm and humid climate. Annual average rainfall ranges from a low of 1400 mm to a high of 2000 mm, and annual average temperature from a low of 17°C to a high of 21°C. The province is mountainous and only the area along the coast is occupied by plains. Mountainous areas and hilly lands make up 80% of its total area (Webpage of Fujian Provincial Government, 2008; Webpage of the Central Government of China, 2008).

To date, there are 38 eriophyoid mite species known to occur in Fujian Province (Hong & Zhang, 1996; Huang, 1999; Huang, 2001; Kuang *et al.*, 2005). Among them, one species belongs to the Nalepellinae, two to the Cecidophyinae, four to the Eriophyinae, twenty to the Phyllocoptinae, six to the Rhyncaphytoptinae and five to the Diptilomiopinae.

Material and methods

During October 2005, field surveys were conducted in Fujian Province. One genus and four species new to science were found and are described in this paper. The morphological terminology used here follows Lindquist (1996) and the generic classification is made according to Amrine *et al.* (2003). All specimens were examined with a Leica DMR (Germany) research microscope with phase contrast and semi-schematic drawings were made. For each species, holotype measurements are given followed by the range of paratype measurements in brackets. All measurements are in micrometers (μm), and are lengths when not specified. The number of specimens (*n*) is the number of individuals found on the slides which were suitable for measure-