



## Systematic remarks on eriophyoid mites from the subfamily Phytoptinae Murray, 1877 (Acari: Eriophyoidea: Phytoptidae)

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### Abstract

In this paper a critical analysis of the subfamily Phytoptinae is undertaken. Five new combinations are stated: *Oziella nilotica* (Abou-Awad, 1981) **comb. n.** (from *Phytopus* Dujardin, 1851); *O. gigantea* (Mohanasundaram, 1981) **comb. n.** (from *Anchiphytoptus* Keifer, 1952); *Phytoptus lineatus* (Keifer, 1952) **comb. n.**, *Ph. beeri* (Keifer, 1957) **comb. n.** and *Ph. chamaebatia* (Keifer, 1975) **comb. n.** (all of them from *Anchiphytoptus* Keifer, 1952). The genus *Anchiphytoptus* Keifer, 1952 is considered to be a junior synonym of *Phytoptus* Dujardin, 1851.

**Key words:** eriophyoid mites, Eriophyoidea, Phytoptinae, *Phytoptus*, *Anchiphytoptus*, *Oziella*

### Introduction

The subfamily Phytoptinae is one of the most ancient in the archaic family Phytoptidae, representing an evolutionary lineage of eriophyoid mites associated with Angiosperms (Sukhareva 1994; Bagnjuk *et al.* 1998). At present it includes 46 species of worm-like mites with equal opisthosomal annulation and two pairs of setae on the prodorsal shield. Its four genera are *Acathrix*, *Anchiphytoptus*, *Phytoptus*, and *Oziella* (Amrine *et al.* 2003).

Since 2000, we have studied the complex of eriophyoid mite species (*Phytoptus* spp. and *Anchiphytoptus* spp.) connected with plants of the family Cyperaceae Juss. (Chetverikov 2004, 2005, 2006a,b; Chetverikov & Sukhareva 2007; Petanović *et al.* 2007). While working with the descriptions of eriophyoid mite species of the subfamily Phytoptinae from sedges and grasses, it was revealed that some species of *Phytoptus* did not fit the criteria of this genus and should be transferred to genus *Oziella*. Additionally, the genus *Anchiphytoptus* Keifer, 1952 should be considered to be a junior synonym of *Phytoptus*.

This paper forms part of a long term investigation of eriophyoid mites from the family Phytoptidae Murray 1877 which started 15 years ago at the Biological Research Institute (Saint-Petersburg, Russia) by the phytoacarology working group (Sukhareva 1994; Chetverikov 2004; Chetverikov & Sukhareva 2007). The plesiotypic nature of this family requires it to be revised for further understanding of eriophyoid mite evolution (Sukhareva 1994; Bagnjuk *et al.* 1998).

The aims of this paper are to make a critical analysis of the type-subfamily Phytoptinae and to state new combinations: *Oziella nilotica* (Abou-Awad, 1981) **comb. n.** (from *Phytopus* Dujardin, 1851); *O. gigantea* (Mohanasundaram, 1981) **comb. n.** (from *Anchiphytoptus* Keifer, 1952); *Phytoptus lineatus* (Keifer, 1952) **comb. n.**, *Ph. beeri* (Keifer, 1957) **comb. n.** and *Ph. chamaebatia* (Keifer, 1975) **comb. n.** (all of them from *Anchiphytoptus* Keifer, 1952). The genus *Anchiphytoptus* Keifer, 1952 is considered here to be a junior synonym of *Phytoptus* Dujardin, 1851.