



TAXONOMIC REVISION AND PHYLOGENETIC ANALISYS OF *Tenuipalpus* SENSU STRICTO GROUP (ACARI: TENUIPALPIDAE)

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Tenuipalpus sensu stricto group (Acari: Tenuipalpidae) includes the type species of the genus, *T. caudatus* (Dugès), and another 39 known species. The definition of this group allowed for a better understanding about of the systematic of the genus, but the relationship among its species is still not well understood. In this study, we provide a taxonomic revision of the *Tenuipalpus* sensu stricto group based mainly on study of type specimens deposited in the NMNH Mite Collection and in the MCZ Mite Collection. The taxonomic revision allowed the construction of a character matrix in order to propose a phylogenetic analysis for this group of mites. The ingroup consisted of 27 species of *Tenuipalpus* sensu stricto. The outgroup was composed by two species of the genus *Ultratenuipalpus*. The dataset consisted of 60 morphological characters. These characters were based mainly from gnathosoma, dorsal, ventral and leg chaetotaxy. The analysis identified two equally parsimonious trees of 218 steps (CI: 32, RI: 54). In the strict consensus tree, a branch including the ingroup was supported by eight synapomorphies, including the presence of lateral body projections associated with setae *c3*. The first major branch was supported by two synapomorphies, related to presence of ridges from prodorsal setae *sc1* to the sejugal furrow. The second major branch was supported by two synapomorphies, including the presence of ventral setae *3a2*. Our preliminary results show the presence of two major groups within *Tenuipalpus* sensu stricto. The inclusion of more species with new characters will collaborate a better understanding about the relationship among the species of this group of mites.

Keywords: flat mites, false spider mites, taxonomy, systematic, body projections, *Ultratenuipalpus*.

Financial support: FAPESP, CNPq.