



REDESCRIPTION OF *Ultratenuipalpus meekeri* (De Leon) (ACARI: TENUIPALPIDAE), WITH COMPARISON OF NEW SPECIMENS FROM MEXICO AND BRAZIL

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Ultratenuipalpus Mitrofanov is a small genus of the family Tenuipalpidae (Acari: Tetranychoidae), with 25 known species to date. The flat mites of this genus bear a broad subquadrate propodosoma with many large, lanceolate and/or obovate to ovate dorsal setae. In addition there are some plesiomorphic character states, like the presence of three pairs of ventral *ps* setae. The type species of the genus, *U. meekeri* (De Leon), was described based on specimens collected on ferns in mangrove swamps, in Mexico. In this study, we redescribe the adult female and male, deutonymph, protonymph and larva of *U. meekeri* in a standardized format based on type specimens deposited at the National Insect and Mite Collection, National Museum of Natural History, Smithsonian Institution (NMNH), located at Beltsville, Maryland, USA. New specimens collected on ferns in Mexico and Brazil were imaged using low temperature scanning electron microscopy (LT-SEM) and are included in the redescription. Based on the study of type specimens, new material collected and comparison of LT-SEM images (e.g. length of setae, chaetotaxy, pattern of microplates), we consider that the specimens from Mexico and Brazil are morphologically similar to *U. meekeri*, and all of them belong to the same species. However, in order to confirm the morphological identification, specimens collected from both countries were maintained in 100% ethanol for molecular analysis. In addition, based on the literature, we demonstrated that most of the *Ultratenuipalpus* known species are associated with pteridophytes and gymnosperms plants. The ontogenetic changes in the idiosomal and leg chaetotaxy of all stages are presented and discussed.

Keywords: flat mites, false spider mites, taxonomy, biodiversity, ontogeny, LT-SEM, molecular analysis.

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