

ISSN 1175-5326 (print edition)

 ZOOTAXA

 ISSN 1175-5334 (online edition)



Edaphic and plant inhabiting oribatid mites (Acari: Oribatida) from Cerrado and Mata Atlântica ecosystems in the State of São Paulo, southeast Brazil

ANIBAL R. OLIVEIRA^{1,3}, ROY A. NORTON² & GILBERTO J. DE MORAES³

¹Instituto de Biociências, Departamento de Zoologia, Universidade de São Paulo, 05422-970 São Paulo-SP, Brazil (arolivei@carpa.ciagri.usp.br)

²SUNY College of Environmental Science & Forestry, 1 Forestry Drive, Syracuse, New York 13210, USA (ranorton@esf.edu)

³Departamento de Entomologia, Fitopatologia e Zoologia Agrícola, ESALQ/Universidade de São Paulo, 13418-900 Piracicaba-SP, Brazil (gjmoraes@carpa.ciagri.usp.br) [address for correspondence]

Abstract

Forest sites in the eastern half of the State of São Paulo were surveyed to determine the oribatid mite fauna in areas of Cerrado (dry savannah) and Mata Atlântica (tropical rain forest) ecosystems. Samples of bark, fruits, leaves, litter, soil and terminal shoots were taken from selected species of Myrtaceae (Cerrado) and Arecaceae (Mata Atlântica). Fifty-six oribatid species, belonging to 48 genera in 34 families, were represented. Seven of these are new records for the State of São Paulo, and 20 are new records for Brazil.

Key words: Acari, Oribatida, faunistics, Myrtaceae, Arecaceae, Neotropics

Introduction

Mites of the order Oribatida generally represent the most abundant arthropod group in forest soil and litter, and are also found, less abundantly, on living plants. They feed mostly on plant detritus and fungi, and are important components of food webs involved in the processes of organic matter decomposition and nutrient cycling.

Schuster (1962) published the first record of oribatid mites in the State of São Paulo, southeast Brazil, describing two species of *Mesoplophora* Berlese. Subsequently, almost two hundred species have been recorded from that State. Most of those records derived from samples taken from the southeastern central region, mainly between 22/24°S and 45/48°W (Balogh & Balogh 1985; Balogh & Mahunka 1977a, 1978, 1992; Balogh &