



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA



> 8th SYMPOSIUM OF THE EUROPEAN ASSOCIATION OF ACAROLOGISTS

Universitat Politècnica de València

July, 11th -15th 2016



selected. On the whole, in the five studied stands there were recorded 32 species of Mesostigmata, belonging to 22 genera and 14 families. The analyzed material includes new species of the Romanian fauna as well as rare and less cited species from other places in Romania. A quarter of the identified species was formerly found in the Danube Delta, two species being identified only within D.D.B.R. territory. Only two species were common to the majority of the investigated stands: *Hypoaspis nollii* and *Rhodacarellus silesiacus*, both of them being hygrophilous elements. The particular conditions of each stand (vegetation, type of soil etc.) as well as climatic conditions influence the structure of the mesostigmatid mites communities both in the quantitative and the qualitative aspects. Horizontal and vertical distribution and the aspects of demographic structure were also brought under discussion. We also analyzed the similarity degree of the gamasid mites communities from the five stands on the base of specific composition and some quantitative parameters, too. This study is part of a wider investigation dedicated to the edaphic mesofauna on the whole and conducted within BIODIVERS Research program, funded by the Romanian Ministry of Education and Scientific Research.

Cocoa crop strategies influence the community composition and abundance of predatory mites (Acari: Phytoseiidae)

Adeilma Nascimento de CARVALHO¹, Anibal Ramadan OLIVEIRA², Denise NAVIA³, Francisco FERRAGUT⁴

1) Universidade Estadual de Santa Cruz, Ilhéus, BA, Brazil. 2) Departamento de Ciências Biológicas, Universidade Estadual de Santa Cruz, Ilhéus, BA, Brazil. 3) Embrapa Recursos Genéticos e Biotecnologia, Brasília, DF, Brazil. 4) Instituto Agroforestal Mediterráneo, Universitat Politècnica de València, Valencia, Spain.
Email: adeilmanc@hotmail.com

During the last few years, cocoa plants (*Theobroma cacao*) in North-West and North-East Brazil have been threatened by the cocoa bud mite *Aceria reyesi* (Nuzzaci) (Eriophyidae), which causes severe bud deformation. A study aiming to know the predatory mite communities (Phytoseiidae) occurring on cocoa plants and surrounding vegetation was conducted in 2014-2015 in some cropping areas of Bahia State. Diversity and abundance of phytoseiid species were compared between cocoa plants and non-cultivated vegetation associated to crop and between two different crop systems (shaded, the traditional system where cocoa plants are protected from the sun by a number of trees and sunny, where cocoa lacks that sun protection). Ninety-five samples were collected and 608 phytoseiid mites belonging to 27 species were extracted from plants. *Amblyseius operculatus* (142 individuals), *A. perditus* (109), *Iphiseiodes metapodalis* (79) and *Typhlodromalus aripo* (69) were the most abundant species. Predatory mites were much richer (22 species) on non-cultivated vegetation (0.88 species per sample) than on cocoa plants (14 species, 0.19 species per sample). Only nine species occurring on surrounding plants were collected on cocoa. There were no significant differences in abundance between cocoa (6.36 phytoseiids/sample) and non-cultivated plants (6.52 phytoseiids/sample). Crop strategy influences the richness and abundance of mites on non-cultivated plants. Twelve phytoseiid species were collected from cocoa plants irrespective from the crop system (shaded or sunny). Likewise, density of predatory mites on cocoa was similar on plants under sun protection (5.63 phytoseiid/sample) and on plants without protection (7.33 phytoseiids/sample). However, species richness on natural vegetation was higher in shaded areas (19 species) than in sunny areas (8 species) and predatory mites were much more abundant in shaded areas (11.3 phytoseiids/sample) than in sunny areas (3.33 phytoseiids/sample).

Study of species status and intraspecific variation of oribatid mites in oak forest ecosystems from the Basque Country and Navarra (Spain), using phylogenetic methods

Elena CORRAL-HERNÁNDEZ¹, J. Carlos ITURRONDOBEITIA¹, Mark MARAUN²

1) Department of Zoology and Animal Cell Biology, Faculty of Science and Technology, University of the Basque Country, Sarriena NBDH, 48940 Leioa, Spain 2) J.F. Blumenbach Institute of Zoology and Anthropology, Georg August University Göttingen, Berliner Strasse 28, 37073 Göttingen, Germany. Email: elena.corral@ehu.es

We investigated with phylogenetic methods the species status and intraspecific variation, individuals from six oak forests grouped in 10 species: (*Hermaniella dolosa*, *Platynothrus peltifer*, *Cerachipteria jugata*, *Minunthozetes semirufus*, *Xenillus tegeocranus*, *Damaeus maximus*, *Rhacaplacarus ortizi*, *Steganacarus magnus*, *Steganacarus*