

Geographic distribution of Miridae in Minas Gerais State, Brazil (Hemiptera: Heteroptera)

PAULO SÉRGIO F. FERREIRA¹, EVALDO M. PIRES^{1,2}, ALEXANDRE S. DE PAULA, & LÍVIA A. COELHO¹.

1 Museu de Entomologia, Departamento de Biologia Animal, Universidade Federal de Viçosa, 36570-000 Viçosa, MG, Brazil

(pfiuza@ufv.br) (evaldo@insecta.ufv.br) (hetalex@terra.com.br) (liviaguair04@hotmail.com)

2 Programa de Pós-Graduação em Entomologia, Departamento de Biologia Animal, Universidade Federal de Viçosa, 36571-000 Viçosa, MG, Brazil

Abstract

We present for the first time the geographic distribution of mirids in the state of Minas Gerais, Brazil, taking into account the vegetation areas, climate features, and species richness. All the information about species distribution in Minas Gerais was obtained using references on Neotropical Miridae and data labels of specimens deposited in National collections. Minas Gerais represents the largest diversity of mirids in Brazil, 311 species. The mirids were collected in 42 counties in Minas Gerais. They are present in all the 4 major biomes of the State. The Atlantic Forest has the greatest richness, with 214 species, followed by Cerrado with 128 species. We suggest that the diversity of Minas Gerais mirids began in the Atlantic Forest. Fisher's PLSD test among mirid subfamilies at different elevations, temperatures, and precipitations showed a significant effect of elevation only.

Key words: Neotropical Miridae, Distribution, Brazil, Biogeography, Hemiptera, Heteroptera

Introduction

The state of Minas Gerais is located in southeastern Brazil (Fig. 2), with an area of about 589.000 km², corresponding to 7% of the Brazilian territory. About 93% of this area is over 300m above sea level (a.s.l.), 57% over 600m a.s.l., and 20% between 900 and 1500m a.s.l. Two climate types (Köppen Climate Classification, source: <http://www.geofictie.nl/ctkoppen.htm>) are recognized: for the lowest areas, the Tropical type (Aw) with temperatures varying 22-23°C, with rainy and dry winters. The precipitation index can reach 1300mm/year at the south and 900mm at the north of the state. The second