New species of plant bug associated with pastures in Colombia, and notes on the genera Dolichomiris, Cynodonmiris, and Megaloceroea (Hemiptera: Heteroptera: Miridae)

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Abstract

Cynodonmiris corpoicanus, a new species of Miridae belonging to the subfamily Mirinae and the tribe Stenodemini, is described from Colombia. Similarities and differences between Cynodonmiris, Dolichomiris, and Megaloceroea are presented. Geographic distribution of C. corpoicanus and its host plants are given. Diagnoses and illustrations of the female and male genitalia characters are provided to distinguish the Neotropical species of Cynodonmiris and Dolichomiris, and Holarctic Megaloceroea.

Key words: Cynodonmiris corpoicanus, taxonomy, diagnosis, host plants, Mirinae, Stenodernini

Introduction

Research by the Corporación Colombiana de Investigación Agropecuaria (Corpoica) focused on pastures in Cundiboyacense highlands discovered a species of Cynodonmiris initially identified as Dolichomiris linearis Reuter, 1882. Reviewing the Neotropical Stenodemini (Carvalho 1975; Schwartz, 2008), we observed D. linearis displays great similarity with the Holarctic species Megaloceroea recticornis (Geofroy, 1785). Two species of Neotropical Dolichomiris are known, D. linearis and D. puncticerus Carvalho, 1975. Cynodonmiris is represented in the Neotropical region by C. costicollis (Berg, 1878). All of these species are associated with grasses or Poaceae (Carvalho 1975). By comparing exemplars of the new species with descriptions and specimens of related species (Carvalho, 1975; Slater, 1956; Schwartz, 2008), D. linearis, D. puncticerus, C. costicollis, and M. recticornis, we found marked differences in external morphology and male genitalia. The results led the authors to describe C. corpoicanus, new species, and similarities and differences between the closely related genera Cynodonmiris, Dolichomiris, and Megaloceroea.

Material and methods

Colombian Cundiboyacense highlands lies between 2500 to 3000 meters above sea level, with an average temperature of 15 °C and relative humidity of 70%. The land covers 817,000 hectares of pasture, predominantly kikuyo grass (Pennisetum clandestinum Hoechst) (90%) and some introduced ray grass (Lolium spp.) (10%). Specimens of Cynodonmiris corpoicanus n. sp. were collected from farm pastures using a sweep net, and placed in vials of 90% ethanol. Authorship of the new species is restricted to the first two authors. The specimens were subsequently dried, mounted on card points, and labeled. Measurements are in millimeters with the holotype male followed first by the minimum, maximum, and mean of 10 male and female paratypes. Genitalia were examined after the abdomen was removed and immersed in cold 10% KOH for 24 hours. The structures were then washed in distilled water and placed in glycerin to study. Genitalia illustrations were done using a camera lucida