Abstract

Cicadellidae is one of the best represented families in the Neotropical Region, and the tribe Proconiini comprises most of the xylem-feeding insects, including the majority of the known vectors of xylem-born phytopathogenic organisms. The cytogenetics of the Proconiini remains largely unexplored. We studied males of Tapajosa rubromarginata (Signoret) collected at El Manantial (Tucumán, Argentina) on native spontaneous vegetation where Sorghum halepense predominates. Conventional cytogenetic techniques were used in order to describe the karyotype and male meiosis of this sharpshooter. T. rubromarginata has a male karyological formula of 2n=21 and a sex chromosome system XO:XX (:). The chromosomes do not have a primary constriction, being holokinetic and the meiosis is pre-reductional, showing similar behavior both for autosomes and sex chromosomes during anaphase I. For this stage, chromosomes are parallel to the acromatic spindle with kinetic activities in the telomeres. They segregate reductionally in the anaphase I, and towards the equator during the second division of the meiosis. This is the first contribution to cytogenetic aspects on proconines sharpshooters, particularly on this economic relevant Auchenorrhyncha species.

Keywords

Insecta, Cicadellidae, Proconiini, karyotype, holokinetic chromosomes, sex chromosomes.