

CURRENT KNOWLEDGE ABOUT FEEDING BEHAVIOUR OF PLANTHOPPERS AND LEAFHOPPERS OF PHYTOSANITARY IMPORTANCE IN ARGENTINA (HEMIPTERA-AUCHENORRHYNCHA)

María E. Brentassi

División Entomología. Facultad de Ciencias Naturales y Museo. Universidad Nacional de La Plata (UNLP). Comisión de Investigaciones Científicas, Provincia de Buenos Aires (CIC). Paseo del Bosque S/N La Plata, CP 1900. Buenos Aires. Argentina.

Planthoppers and leafhoppers (Delphacidae and Cicadellidae) represent one of the most relevant groups within hemipteran owing to their importance for plant health. They have a role in the transmission and dispersal of virus, phytoplasmas and spiroplasmas which affects wild and cropped plants. To the present, the feeding behaviour of the following species was studied in Argentina: *Delphacodes kuscheli* Fennah (Delphacidae), the main vector of “Mal de Río Cuarto Virus” (MRCV) on corn; *Typhlocybella maidica* Catalano (Cicadellidae: Typhlocybinae) found at high densities on corn crops, and *Megamelus scutellaris* (Berg) (Delphacidae) and *Taosa (Cuernavaca) longula* Remes Lenicov (Dictyopharidae), planthoppers that feed and reproduce on the invasive aquatic weed, *Eichhornia crassipes* (Martius) Smols-Laubach (Pontederiaceae) and are considered potential biocontrol agents of this weed. This contribution summarizes information about the experimental rearing methodology for these species, as well as the observations about feeding behaviour through histological examination of injured plant tissues using light microscopy, scanning and transmission electron microscopy. The feeding strategies of the species above are summarized as follows. The delphacids *D. kuscheli* and *M. scutellaris* and the dictyopharid *T. longula* are typical “salivary-sheath-feeders” ingesting mostly phloem sap. The typhlocybine, *T. maidica* is a “cell rupture feeder” consuming the mesophyll cell contents but not making true salivary sheaths. However, tenuous salivary sheaths in relation to vascular tissues could be indicates the ingestion of phloem sap by *T. maidica*. The alteration of the normal structure of chloroplasts and the partial or total occlusion of the cellular lumen of vascular tissues are the main damages produced during feeding mechanism of these species.

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