

Introduction

The planthopper family Delphacidae (Hemiptera: Fulgoroidea) contains \approx 2,000 species (Asche 1985, Wilson et al. 1994). Phylogenetically, the Delphacidae are placed near the base of the Fulgoroidea as the sister group to the Cixiidae, according to Asche (1987), or as the sister group to all other Fulgoroidea, except Tettigometridae, according to Emeljanov (1991). Asche (1990) divided the Delphacidae into 7 clades (the polyphyletic Asiracinae consisting of the tribes Ugyopini and Asiracini, and 5 monophyletic subfamilies; for review see Wilson et al. 1994), but Emeljanov (1996) recognized 3 subfamilies (Ugyopinae, Asiracinae, and Delphacinae) and 14 tribes. The genus *Pissonotus* Van Duzee, 1897, is a member of the Delphacinae, the largest and most advanced subfamily, and the tribe Delphacini, the largest delphacid tribe (1,090 species) (Asche and Remane 1982; Asche 1985, 1990; Wilson et al. 1994), according to both Asche (1990) and Emeljanov (1996). Phylogenetic relationships among the genera within the Delphacini have yet to be resolved. The genus *Pissonotus*, as defined here, is restricted to the New World.

Although little information is available on the ecology of *Pissonotus*, the genus is unusual among delphacids with respect to host plant preferences. Most delphacids feed on herbaceous monocots (Denno and Perfect 1994), but *Pissonotus* species feed primarily on dicots, especially Asteraceae, including some woody species (e.g., *Iva frutescens* L. and *Baccharis halimifolia* L.). *Pissonotus piceus* (Van Duzee, 1894b), however, has been confirmed to feed on *Polygonum* sp. (Polygonaceae) and *Ludwigia* sp. (Onagraceae) (Morgan and Beamer 1949). No species of *Pissonotus* is thought to be a significant economic pest, although *P. piceus* originally was described in association with celery (Van Duzee 1894b) and is here reported from celery, chard, and soybeans. Also, *P. binotatus* is recorded from soybeans, *P. dorsalis* from beets and carrots, *P. delicatus* and *P. albovenosus* from cotton, and *P. albovenosus* from radishes; however, some of these host records are likely to be spurious (see *Discussion*, p. 215). Species of *Pissonotus* have not been investigated with regard to the transmission of plant pathogens, but delphacids are known to vector more than 20 plant viruses (Nault 1994).

Members of the genus *Pissonotus* are characteristically brachypterous (Fig. 1), but macropters are known for most species. The uniform occurrence of