Tymbal differentiation and co-occurrence among *Spartina* sap-feeding insects (Hemiptera: Auchenorrhyncha)

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The exoskeletal morphology of the structures associated with the production of substrate vibrations used for communication among three guilds of spa-feeding insects on the cordgrasses *Spartina alterniflora*, *S. patens*, and *S. pectinata* (Poaceae: Chloridoidea) was examined for the males of 14 species of planthoppers and 2 species of leafhoppers (Hemiptera: Auchenorrhyncha: Caliscelidae, Cicadellidae, Delphacidae, Derbidae). Morphometric comparisons of the second abdominal sternite and its apodemes, the "tymbal", revealed significant differences among the insect species on each of the cordgrass species. If tymbal morphology does reflect definitive features of the vibrational signals then coexistence by the members of each sap-feeding guild is likely fostered by partitioning of the "substrate resource". Tymbal morphology may serve as an indicator of the presence of sibling species and may provide insights regarding behavior, ecology, and evolution of these insects.