THE PREVALENCE AND DEGREE OF HOST SPECIFICITY IN LEAFHOPPERS AND PLANTHOPPERS OF RICE AND THEIR IMPORTANCE TO TAXONOMY AND PEST CONTROL.

P.K. Pathak

Department of Entomology, G.B. Pant Agricultural University, Pantnagar 263145, Uttar Pradesh, India

Abstract

Several species of leafhoppers (Cicadellidae) and planthoppers (Delphacidae) are major insect pest of rice in Southeast Asia. They cause serious damage to the plants by feeding on them resulting in poor growth and hopperburn in a few cases. Some of them are vectors of virus diseases. Large numbers of rice varieties resistant to leafand planthoppers have been released for commercial cultivation to farmers. The release of such varieties has resulted in the selection of hostspecific biotypes particularly in the brown plant hopper (BPH) Nilaparvata lugens. Recently, sympatrically occurring biotypes of BPH in the Philippines have been identified on micro morphological characters. Differential responses of these biotypes to different insecticides have also been reported. The present paper discusses the host specificity of cicadellids and delphacids, their distribution, nature of damage, role of resistant varieties in controlling them, virus diseases they transmit, and recent control measures.