SUGARCANE LEAFHOPPERS OF TANDOJAM

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Abstract— Sugarcane crop is the third cash crop of Pakistan and is the only source of raw material to sugar mills of Sindh and Punjab, sugar beet on the other hand is cultivated in Khyber Pakhtunkhwa and is available for the sugar mills on small scale. Sugarcane crop bears the attack of harmful insect pests that cause economic loss, despite the presence of several species of leafhoppers they are not reckoned as major pest but are the part of checklist of insect pests of sugarcane crop. Leafhoppers belong to family cicadellidae, they are easily recognized by row of setae on hind tibia. They persist sugarcane crop at various stages, they cause various diseases as maize streak virus is transmitted by at least six leafhopper species of Cicadulina, mostly by C. mbila and C. storey [8], from India 22 species of leafhoppers are reported including fifteen genera; Austroagallia, Balclutha, Batracomorphus, Cicadulina, Cofana, Deltocephalus, Doratulina, Empoascanara, Exitianus, Goniagnathus, Hecalus, Hishimonus, Nephotettix, Varta and Yamatotettix. The present study will add our knowledge on leafhopeprs feeding on sugarcane crop and take precautionary measures as a part of Integrated Pest Management as many of them are vectors of plant diseases. The study was conducted to explore leafhopper stpeies found on sugarcane crop at Tandojam, Pakistan, during survey sugarcane crops were visited cultivated at campus (Sindh Agriculture University Tandojam) surroundings, about 167 specimens of leafhoppers were collected, these might be feeding on sugarcane or may be just sitting on it. The diagnoses revealed 10 species of two subfamilies; Cicadellinae (1) and Deltocephalinae (9). Cicadellinae, Latreille 1825, tribe Cicadellini revealed the occurrence of 1 species Cofana spectra (Distant, 1908). Deltocephalinae exposed 9 speceis under 6 tribes: Chiasmini, Distant 1908 with two species Exitianus indicus (Distant, 1908) and Exitianus nanus (Distant, 1908). Goniagnathini, Wagner 1951 with one species Goniagnathus guttulinervis (Kirschbaum 1868); Hecalini Distant, 1908 with two species Hecalus porrectus (Walker, 1858) and Hecalus sindhensis (Ahmad & Aziz, 1988); Macrostelini, Kirkaldy 1906 with two species records Balclutha incisa (Matsumura, 1902) and Balclutha rubrostriata (Melichar, 1903); Scaphytopiini Oman, 1943 with one species Varta rubrofasciata Distant 1908 and lastly tribe Stenometopiini, Baker 1923 with one species Stirellus lahorensis (Distant, 1918).

Index Terms— Sugarcane, leafhoppers, vector, virus