

Insect Diversity Assessment of Maize Crop (*Zea mays* L.) by Using Sweep Net, Pitfall Trap and Plant Inspection Methods

Authors : Muhammad Naeem Mushtaq, Muhammad Arshad, Shahid Majeed

Abstract : Maize is known as queen of cereals because of its highest genetic yield potential and multipurpose characteristics in human being and animal diet. Maize crop visited by many major, minor, visitors and sporadic insect pests. This study was conducted during 2014 to evaluate the richness and evenness of these insect pests and their interaction with metrological conditions at University of Agriculture, Faisalabad. In this experiment, two localities were selected; one was treated with pesticide and second was untreated. Maize field visited by many insect pests. Those insect pests were collected by using three collection method: sweep net, pitfall trap and plant inspection. The data was collected weekly interval from August to October and statistically analyzed by using Shannon Index which showed the results of insect pest richness and evenness. The value of Shannon Index was higher with the increase in number of species and abundance of insects. *Camponotus nearcticus* was most abundant in sweep net and pitfall trap method while *Rhopalosiphum maidis* was abundant in plant inspection method. Temperature was negatively co-relate with the insect population in all three collection methods while the relative humidity and rainfall had varying results.

Keywords : abundance, evenness, maize, richness

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