

Effect of Pyrethrin Treated Nets on Tomato Pests Diversity and Abundance in the Nursery

Sang K. James (A100/10456/2013)

Abstract

Tomato is a popular vegetable in Kenya and is extensively grown by small-scale farmers. In spite of the economic benefits to the farmers, insect pests remain one of the most significant constraints to tomato production. Current insect pests control measures rely on pesticides despite the known hazards to human health and the environment. Repeated use of pesticides has also led to the development of resistance by pests. Therefore, it is important to evaluate other pest control strategies that are safe, effective and economically viable with the aim of minimizing the hazardous effects of insecticide residues. This study investigated the effectiveness of pyrethrin treated nets against tomato insect pests. This study was carried out at the university of Embu demonstration farm for three months period. A local variety of tomato, Riogrande®, was sown in the nursery. The study involved pyrethrin treated nets, untreated nets and the common farmers grass mulch shade. Each treatment was replicated three times. Insect diversity was calculated using the Simpson's diversity index. The mean numbers of pest population between treatments were subjected to ANOVA.