

Status of Guava Mealybug Infestations on Different Guava Genotype

Bikash Bhusal^{1*}, Suprabha Pandey¹, Sunil Aryal², Shuvechchha Khanal¹ and Surendra Lal Shrestha¹

¹National Horticulture Research Center/NARC, Khumaltar, Lalitpur, Nepal

²Horticulture Research Station/NARC, Kaski, Nepal

*Corresponding author's email: bhusalbikash2015@gmail.com

Abstract

Guava (*Psidium guajava* L.) is a very important fruit crop of Nepal which is highly rich in minerals like phosphorus and calcium. Among various insect pests, guava mealybug *Pseudococcus* spp. is one of the major limiting factor in its production. The use of excessive chemical insecticides not only effects natural enemies but also develop resistance to mealybug rendering those chemical ineffective. Use of resistant variety is better than using insecticide for its eco-friendly management. However, very few research were conducted to screen against guava mealybug. So, in this research we evaluate different guava genotype; Apple guava, Bari, Bangalore, KG 1, Pear shape and Illam selection against mealy bug on established orchard at National Horticulture Research Center (NHRC), Khumaltar. Three plant of each genotype were randomly selected and score (0 to 10) was given based on infestation of mealybug on plant twig, new leaf, old leaf and fruits on each observation. From this study we found that infestation was not significant during flowering and early fruiting stage (pea size fruit). However, infestation was found higher on twig of Apple guava, Bangalore Pear shape, Illam selection than Bari and KG 1 genotype. Similar result was found on new leaf, old leaf and fruits. Mealybug infestation was significantly lower on KG 1 followed by Bari than the other evaluated genotype. KG 1 could have potential to be grown in guava mealybug prone area. Furthermore, to ascertain whether mealybug could complete its lifecycle on KG1 or not, study should be conducted.

Keywords: Mealy bug, Apple guava, KG 1, Bari, Bangalore, Illam selection