Recent Trends in Agriculture, Food Science, Forestry, Horticulture, Aquaculture, Animal Sciences, Biodiversity, Ecological Sciences and Climate Change (AFHABEC-2018)

Effect of Nitrogen, Phosphorus and Potassium Application on Growth Parameters of Guava cv. Hisar Safeda

Shahroon Khan, Ashwani Kumar and J.R. Sharma

Department of Horticulture, CCS Haryana Agricultural University, Hisar E-mail: shahroonkhan25@gmail.com

Abstract—Guava (Psidium guajava L.) belongs to the family Myrtaceae and indigenous to tropical America. Guava is an ideal fruit for nutritional security. The fruit is in great demand in domestic as well as international markets and traded in more than 60 countries. Guava is exporting from India mainly to Saudi Arabia, United Arab Emirates and Nepal. Guava is very popular among rich and poor people due to moderate price, good taste and easy availability. Guava is one of the most important fruit crops of north India because of its high adaptability to wide range of climate and soil conditions. Nitrogen, phosphorus, and potassium are the major and essential nutrients for plant growth and development. The experiment was conducted at Experimental Orchard of the Department of Horticulture, CCS Haryana Agricultural University, Hisar during rainy season of 2015-16 and 2016-17. The height of plant was measured with the help of measuring pole up to the maximum point of height, ignoring only the off type shoots, if any and expressed in per cent increase. The pooled analysis reflects that the maximum increase in plant height (6.37%), plant girth (3.26%), E-W canopy spread (8.20%) and N-S canopy spread (8.04%) was obtained with the application of RDF 140% (966:280:336 g NPK/tree) which was significantly higher than all the treatments except RDF 120% (828:240:288 g NPK/tree). The canopy spread was more in E-W side as compared to N-S direction. Therefore, it is concluded from two years study that RDF 120% (828:240:288 g NPK/tree) was best dose for plant growth of guava cv. Hisar Safeda.

Keywords: Canopy spread, East-West, Plant height, Soil application.

ISBN: 978-93-85822-64-3 57-57