

Abstract

Fruits have vital importance in human's life and work as a key role in healthy life. Estimation of fruit yield is essential for the timely development and meeting the future specification of the country. The consistent estimation of yield procedures are required against the actual yield to cope with the globalization challenges in the world. Citrus is the largest production among all the fruits in Pakistan. Kinnow mandarin is contributing a large proportion to the total citrus production. Yield estimation of Kinnow mandarin is established by using all the ground information.

The major objective of this study is to examine the exclusive statistical descriptive study of citrus (Kinnow) on a Punjab level with various combinations of essential variables, which have significant affect on yield of Kinnow and never been studied in Pakistan yet now and that would be helpful for the farmers or growers to observe the factors affecting the yield and make the change in their growing polices for enhancing their yield.

In methodology the multiple regression technique is used for statistical yield modeling of kinnow, number of citrus (kinnow) and average weight of kinnow with all diagnostic checks to predict the yield for making future policies. The square root transformation technique for converting the non normal variance of the dependent variable to normal is used. Descriptive study with different combinations of explanatory variables is discussed to observe the impact on yield is studied.

The descriptive study of important variables like age of the plant, circumference of stem of the tree, DAP fertilizer, Urea fertilizer and Potash fertilizer, extra fertilizers, number of watering, number of leveling, number of ploughing, number of digging, mix crop, diseases and climatic variables like minimum and maximum temperature, humidity and rainfall from May to December are discussed to observe their impact on citrus yield and number of citrus balls with different combinations.