

ROOTSTOCK BREEDING FOR FRUIT TREE CROPS

RUPAL DHOOT¹, MEENAKSHI DHOOT² & VARUN KUMAR BADAYA³

¹Department of Genetics and Plant Breeding, Anand Agricultural University, Anand, Gujarat, India

^{2,3}Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology,
Udaipur, Rajasthan, India

ABSTRACT

The rootstock influences tree size, productivity, fruit quality, pest resistance, stress tolerance, and ultimately profitability. It also reduces juvenility and tree vigor; bring a much improved degree of uniformity and consistency to an orchard. Therefore rootstock is very vital component of a grafted tree and determines the success or failure of a commercial orchard. Rootstock selection offers a powerful tool for the sustainable intensification of fruit production because while the scion genotype can be used to select fruit properties, adaptation to water deficit and high salinity, tolerance to alkaline soils and susceptibility to pathogens (e.g. Fire blight in apple) can be influenced by the choice of rootstock.

KEYWORDS: Rootstocks, Mango, Citrus, Guava and Apple