

Effect of Different Media and Planting Time on the Cuttings of Cherry (Prunus Avium L.) Rootstock Colt Under the Agro Climatic Conditions of Temperate Region

Authors : Sajjad Ali Khan Sajjad Ali Khan, Gohar Ayub, Khalil Ur Rahman, Muhammad Sajid, Mumtaz Farooq, Mohammad Irshad, Haider Ali

Abstract : A trail was carried out to know the effect of different soil media and planting time on the cuttings of cherry (Prunus avium L.) rootstock Colt at Agriculture Research Institute (ARI) Mingora swat, during winter 2011. The experiment was laid out in Randomized Complete Block Design (RCBD) with split plot arrangement and was replicated three times. Soil media (Silt, Garden soil and Silt+Garden soil+FYM) were assigned to main plots whereas, planting Dates (1st Jan, 11th Jan, 21st Jan, 1st Feb, 11th Feb, 21st Feb and 2nd March) subjected to sub plots. The data recorded on sprouting percentage, shoot diameter cutting-1, number of leaves cutting-1, rootstock height (cm), survival percentage, number of roots, root length (cm), root volume (cm³) and root weight (gm) were significantly affected by different soil media. Maximum sprouting percentage (100%), shoot diameter (1.72 mm), number of leaves cutting-1 (76.74), rootstock height (104.36 cm), survival percentage (41.67%), number of roots (76.35), root length (11.28 cm), root volume (4.43 cm³) and root weight (4.64 gm) were recorded in media M3 (Garden soil+silt+FYM). A significant response to various planting dates were observed for most of vegetative and rooting attributes of cherry rootstock Colt. 1st January plantation showed maximum sprouting percentage (100%), shoot diameter (1.99 mm), number of leaves (81.46), rootstock height (126.24 cm), survival percentage (58.12%), whereas 11th January plantation showed more number of roots (94.43), root length (10.60 cm), root volume (3.68 cm³) and root weight (3.71 gm). Based on the results from the experimental work, it is recommended that cherry cuttings should be planted in early January in soil media (Silt+Garden soil+ FYM) for better growth and development under the agro climatic conditions of temperate region.

Keywords : soil media, cherry rootstock, planting dates, growth parameters

Conference Title : ICAACS 2023 : International Conference on Agriculture, Agronomy and Crop Sciences

Conference Location : Sydney, Australia

Conference Dates : May 11-12, 2023