



Research Paper

Article history :

Received : 11.11.2013

Revised : 15.03.2014

Accepted : 01.04.2014

Effect of rooting media and IBA (Indole butyric acid) levels on rooting and survival of AIR layering in fig (*Ficus carica* L.) cv. POONA under middle Gujarat agro-climatic conditions

■ P.P.N. REDDY¹, N.R. RAY, A.D. PATEL² AND J.S. PATEL²

Members of the Research Forum

Associated Authors:

¹College of Horticulture, Dr. Y.S.R. Horticultural University, Rajendrahagar, HYDERABAD (A.P.) INDIA

²Department of Horticulture, B.A. College of Agriculture, Anand Agricultural University, ANAND (GUJARAT) INDIA

Author for correspondence : N.R. RAY

Department of Horticulture, B.A. College of Agriculture, Anand Agricultural University, ANAND (GUJARAT) INDIA

ABSTRACT : An experiment was carried out at Horticultural Research Farm, Department of Horticulture, B. A. College of Agriculture Anand during *Kharif* season in the year 2012. The treatments comprised the combinations of rooting media *i.e.* soil, organic media (Vermicompost/Poultry manure) and water holding materials (Sphagnum moss/Coco peat) in the ratio of 60:30:10 g along with various IBA levels (1000, 2000 and 3000 mgL⁻¹) and compared with soil alone (control). The experiment was laid out in CRD with three replications. The air layers made with soil + poultry manure + sphagnum moss + 3000 mg L⁻¹ IBA showed early root initiation (8.73 days), minimum days required for bulk appearance of roots (20.80), highest number of primary roots *i.e.* 39.20 and 58.87 at 30 and 45 days, maximum secondary roots *i.e.* 155.93 and 250.73 at 30 and 45 days, maximum primary root length *i.e.* 16.53 and 17.48 cm at 30 and 45 days, maximum secondary root length *i.e.* 2.36 and 3.37 cm at 30 and 45 days, maximum fresh weight of shoot biomass *i.e.* 34.10, 35.96 and 43.53 g at 45, 60 and 75 days after planting of fig air layers, maximum fresh weight of root biomass *i.e.* 5.63, 6.63 and 7.73 g at 45, 60 and 75 days after planting of fig air layers, maximum dry weight of shoot biomass *i.e.* 16.49, 24.91 and 30.88 g at 45, 60 and 75 days after planting of fig air layers, maximum dry weight of root biomass *i.e.* 1.65, 2.13 and 2.81 g at 45, 60 and 75 days after planting of fig air layers, maximum survival percentage of air layers *i.e.* 90.93, 88.53 and 83.46 and number of new leaves *i.e.* 4.60, 6.53 and 8.86 at 45, 60 and 75 days of air layers in the poly bag after planting, respectively with highest economics (Net CBR 1:3.34).

KEY WORDS : Air layering, Rooting media, Organic media, Water holding materials, IBA, Fig

HOW TO CITE THIS ARTICLE : Reddy, P.P.N., Ray, N.R., Patel, A.D. and Patel, J.S. (2014). Effect of rooting media and IBA (Indole butyric acid) levels on rooting and survival of AIR layering in fig (*Ficus carica* L.) cv. POONA under middle Gujarat agro-climatic conditions. *Asian J. Hort.*, 9(1) : 1-5.