

RESEARCH PAPER

Effect of plant growth regulators on rooting in cuttings of fig (*Ficus carica* L.) cv. DINKAR

L.S. KHAPARE*, M.H. DAHALE AND R.B. BHUSARI

Department of Horticulture, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, AKOLA (M.S.) INDIA

ABSTRACT

In order to estimate the effect of plant growth regulators on rooting in cuttings of fig, the present investigation was conducted at main garden of Department of Horticulture” Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola during the year 2009-2010. For the investigation 14 treatment combinations comprising two type of cutting and six treatment of plant growth regulator with one control were used. The results of the investigation indicated that, among two type of cuttings, hardwood cutting recorded maximum root growth, percentage of rooted cuttings, survival percentage of rooted cuttings. In respect of plant growth regulators, cuttings treated with 2500 ppm IBA+2500 ppm NAA gave maximum root growth, percentage of rooted cuttings, survival percentage of rooted cuttings in both hardwood and semihardwood cuttings, thus fig can be propagated by hardwood cuttings treated with 2500 ppm IBA +2500 ppm NAA

Key Words : Cuttings, Plant growth regulators, *Ficus carica*.

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Fig (*Ficus carica* L.) is one of the most ancient fruits known to mankind which finds its mention in the Bible. It is thought to be a native to Southern parts of the Arabian Peninsula, Italy. It is good source of carbohydrates, including fibre. Fresh fruits are rich in calorie, protein, calcium and iron. Fig helps to maintain the acid-alkali balance of the body by very effective neutralizing excess acid. The fruit contains 3.02 per cent (dry-weight basis) total acids.

Fig is gaining more importance and preferred in dry land horticulture commercially cuttings are used for its multiplication, but very less research work has so far been done on propagation of fig by cuttings using plant growth regulator. As the soil and climatic conditions are more suitable for cultivation of fig, there is an ever-increasing demand for planting material in India. This has led to find out an easy and quick method of propagation. Considering these facts in view, the present study was carried out to investigate the effect of

plant growth regulators at different concentrations on rooting of cuttings of fig.

RESEARCH METHODOLOGY

The present investigation was carried out at the main garden of Department of Horticulture Dr. P.D.K.V. Akola during the year 2009-2010. The cuttings of fig (*Ficus carica* L.) cv. DINKAR used for this research were selected from 3 years old mother plant. Hardwood cuttings were taken from one year old shoots of 20-22 cm length and of about 1.0 to 1.5 cm diameter having 4-5 nodes each and semihardwood cuttings were taken from current season growth in the month of July. The basal end of the cutting was given slanting cut to expose maximum surface for effective rooting. There were 14 treatment combinations comprising of two types of cuttings and six concentration of plant growth regulator IBA (1000,2500 ppm),

* Author for correspondence

M.H. Dahale and R.B. Bhusari, Department of Horticulture, Dr. Panjabrao Deshmukh Krishi Vidyapeeth, AKOLA (M.S.) INDIA