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ashewnut is an important fruit of tropical and sub-
tropical regions of the country. India is supposed to
be the highest producer of this fruit in the world. Cashewnut (Anacardium occidentale L.), a member of the
family Anacardiaceae with the natural order Sapindales, is
an evergreen tree. In India, out of the total coverage, about 75
per cent area is on the West coast covering the states
Karnataka, Kerala, Goa and Maharashtra, while in East coast,
the states includes Andhra Pradesh, Orissa, Pondicherry, Tamil
Nadu, Tripura and West Bengal.

The uniform cashewnut trees, cv. VENGLURA-6 were
selected for the study, and on the selected tree shoots of
uniform age (1 year old), growth (50 to 60 cm length), and
thickness (0.8 to 1.0 cm diameter) were randomly selected for
air-layering. The experimental unit consisted of a single tree
with twenty layers in each treatment. The treatments were
arranged in Factorial Randomized Block Design with three
replications. Before application of IBA, ringing was done to
all shoots selected for experimentation. Such ringed shoots
were treated with various concentrations of IBA as per the
treatment on same day. Out of which such ringed layers were
wrapped with black polythene sheet for etiolation as per
treatment for ten days. Then after ten days, the black polythene
wrapping were removed and all the open ringed (etiolation
and unetiolated bunches) were wrapped with sphagnum moss
followed by transparent white polyethylene sheet with string,
and kept for rooting.

All the concentration of indole butyric acid (IBA) were
found significant in reducing the period for appearance of
first rooting over untreated control (I1). Indole butyric acid at
500 ppm (I2) was observed most effective in reducing the
rooting period (20.61 days), followed by IBA at 1000 ppm (I3)
which were at par with each other and the longest period (31.77
days) was recorded with treatment untreated control (I1) (Table
1). Indole butyric acid 500 ppm (I2) was observed most effective
in reducing the harvesting period (38.33) days, followed by
treatment I1 (IBA at 1000 ppm). Similar result was recorded by
Sen and Chakrobotry (1969). The longest period (38.33) days

Effect of different level of indole butyric acid on air layering
of cashewnut (Anacardium occidentale L.) cv. VENGLURA-
6

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ABSTRACT : In present studies, use of different levels of IBA on air layering of cashewnut reveals that
IBA 500 ppm was found significantly superior in minimum days (20.61) for appearance of 1st rooting,
days taken (29.52) for harvesting, per cent success (59.97), number of primary root (12.60), number of
secondary roots (23.86), number of roots (66.66) length of primary roots (5.25 cm), thickness of
primary roots (0.31 mm) per layer and survival per cent (46.95) after one month of detachment in
comparison to untreated control.

KEY WORDS : IBA, Air layering, Cashewnut

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