

SHORT SCIENTIFIC NOTES

Juvenile Growth Characters of Air Layers and Seedlings in four Cashew (*Anacardium Occidentale* L.) Cultivars

The primary advantages of orchards planted with clonal progenies are the early productivity and fairly uniform crop growth. Cashew stands raised from seeds manifest variation in both morphological and reproductive characters. It is possible to spot out seedlings of high yielding potential amongst the seedling progenies and natural stands of cashew. A comparative study of the performance of seedlings and clonal progenies of cashew made by earlier works have indicated the better performance of vegetative progenies over seedlings (Nayar and John, 1958; Sundar Rao, 1970; and Muddappa Gowda 1976). The observations recorded on juvenile growth characters of seedlings and air layers of our accessions planted in a trial in July 1977 at CPCRI Cashew Seed Farm, Shantigodu are presented here.

The trial has been laid out in a randomized block design with four replications, keeping seedlings and airlayers as major treatments and the four cultivars as sub-

treatments. The four cultivars are: VTH-11 (M-10/4; Vridhachalam, Tamil Nadu), VTH-35 (T. 40; Bapatla, Andhra Pradesh), VTH-150 (BLA-139-1; Annakkayam, Kerala), VTH-155 (Local-Vittal, Karnataka). Each plot consists of 12 air layers/seedlings per cultivar. Planting has been done in an undulated terrain on terraces at a distance of 8×8m. The soil is laterite. The average annual rainfall in the farm is 3500 mm.

Observations on plant height, spread, girth and numbers of leader shoots, laterals and flowered shoots were made on one year old trees and the data were analysed (Tables I and II). The differences between the air layers and seedlings in height, and production of leader shoots and laterals were significant. The differences for stem girth were insignificant. The seedlings showed increased height as compared to the layers. The air layers were significantly superior to the seedlings for the remaining characters (Table I). Air layers of all the four cultivars came to flowering while none had put forth any bloom

Table I. Growth characters in one-year old seedlings and air layers of cashew (mean values)

Type	Height (cm)	Spread (cm)	Girth (cm)	No. of leader shoots	No. of laterals	No. of flowered shoots
Seedlings	87.9	64.1	7.9	12	3	..
Air layers	76.5	78.9	7.2	17	5	2.0
SE	1.1	0.6	0.2	0.4	0.5	..
CD	4.6	2.7	..	1.7	2.0	..

Table II. *Growth characters in air layers of four accessions (mean value)*

Type	Height (cm)	Spread (cm)	Girth (cm)	No. of leader shoots	No. of laterals	No. of flowered shoots
VTH-11	92.9	79.7	8.2	16	5	3
VTH-35	84.4	75.6	7.5	15	4	3
VTH-150	71.0	72.4	7.3	13	3	1
VTH-155	80.9	58.0	7.1	14	5	2
SE	5.8	5.8	0.4	0.4	0.5	0.6
CD	..	12.7	0.8	..	..	2.7

of the seedlings. The four cultivars showed some significant differences among themselves (Table II).

The production attributes observed in air layers/seedlings in four genotypes during their juvenile stage could be correlated with their yielding potential when the entire

population of the trial come to production.

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Basal Wilt of Black Pepper and its Control*

During the 1976 South West monsoon period (June-September), pepper seedlings and rooted cuttings in the nursery were affected by a serious rotting. The fungus associated with this disease was found to be *Sclerotium rolfsii* Sacc. In August 1976,

the fungus was observed in a private garden in Nileshwar infecting an yielding vine and causing its death. This disease was subsequently observed in a few black pepper nurseries in North Kerala (Peruvannamuzhi, Chungathara and Panniyur). Chowdhury

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