

A Field Study on Propagation of Cashew (*Anacardium Occidentale*) by Air Layering

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Cashew air layers could be obtained all-round the year but with a degree of variation in rooting in different seasons. Under the conditions available at west coast of India, cashew trees put forth new flush from September onwards followed by emergence of inflorescence. Airlayering done during this period (when the trees are in flushing and blooming) gives better success than done when the trees are not in active growth phase. The trials conducted at CPCRI, Regional Station, Vittal in South Kanara District of Karnataka revealed that a high per cent of rooted shoots (88-91%) could be obtained within a period of 75 days duration when airlayering was taken up during March-April.

With a view to transferring the research findings for adoption in field scale, the air layering was done in large scale by the foresters in the forest cashew plantation at Kodiambady (Karnataka State Forest Department) situated about 10 km away from Puttur.

Technique

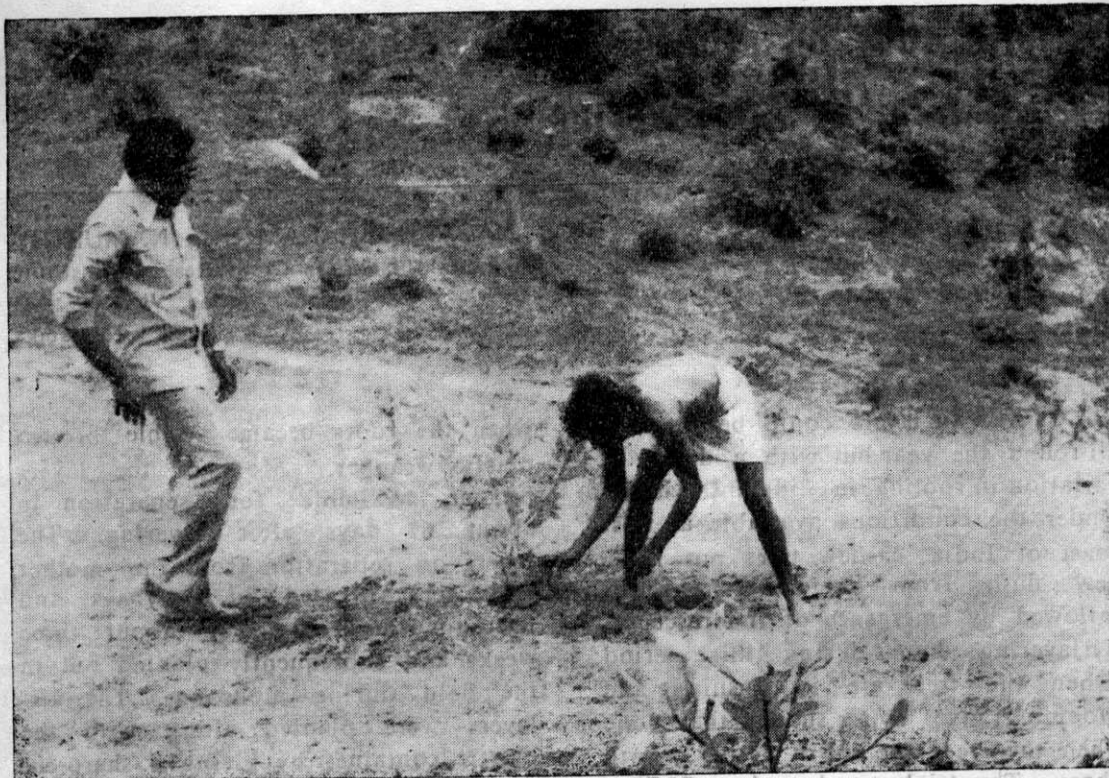
Air layering was taken up by the forest trained personnel in the forest plantation at Kodiambady in about 200 adult trees, utilizing 3,700 shoots during March 1978. Separation of rooted layers had commenced from the second week of May 1978. The rooted shoots were severed from the mother tree, as and

when the roots became visible through plastic wrapper. Most of the layers became available for separation in about 67 days after layering. The layers on separation from the mother tree were planted in polybags and left for hardening for about three weeks and subsequently planted out in the field during monsoon. The air-layers were planted along with the plastic container by giving a sharp cut to the bottom of the container. The percentage establishment of air layers was worked out, ten months after planting when they were in active growth with inflorescence in most of the layers planted.

Results

S. No.	Details of air layers	No.	%
1)	Number of layers made	3700	—
2)	Layers rooted & planted in poly bags	2150	58.1
3)	Survival in poly bags	1600	43.2
4)	Establishment in the field	965	26.1

Note: Out of 3,700 layerings made, nearly 700 shoots which had struck roots and awaiting severance from the mother tree were damaged due to strong gales blown on 3rd and 10th May 1978.



Cashew air layers plot established by the Forest Department of Karnataka in Koila Villaga, Puttur. The Regional Forest Officer, Puttur observing an established layer.

Conclusion

Although the ultimate output of air layers being nearly 30 percent of the total layers made, the results obtained in field scale could be inferred as encouraging in as much as the layering was attempted for the first time by the foresters in the Puttur division of South Kanara District of Karnataka. Further, the experience gained can be well utilized in propagation of any high yielding tree identified in plantation by vegetative means.

The airlayers planted would serve as progeny for further supply of high

yielding planting materials by the state forest department of Karnataka.

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