HOW TO ACHIEVE SUCCESSFUL MANGO CLEFT GRAFTING.

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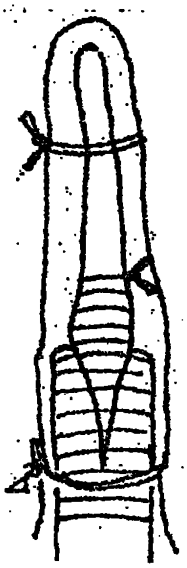
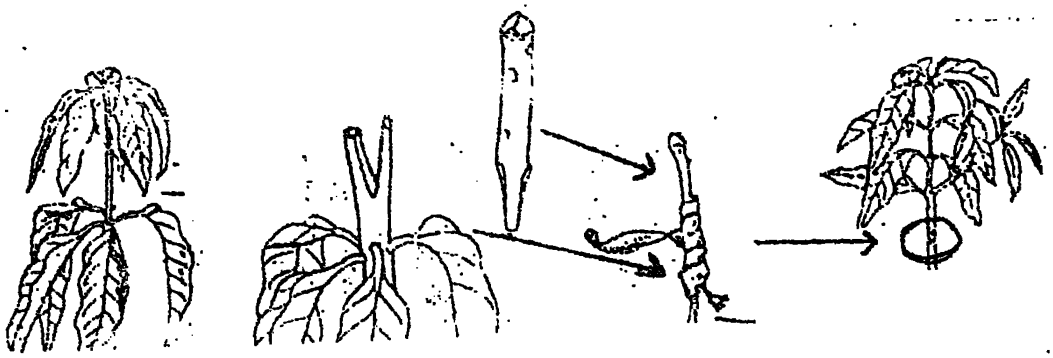
Budding and grafting are very widely used in propagation of of mango. Skilled labour is required for success of the operation. Compared to budding, grafting (shoot) is more convenient to farmer. But in the Dry Zone according to fruiting cycle seeds are available during the period of November to December. Planting of seeds commence when seeds are available and 4 - 5 months are required for plants to attain the budding stage. When the plants are at buddable stage climatic conditions are very dry and the velosity of wind also is very high. Due to these adverse climatic conditions percentage of success of grafting is very low.

An Observational study was carried out at Agricultural Research Station at Vanathavillu to find out a suitable technique to get a higher percentage of success from grafting. The normal practice is to cover the grafted plant with a piece of dry banana pseudo stem. But very high wind velocities can damage the grafted plant inspite of such protection.

The following treatments were used in this study.

(a) Control treatment. Scion not covered.
(b) Scion covered with dry banana pseudostem.
(c) The scion completely covered with budding tape.





Month of Grafting.	No. Grafted.			No. Success			Percentage Success.		
	A	B	C	A	B	C	A	B	C
84 July	25	25	25	5	12	20	20	48	80
85 July	20	20	20	4	11	18	20	55	90
86 July	30	30	30	5	13	26	16	43	86
Average percentage success:							18	48	85

Method C gave a higher percentage of success, indicating that it is the most suitable method of grafting. This method would have given good results due to lesser damage from wind.

Methodology

Select the wild variety of stock plants which are in buddable stage. The stock is topped at a height of 20-25 cm and split vertically from the top to a depth of about 3 - 4 cm. Selected scion (from a desired plant) which is carrying dormant buds, is then shaped into a wedge at the base, and inserted into the cleft **made in the stock.** About 2.5 cm wide polythene tape could be used as a budding tape. Tape is firmly **wrapped** starting from stock (15 cm from the ground level) to scion till the scion is completely **covered.**

Buds of the scion start to sprout 10-20 days after grafting. This sprouting is easily observed **due to** the transparent nature of the polythene tape. If sprouting is observed open the terminal bud and keep the rest of the scion covering with polythene. When the scion is producing leaves open the scion and remain the union cover with polythene. At the stage of 2-3 leaves, budding tape at union could be released. The time taken for whole procedure is about 30 days.