



Harvesting of Rubber

[Article ID: SIMM0312]

¹Ravi Pujari, ²Shivappa. M. Karadi, R. P & ³Chetan. T

¹Assistant Professor of Horticulture College of Agriculture, Bheemaranagudi

²Assistant Professor of Horticulture College of Agriculture, Bheemaranagudi

³Scientist Horticulture, KVK, Raddewadagi



Tapping

- Harvesting in rubber is known as **tapping**.
- Tapping is the periodical removal of thin slices of bark to extract rubber latex.
- It is the process of controlled wounding with the shaving of bark removed. The latex vessels are found in the inner layer of soft bast of the bark.



The latex vessels are

concentrated in the soft bast arranged in a series of concentric rings of inter connecting vessels.

- Tapping is done by skilled men.

- While tapping, the cambium should not be damaged as otherwise callus formation will take place causing swellings.

- The rubber trees attain tappable stage in about seven years. The best season for tapping is March or September depending upon girth of the tree.

- The latex vessels in the bark flow at an angle of 32° to the right and therefore a cut at higher level from the left to right has to be carried to facilitate opening of a large number of latex vessels.

- Tapping is done in the early morning; late tapping will cause reduction in the flow of latex.

Tapping Systems & Intensity

Sl.No	Tapping Sytems	Intensity	Remarks
1	s ₂ d ₂ - Half spiral, tapping alternate days for 6 months and rest for 3 months.	100 %	Recommended for budded plants.
2	s ₂ d ₃ - Half spiral,	67 %	Recommended for clonal plants.

Types of Tapping Knives

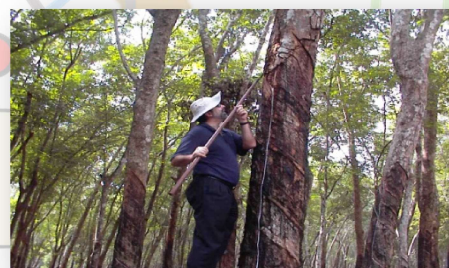


	tapping at every three day for 6 months and rest for 3 months.		
3	s ₂ d ₁ – Half spiral daily tapping.	200 %	Followed by small growers but it favours brown blast incidence and causes early deterioration of trees.



2. Slaughter tapping

- ✓ Intensive tapping prior to felling of the old trees is called slaughter tapping. It is often done at higher levels sometimes even on branches with the help of ladders and not on the usual renewed bark levels.
- ✓ As the objective of slaughter tapping is to extract as much as latex as possible from the available bark, no consideration is given to the technique, intensity or standard of tapping.



- In South India, rubber trees shed their leaves during December- January & immediately again they put forth the new leaves and flowering.
- During this period the trees are given rest since the yield of the rubber will be poor if tapped. The yield of the rubber steeply increases year by year and the peak is reached at 14-18 years after planting.
- ✚ Then it slowly declines . After 40 years it may not be economical to maintain the trees.
- ✚ The latex yield will vary with the clone, age of trees, fertility of soil, climatic conditions and skill of the tapper.

Types of Tapping

1. Puncture tapping

- ✓ Puncture tapping or micro tapping is basically an incision method of tapping. Micro tapping is done with a small needle on a vertical band of stimulated bark.
- ✓ The length of the strip is usually limited to 60 cm and the number of punctures made may be 4 or 5.

Rain guarding

- ✓ By fixing a polythene rain guard to the trunk of the tree above the tapping panel, tapping can be carried out during rainy season also
- ✓ Growth regulators like 2,4 dichloro phenoxy acetic acid and 2,4,5 trichloro phenoxy acetic acid are applied through vegetables oils these are applied in a broad band round the trunk under the tapping cut of the rubber tree many proprietary products like stimulex, flow more, ready rub containing the above

growth regulators are available in the



market as rubber stimulant

Composition of Latex

Contents	Percentage (%)
Rubber	30-40
Protein	2-2.5
Resin	1-2
Sugar	1-1.5
Water	55-60

Generally used anti-coagulants

- Ammonia, Sodium sulphate & Fomalin.
- Ammonia 0.7% is the most popular latex preservative.

Yield of Rubber

- In South India, the annual yield of rubber is about 375 kg/ha from seedlings where as budded plantations yield about 900-1000 kg /ha.

References:

- Shanmugavelu, K.G., Kumar, N. & Peter, K.V., 2002, Production Technology of Spices and Plantation Crops.
- Anon. (1965). Seed Gardens for Estates. In: Planters Bulletin of the Rubber Research Institute of Malaya, 81: 255-260.
- Gomez, J.B. (1982). Anatomy of Hevea and its influence on latex production. Malaysian Rubber Research and Development monograph, No.8.

Jayarathnam.(1992). Pests. In: Natural Rubber: Biology, Cultivation and technology (Eds. M.R. Sethuraj and N.M.Mathew). Elsevier, Amsterdam, pp. 360-369.

Karthikakuttyamma, M., Joseph, M. and Nair, A.S. N. (2000). Soils and nutrition. In: (Eds. P.J. George and Jacob,

C.K.). Natural Rubber: Agromanagement and crop processing. Rubber Research Institute of India, Kottayam, India, pp. 170-198.