Estimated cost of cultivation (₹ / 5 Nos. of trees)

| Common cost of cultivation | | | | |
|----------------------------|--------------------------------|--------------------------|----------------|----------------------------------|
| SI. No | Operation | Inputs (man- days) | Rates/ Unit | Cost (₹ / 5 Nos. of trees) |
| 1. | Labour for air layering | 1 | 120 | 120 |
| 2. | Labour for transplanting | 1 | 120 | 120 |
| 3. | Inter-cultural man- agement | 1 | 120 | 120 |
| 4. | Harvesting | 1 | 120 | 120 |
| 5. | Miscellaneous | | 150 | 150 |
| | | | Total | |



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INDIGENOUS METHODS OF LITCHI PROPAGATION IN MEGHALAYA



Bio-Resources Development Centre 5½th Miles, Upper Shillong Meghalaya-793009

Indigenous Air Layering Method at Umsyiem:

UmSyiem is a village located at the Indo-Bangladesh border of East Khasi Hills District, 80 km from Shillong. It falls under the tropical agro-climatic zone of the state. The climatic condition of this area is highly suitable for cultivation of litchi and areca nut which are the main commercial crops grown in its vicinity. Brief history about litchi in the village:

It was introduced during the 1930's by Mr. Duncan, a missionary during the British Rule. The missionary was residing at the local pastor house where he planted the first litchi seedling which was eventually multiplied throughout the village. The first progeny which was propagated from this parent plant still exists till this present day. There are four types of litchi varieties, namely:-

- a). Sohmanir Bilat -
 - Spherical Shape fruit
- b). Sohmanir Khlemshyieng
 - Seedless variety
- c). Sohmanir Bri (farm)
 - Triangle shape fruit

d).Sohmanir Shrieh

- Elongated shape with big seed







Fig: a).Sohmanir Bilat b). Sohmanir Khlemshyieng c). Sohmanir Bri d).Sohmanir Shrieh

Air layering method in Litchi chinensis:

This technique has been developed by the ancestors of the village themselves which has been shared for generations both verbally and practically. Their method has been proven to have a higher establishment rate of the plant in the field. This indigenous air layering method is usually practiced during the month of March to April and is being practiced as follows:-

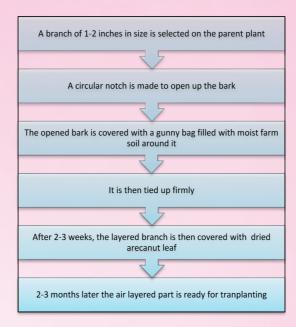


Fig: Indigenous Air Layering Method in litchi by UmSyiem village

After two to three months the air-layered portion is ready to be detached from its mother plant. The planting period of litchi plant is during the month of July-August. The area for planting should be in a slightly sloping land with good drainage. Deep sandy loam soils are generally more suitable for this fruit. While planting, the litchi plant should be positioned in a slanting orientation and the soil around the layered plant must not be hardened by trampling upon. This is very important for its successful establishment in the field. The spacing is generally 8 to 10 feet from plant to plant. No fertilizers are being added in the field instead churning of soil and heaping up of local farm biomass around the plant is done. Rain water is the only water source to the litchi orchards with no proper irrigation system. Litchi is mainly intercropped with arecanut and betel leaves. Inter-cultural management practice such as weeding is done twice a year. Initial fruiting is generally observed at 7 to 8 years after transplanting. The average fruit yield of medium sized litchi plant is around 80-120 kg / tree. Marketing of the products extends up to Ri-Bhoi District, Jowai, Ladrymbai, Umkiang, Shella, Shillong, Pynursla.

Facts: The fruits grown in the village vicinity are far sweeter in comparison to the farm produced fruits.

