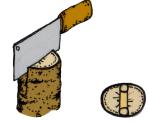
### C. CLEFT GRAFTING

Cleft grafting is the most popular method in rambutan used by propagators in the Philippines because it is less wasteful in terms of propagating materials.

Choose a healthy seedling rootstock of about 6-8 months old or is 7-10 millimeters in stem diameter.



2 Cut off the shoot of the rootstock and make a vertical cut of about 2.0-2.5 centimeters making a V-shaped opening for the scion.

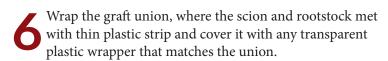


Get a scion from a selected outstanding fruit tree with stem size that is approximately matching with the rootstock material.



Cut the basal end of the scion into a gently sloping wedge of about 2 centimeters long.

5 Insert the scion onto the opening of the rootstock.





The grafted plant is ready for field planting after six months.



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Scaling-Up of the Second Cordillera Highland Agricultural Resource Management (CHARM2) Project

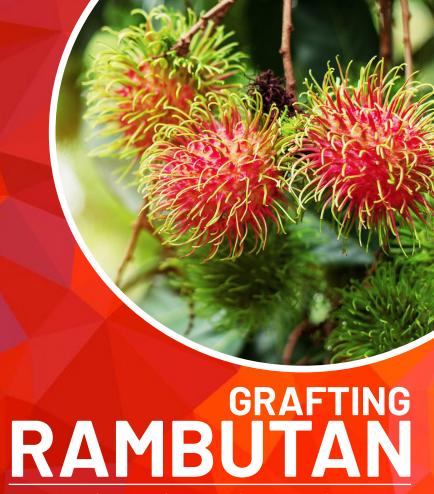
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A techno-guide to rambutan production

Rambutan (Nephelium lappaceum Linn.) is a medium-sized tropical fruit native in Malay archipelago and has spread all over the countries in tropical Asia. Rambutan came from the Malay word 'rambut' which means 'hair' due to its hair-like fleshy pliable spines skin. The fruit flesh is sweet and translucent with color either whitish or very pale pink. It is also a popular garden fruit tree and propagated commercially being one of the best known fruits of Southeast Asia. Aside from eating rambutan fresh, it can also processed into jam, jelly, and sweet among others.

Rambutan may be propagated through sexual or asexual propagation. Asexual propagation is the use of the vegetative plant's parts for propagation like grafting, budding and marcotting among others.

For rambutan, the use of grafting is the most recommended by commodity-propagators.

# BENEFITS OF ASEXUAL PROPAGATION

(www.ndsu.edu)

- To preserve the desirable characteristics of a particular plant;
- To propagate plants that do not produce viable seeds;
- To propagate plants that produces seeds that are difficult to germinate or has a very short storage life, and
- To bypass or avoid the young/ adolescent stage of plant growth wherein the plant do not yet flower or bear fruit.

Grafting is the process of joining together a rootstock and a scion until they unite permanently. The rootstock is the plant, usually a seedling, in which the scion is inserted. The scion is any plant part, usually a stem, taken from the desired plant. There are three methods used in grafting rambutan namely cleft grafting, whip and tongue grafting and approach grafting.

## A. WHIP AND TONGUE GRAFTING

It is a graft prepared by cutting both the scion and the rootstock in a sloping direction and slipping them together through a tie and wax.



Find a scion that is of the same size or thickness with that of the desirable rootstock material.



Make an upward slanting vertical cut to the rootstock using a grafting knife. Make also a downward slanting vertical cut to the scion leaving at least 2-3 buds on the scion wood. Make sure that the scion and the rootstock have matching cuts.



Unite the scion and rootstock. Wrap the graft union with a grafting tape.

Afterwards, apply grafting wax to the graft union to keep it from drying. Do not take off the tape after the shoots start coming out, it will degrade on its own.



Cover the scion and the union with a transparent plastic wrapper to conserve moisture and prevent it from drying up. This can be removed when there are already buds sprouting.

## **B. APPROACH GRAFTING**

The distinguishing feature of approach grafting is that two independently growing, self-sustaining plants are grafted together. This self-sustaining characteristic of both plants which are to be grafted insures survival of both because of their active growing condition and the absence of time limitation required for the healing of the graft union to occur before the dependent scion (top portion) dies from lack of sustenance.



Select the desired growing plant as scion and desired seedling as rootstock for grafting.



Position the rootstock seedling near the stem of the scion growing plant. Make sure that the chosen stems for union are of the same size. Peel surface of the stems where union is to occur and make sure that they are aligned with each other.



Unite the peeled surfaces of the plant materials properly. Bind tightly the union of the two peeled surfaces with budding or electrical tape. Wrap completely the area where the two peeled areas are in contact with plastic covers.



After the parts are well united in 4 weeks or more, the grafted union can now be removed from the growing plant by cutting the excess parts several inches below and above the graft union.