

What is Air Layering ?

*Hommaya Gurung
plants a guava
seedling made by air
layering.*

Everyone likes to eat tasty fruit. And everyone who plants an orchard looks forward to tasting the fruits of their work. It is our responsibility to plant fruit trees, which give the family nutrition as well as increasing farm production. So people want to plant fruit trees, even those with just a little land. There are many ways that farmers can grow good quality fruit trees at home at very low cost. The more methods are known, the more choices farmers have to improve their farm production.

In this chapter we talk about another easy and successful method of propagating fruit trees, which is called *Air Layering*. Air layering is a simple way of propagating fruit tree seedlings from their branches.



Why do Air Layering ?

There are 2 problems with planting fruit trees from seed. The first is that a tree grown from seed will take a long time to produce fruit. It may take 8-10 years. The second problem is that although the seed may be taken from a very good tree, producing excellent fruit, the new tree may not produce good fruit. By air layering a tree, we can guarantee that it will produce fruit sooner, and the fruit will be as good as the tree from which the branch was taken.

Species which can be Air Layered

Most of the citrus varieties - orange, lemon, lime, grapefruit, kumquat, etc. Also, pomegranate, lychee, guava, star fruit, custard apple, plum, and pear. There may be other varieties that you know in your local area.



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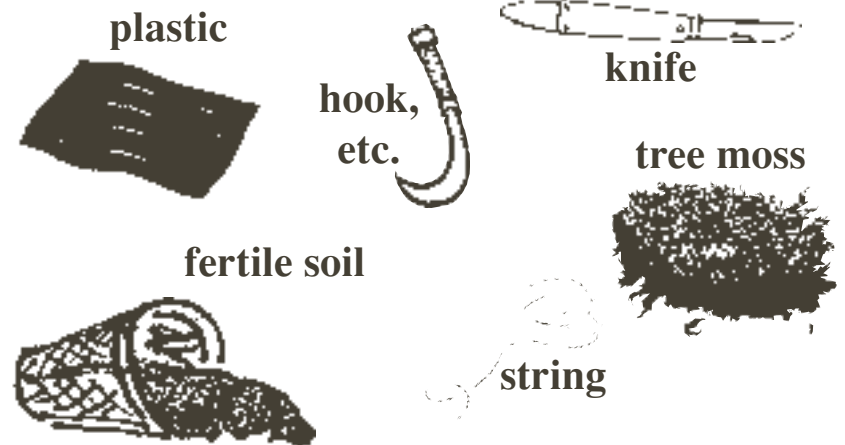
How to do Air Layering ?

Time to do Air Layering ?

In low-lying, hotter climates, air layering can be done from late winter through to spring. The higher and cooler you go, normally the later air layering can be done. The season can go on through spring and even into early summer. The time to do air layering is normally the same time as when fruit trees start to grow new leaves.

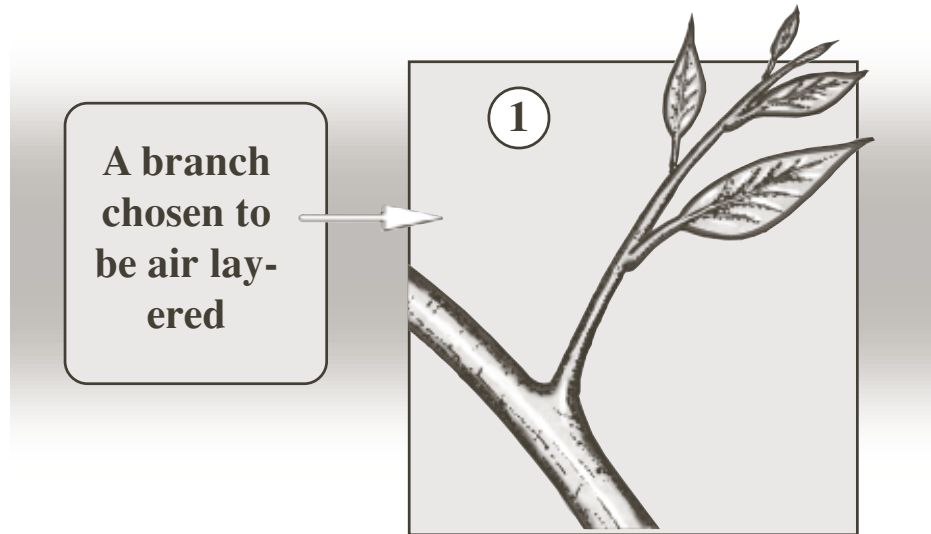


Materials Needed to do Air Layering

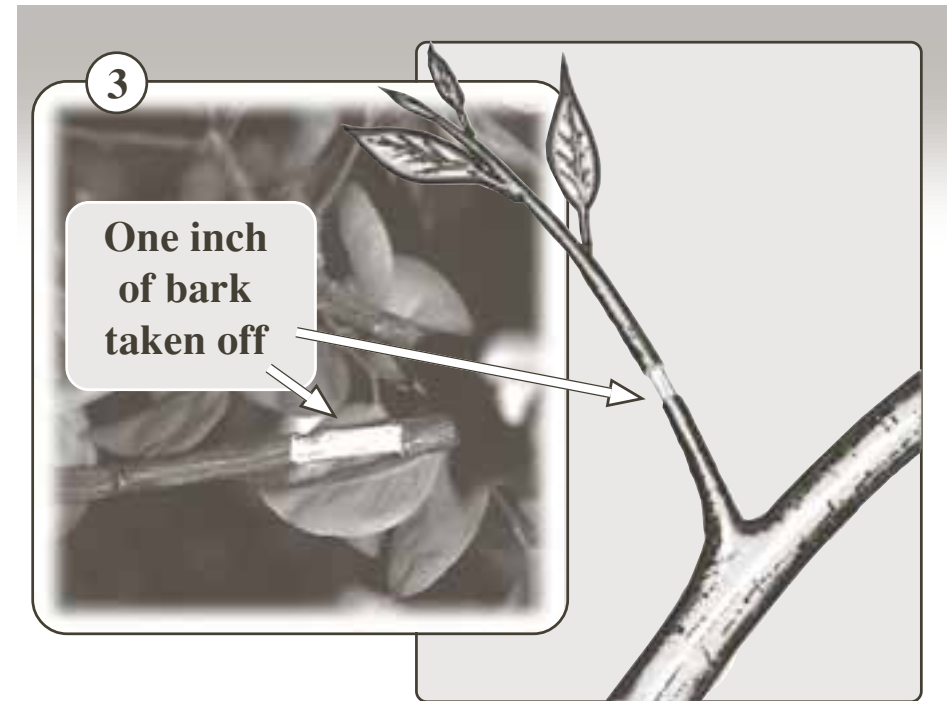
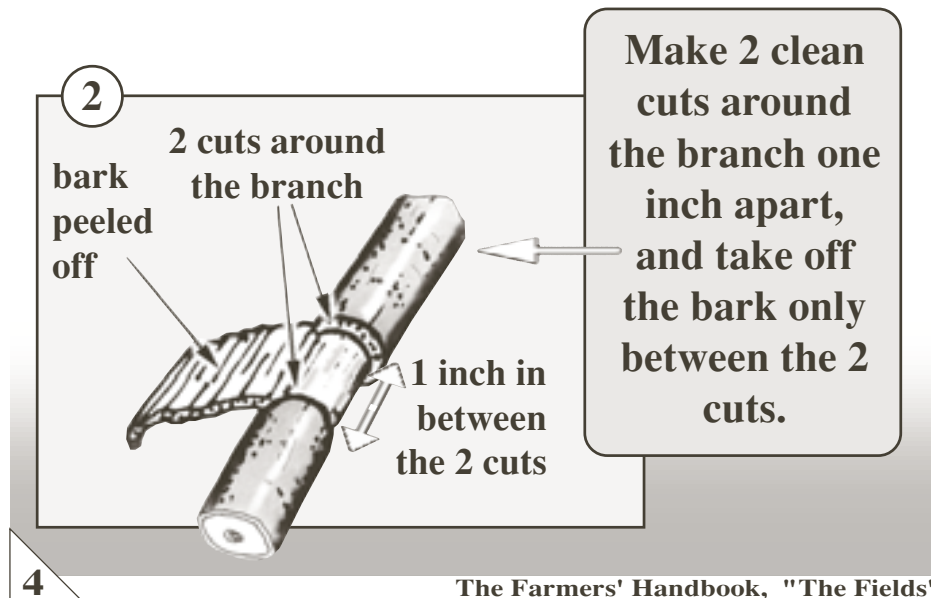


Choosing the branch to air layer

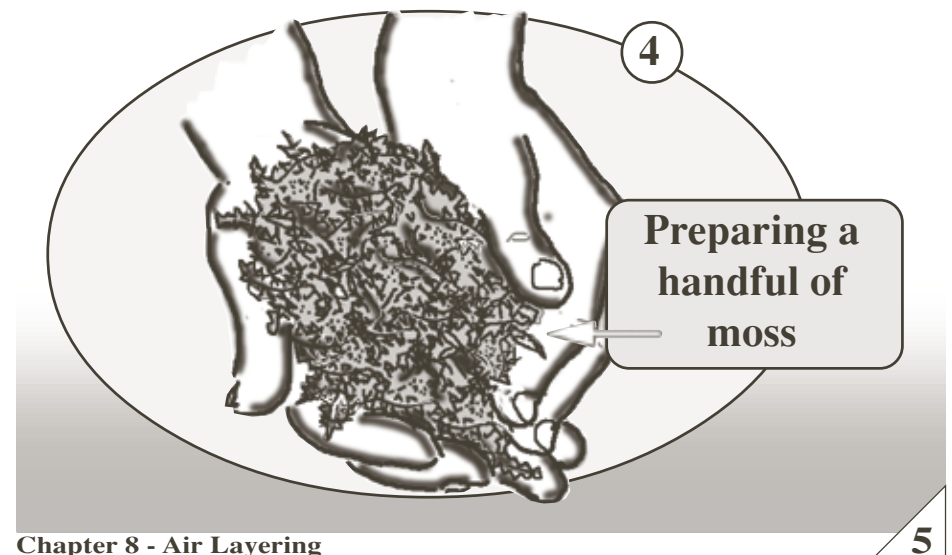
The branch to be air layered should be healthy and free of disease, and at least one year old.

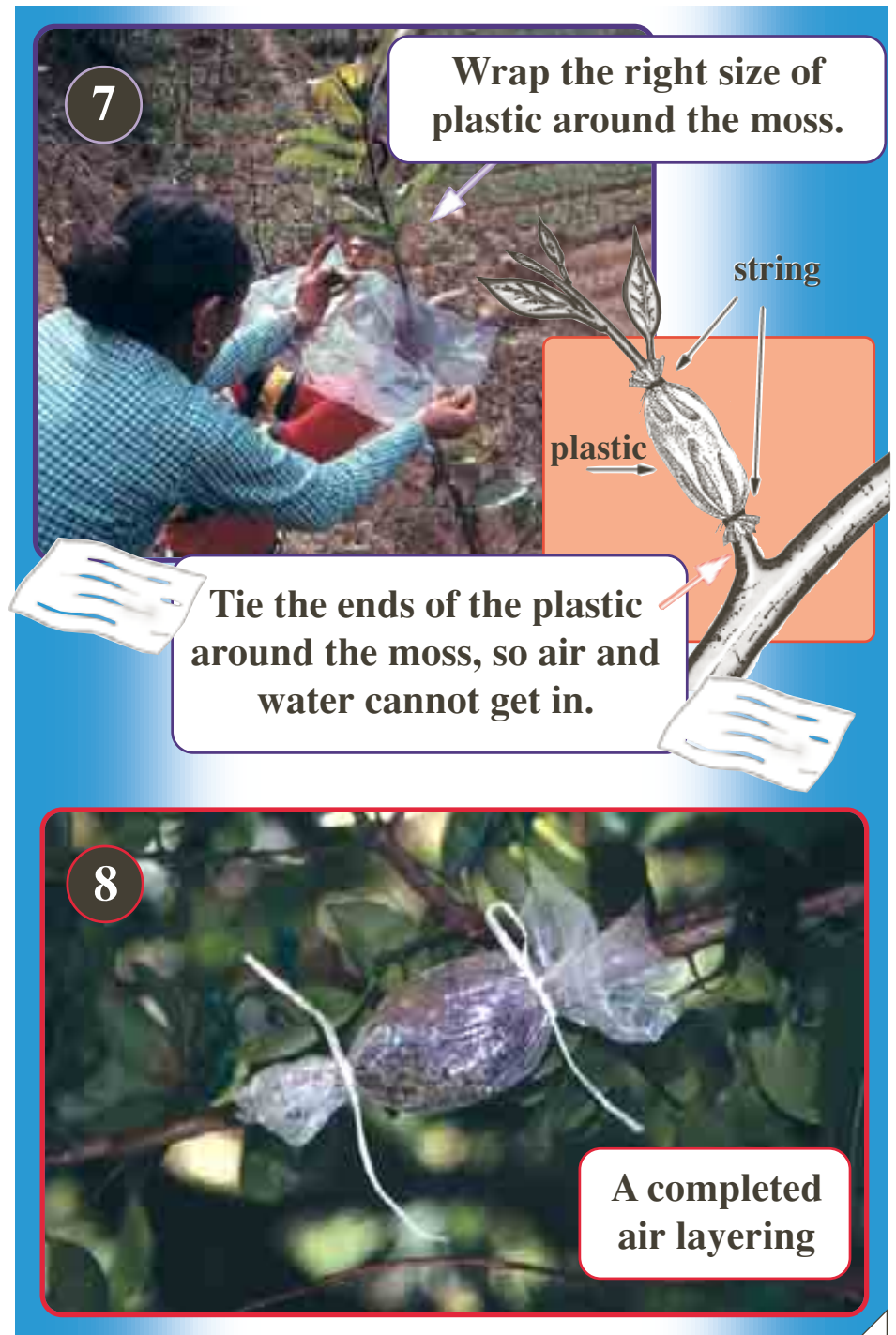
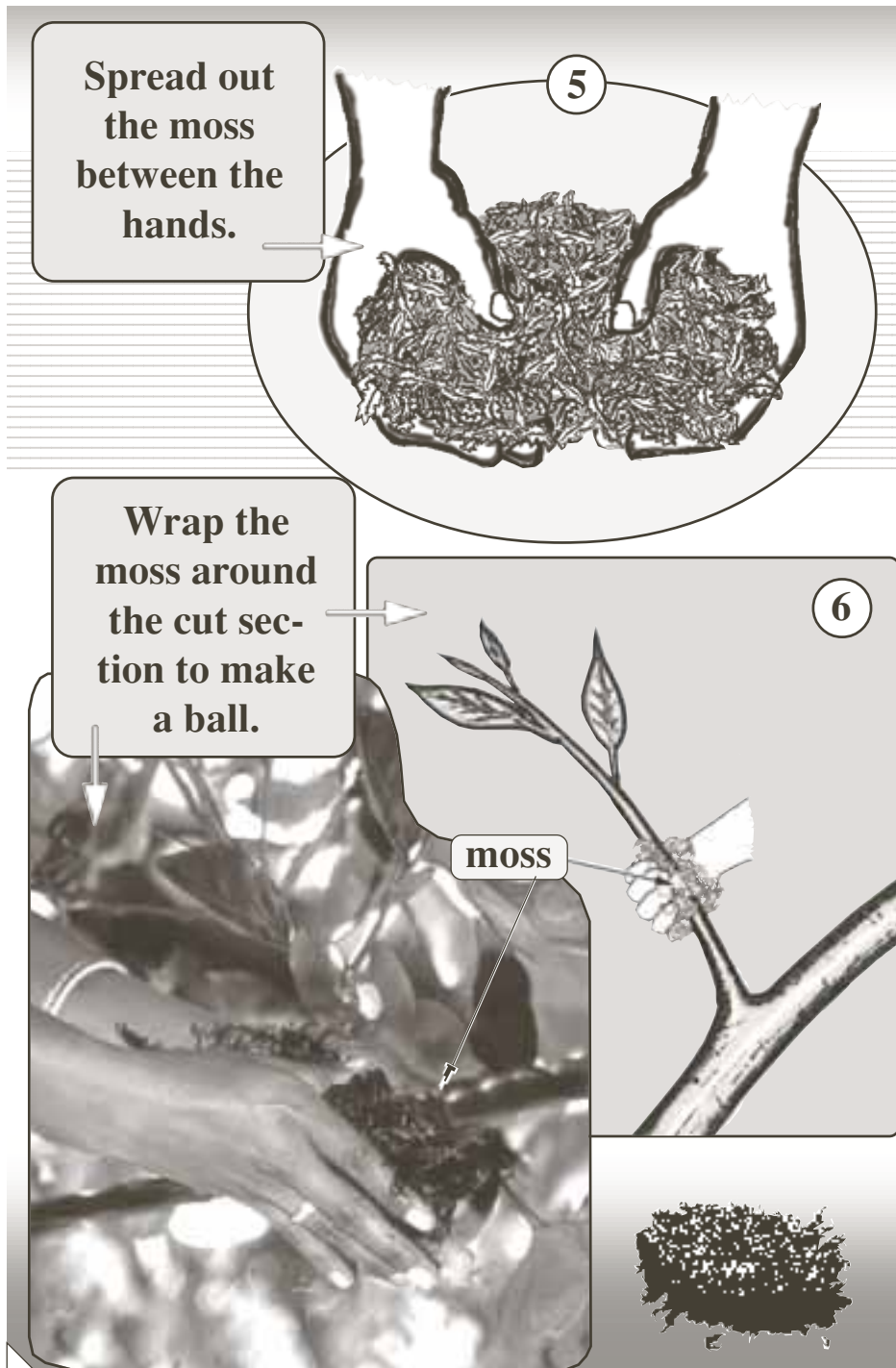


Then, away from the tip, cut the bark from around the stem of the branch.



After removing the bark, wrap around a handful of tree moss, or a ball of soil mixed with ash and cow dung.





When air layering, always make sure the end of the plastic is pointing down, otherwise water can get in, and the air layering may fail.

The branch is then planted in the summer, 6-8 weeks after binding.

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Inside the plastic, white roots can be seen.

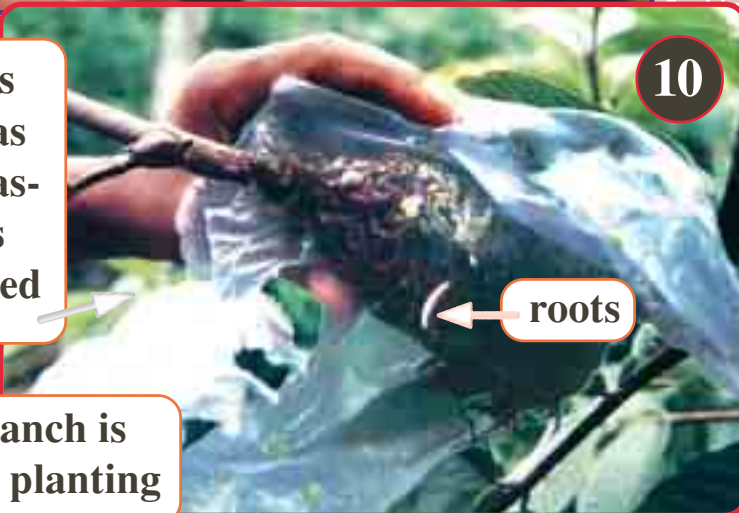


Roots seen as the plastic is removed

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roots

This branch is ready for planting



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To plant the air layered branch, cut the branch just below the moss ball



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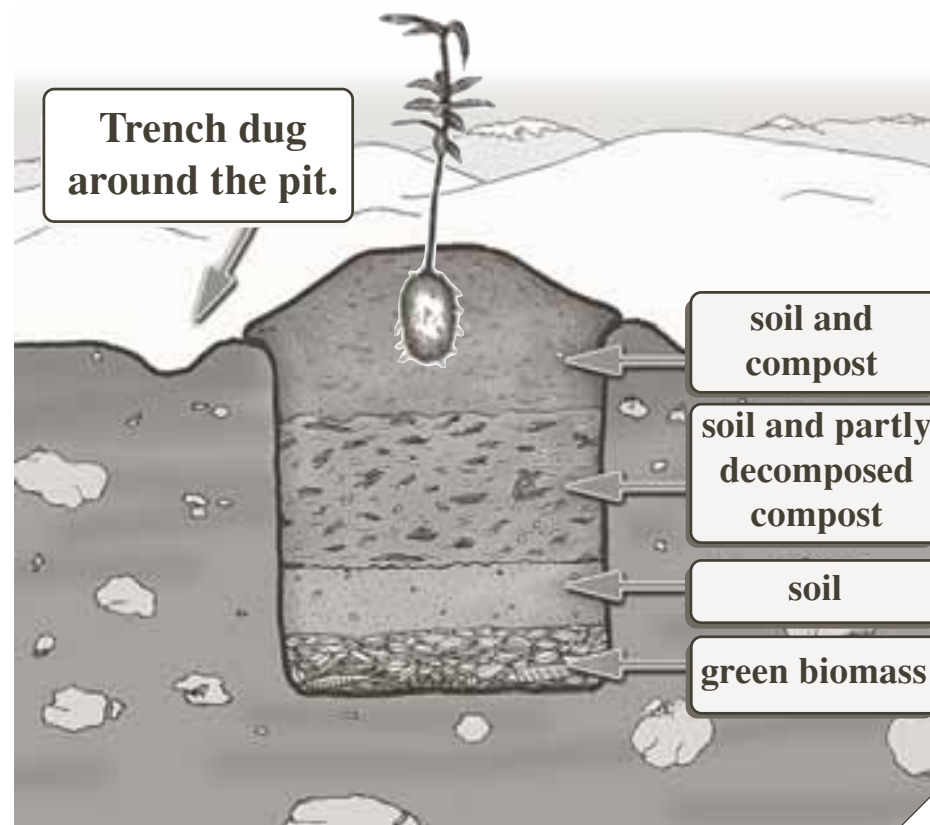
Before cutting and transplanting, make sure the place to plant the seedling is prepared

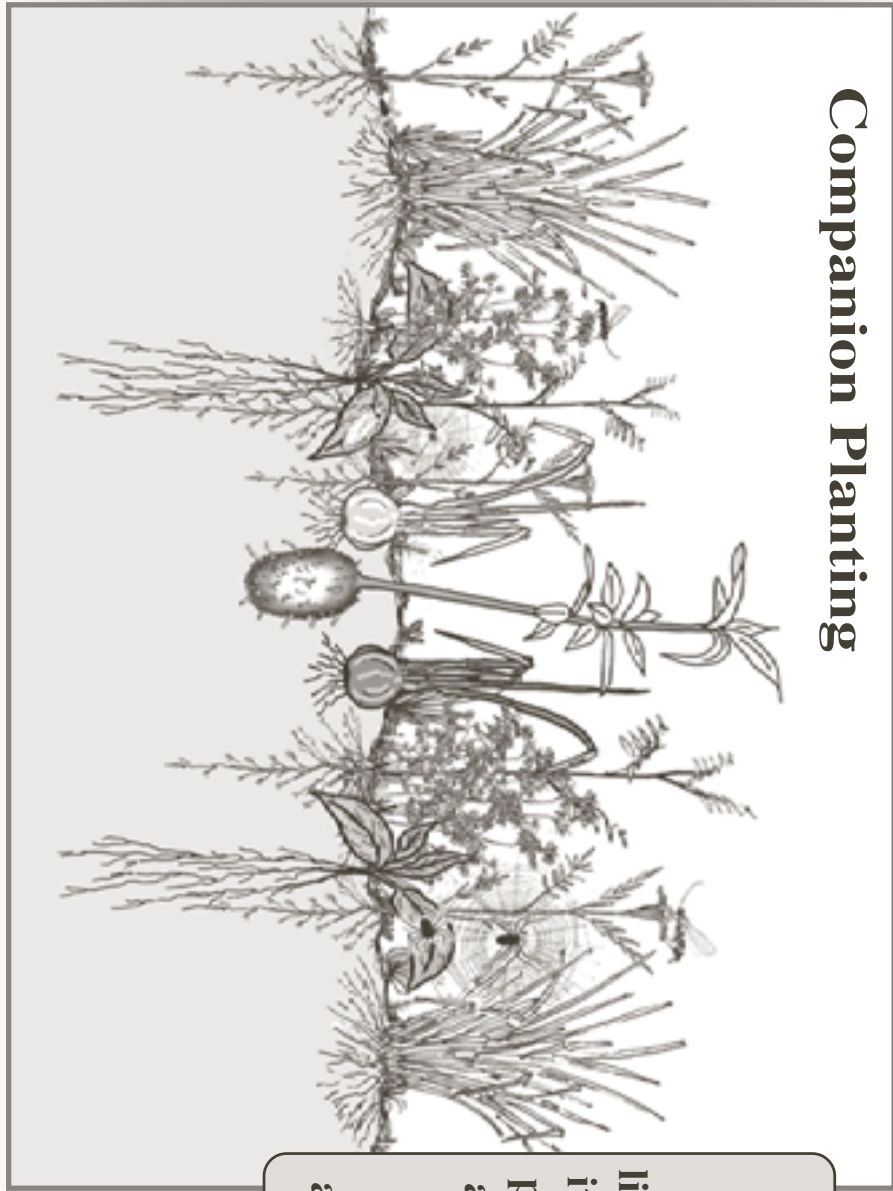




Planting the branch

- Dig a pit a metre deep and a metre wide.
- Fill the pit as shown in the picture below.
- Carefully plant the new seedling, taking care not to damage the roots, and cover with soil just above the moss ball.
- Put a thick mulch around the seedling.
- Water well into the ditch around the pit.
- Plant companion plants around the seedling, such as garlic, onion, marigold, comfrey, basil, coriander, nasturtium, wormwood, tansy, lemon grass, etc. More information about this is given in the *Fruit Tree Planting* chapter.





Companion Planting

After planting the seedling, mulch it well and plant suitable companion plants around it.

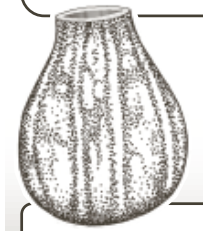
Maintenance

How to care for an air layered seedling

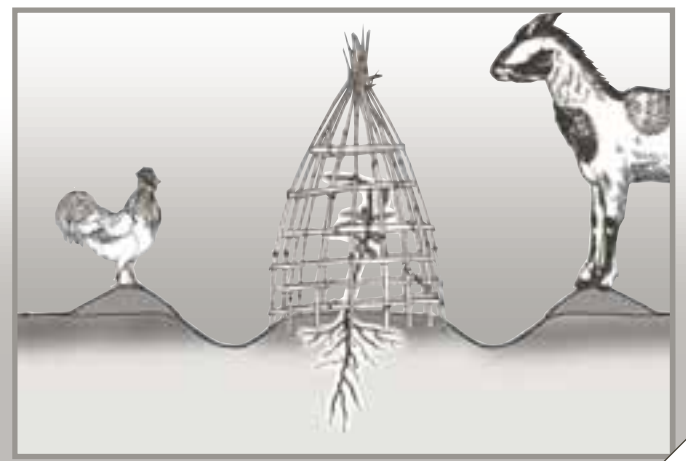


Put water and compost only in the trench around the seedling

A good way of irrigating the seedling is given in the *Fruit Tree Planting* chapter.



Protect the seedling from livestock.



Farmers' Experience

Mrs Pabisara Gharti

From Nepal, Surkhet district, Gumi - 6, and a member of "Peoples's Awareness" women's group, Mrs Pabisara Gharti has experience with Air Layering on her own land. Now let's hear about her experience.



Mrs Pabisara Gharti and her air layered orange

“ I learned about air layering from the Homestead Programme (JPP). To make the cutting, I peeled the bark from around the branch, covered it with a ball of moss, and wrapped it in plastic. Easy. Roots grow from the cut section in about 2-3 months. Then, I cut the branch and planted it with its new roots. I made the air layering in February, and planted it out in June. A seedling made in this way fruits much quicker than when planted from seed. I found this method easier and more successful than other methods, so we've been planting lots of fruit trees made this way, and will be planting more this year. Why shouldn't everyone do this type of work, that is easy and gives good benefits ? ”

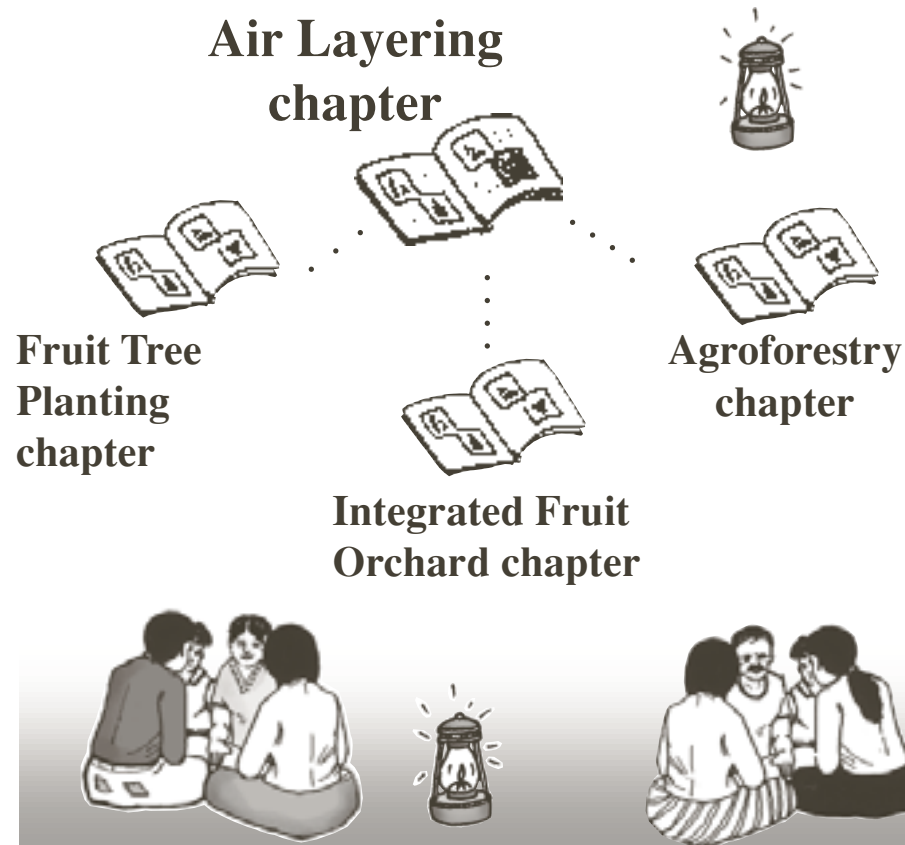


Read On !



Subjects Related to Air Layering

This chapter provides enough information for you to be able to do your own Air Layering on fruit trees. However, this information is also linked to other methods. For extra benefits let's read, learn and practice from other related chapters.



Related Subjects

Fruit Tree Planting chapter

After raising good seedlings in the fruit nursery, if they're not planted well all the work can go to waste. Information about more productive planting is given in this chapter.



Integrated Fruit Orchard chapter

Information on how to plant fruit trees with various other multi-purpose trees to give more and faster benefits for less work is given in this chapter.



Agroforestry chapter

Farmers can get many benefits from planting trees on their land, but you can't plant them just anywhere. In this chapter, learn how to integrate trees on the farm without affecting your crop production.

