



What is Fruit Tree Planting ?



Farmers' Handbook "The Fields", Chapter 6 - Fruit Tree Planting

Fruit is a store of goodness. It is juicy, tasty and nutritious, and it holds vitamins essential for our health and well being. So it's our duty to plant fruit trees. All over the world people have planted fruit trees, since early times. Even if people have only a small piece of land they show interest in planting fruit trees. But if you don't have the skills and knowledge to plant and care for fruit trees they can die, or at best be less productive. So all the effort that went into acquiring and planting fruit trees goes to waste.

In this book we can learn about how to plant and maintain fruit trees to get the best production using local resources and with minimum work.



Comfrey and garlic as companion plants under a young apple tree

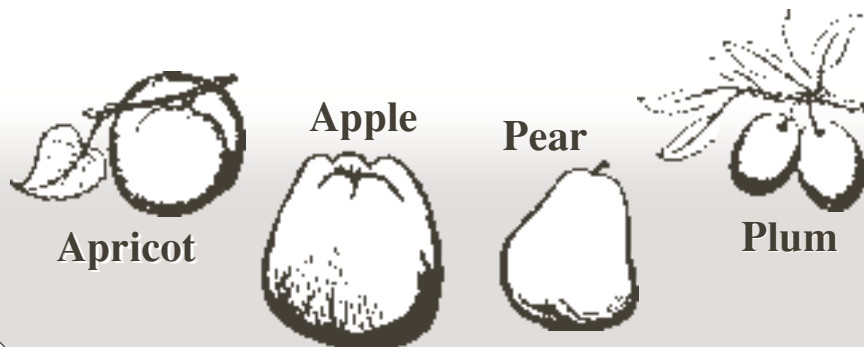


Why plant fruit trees ?

There are many types of benefit from fruit, for example:-

- it is tasty and nutritious;
- if you eat fruit after a meal the food is easier for the body to digest;
- fruit is like wealth which you can sell or exchange;
- after you plant a fruit tree it only requires a small amount of maintenance, and will last for many years (it is perennial);
- because they are perennial, fruit trees help to protect the soil and the environment.
- fruit trees give nectar to bees, give firewood from pruning, habitat for birds and wildlife, and many other benefits.

In order to get these benefits, the first important thing is to plant the fruit tree well. Only then will fruit trees give their benefits to people and the community.



How to plant fruit trees ?

Choosing the right places to plant fruit trees

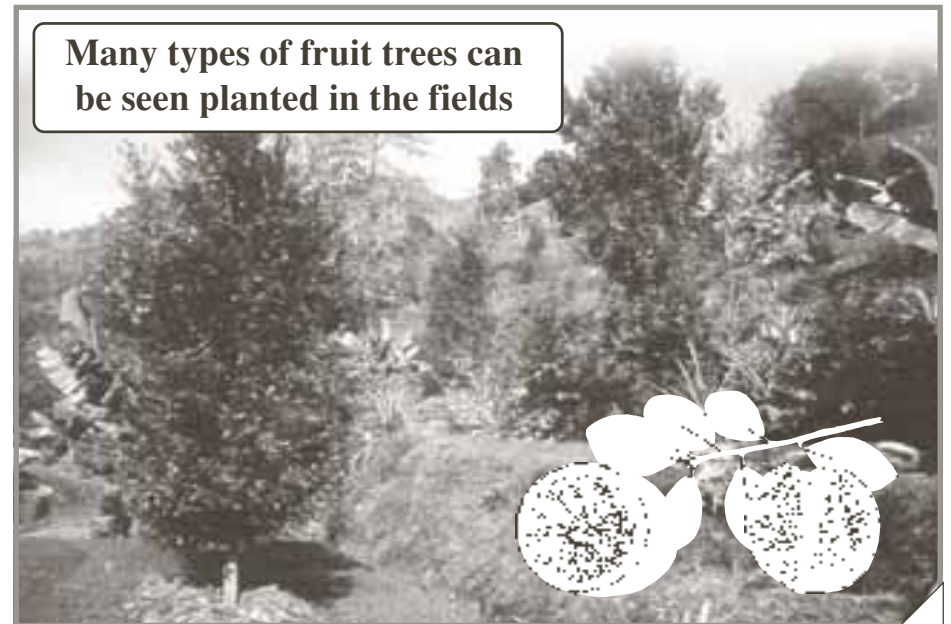
When selecting where to plant a fruit tree, you need to consider the following needs:

- protection from animals
- enough room to grow
- easy maintenance
- suitable good soil
- shelter from the wind

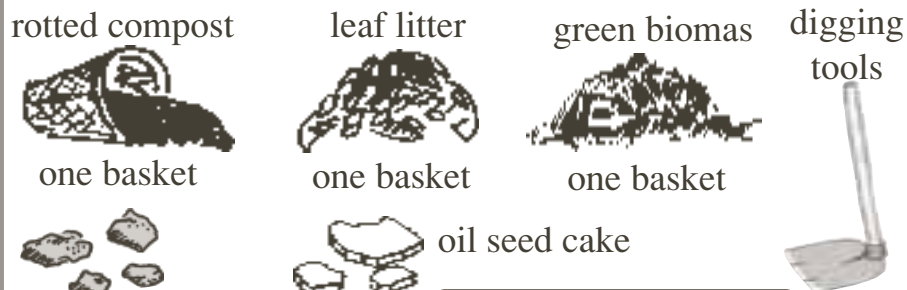
Below are good places to plant fruit trees:

- in old pit latrines
- terrace edges
- on the edge of the house's yard
- on the edges of fields

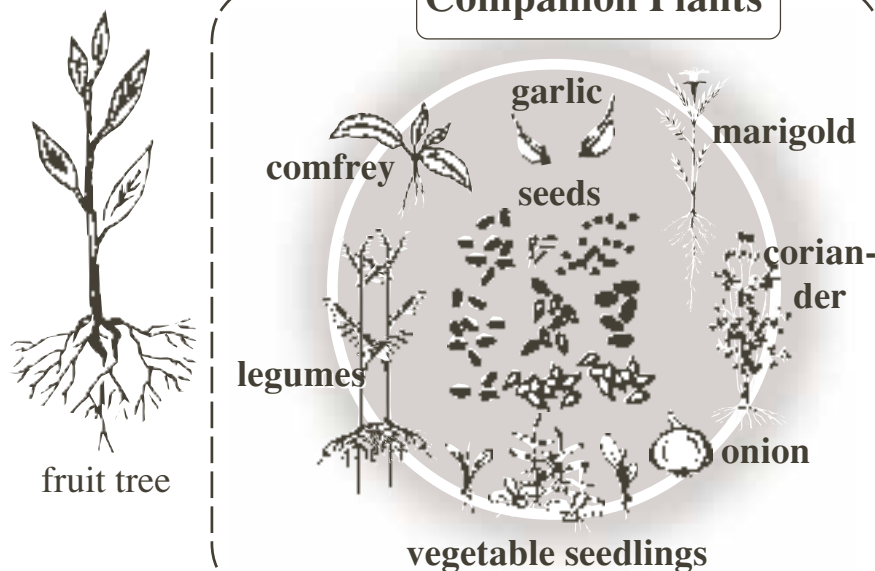
Many types of fruit trees can be seen planted in the fields



Materials needed to plant a fruit tree



Companion Plants



Preparing the Pit

If you're planting the fruit tree in an old pit latrine, then your pit is already prepared. If not, you need to select a good place and dig a pit. The pit should be at least 3 feet deep (if you have deep soil, then 4 feet is even better). The pit should be 3 feet wide.

In the bottom of the pit, put 6-8 inches of green biomass, then cover it with soil that has been dug out of the pit. Then put a 12-18 inch layer of semi-decomposed biomass mixed with un-rotted animal compost and soil. Then put in a layer of well rotted compost mixed with soil. All the dug soil should be put back in the pit until it is heaped above the pit, which is now ready for planting.



If you have a problem with ants or termites, mix oil seed cake (such as mustard) with the soil. One part of cake should be mixed with 10 parts of soil.

Planting the Fruit Tree

When you plant the fruit tree in the prepared pit, first remove as much soil and compost as is needed for the size of the roots. The roots should be open, and point downwards. When the soil has been returned around the roots and filled in, tread on the soil to press it down. Around the pit make a shallow trench to collect water. Lastly, put down rotted compost covered with mulch. If you don't have enough biomass, use rocks to cover the soil.

After doing all these things the tree will grow well.

Where are my helping friends?

Like people, trees don't like to be alone



Companion Planting

Various plants can be planted around the fruit tree which help it to grow even better and give more production. This is called *companion planting*.

Garlic, onion, marigold, basil, mint, lemon grass, nasturtium, comfrey, coriander, fennel, dill, tansy and wormwood are some examples of companion plants. There are many benefits of planting them with the fruit tree.

Benefits of Companion Planting

- Companion plants help to protect from harmful pests
- They attract beneficial insects
- They produce vegetables, herbs, nectar for bees, etc.
- They can be cut and used as a mulch
- They can be stacked densely in different layers
- They help to balance the environment
- They help to conserve soil moisture
- They help to prevent weeds from growing



**Companion planting helps the fruit tree,
but doesn't take much extra work**

Let's See

how to plant fruit trees



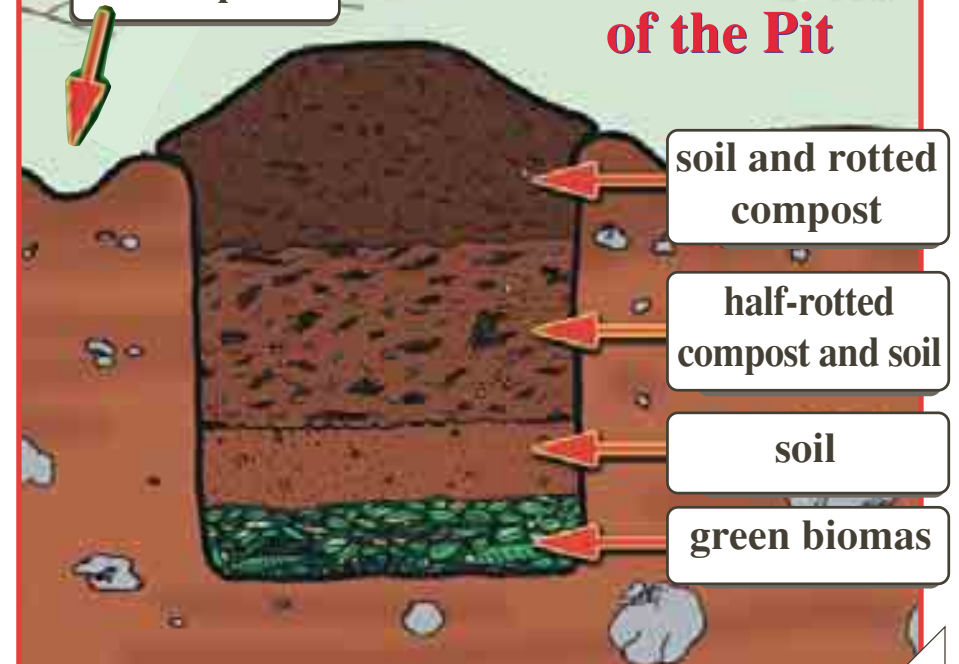
The pit should be one metre wide and at least one metre deep.



2

trench around
the pit

Cross Section of the Pit



soil and rotted
compost

half-rotted
compost and soil

soil

green biomass

3



Make a trench around the pit to collect water.

6



Pull the tree upward as you fill in the soil so that the roots all point downward.

4



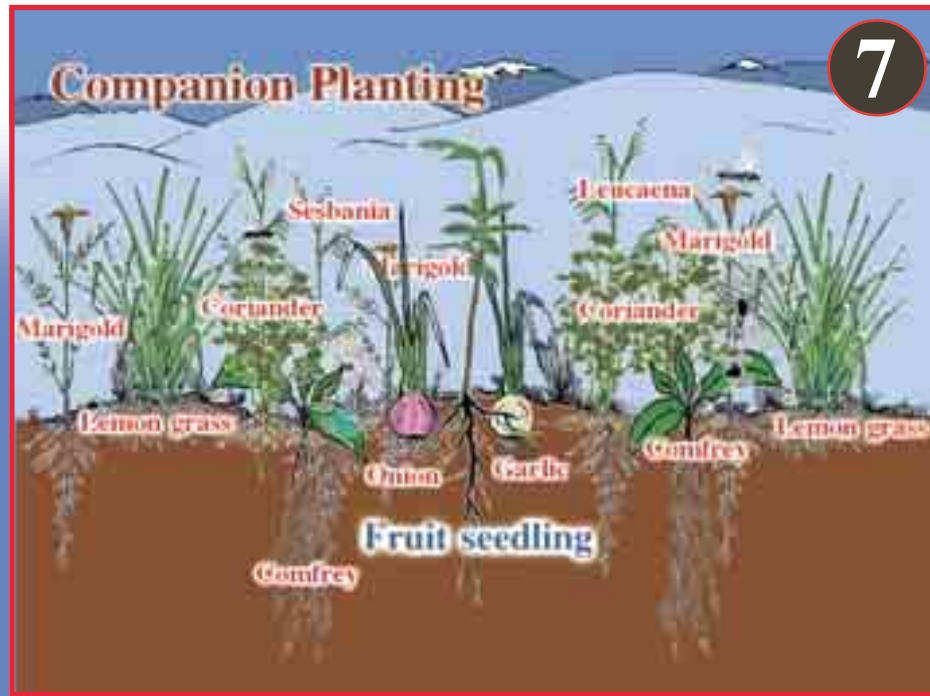
Trim off the fruit tree's long roots.

5



Don't squash the roots while planting the fruit tree.

7



8



Different types of companion plant seen beneath a mango tree.

9



A grafted fruit tree can flower when very small...

...but this makes the young tree weak, so you should remove the flowers for 1-2 years.

Maintenance

How to Care for the Fruit Tree

What the Fruit Tree needs :-

- Protection from damaging pests
- Fertility
- Water



Companion planting also helps to provide these three needs. However, extra maintenance brings extra yields.

Compost:- It's good to provide compost once a year, in early Spring.

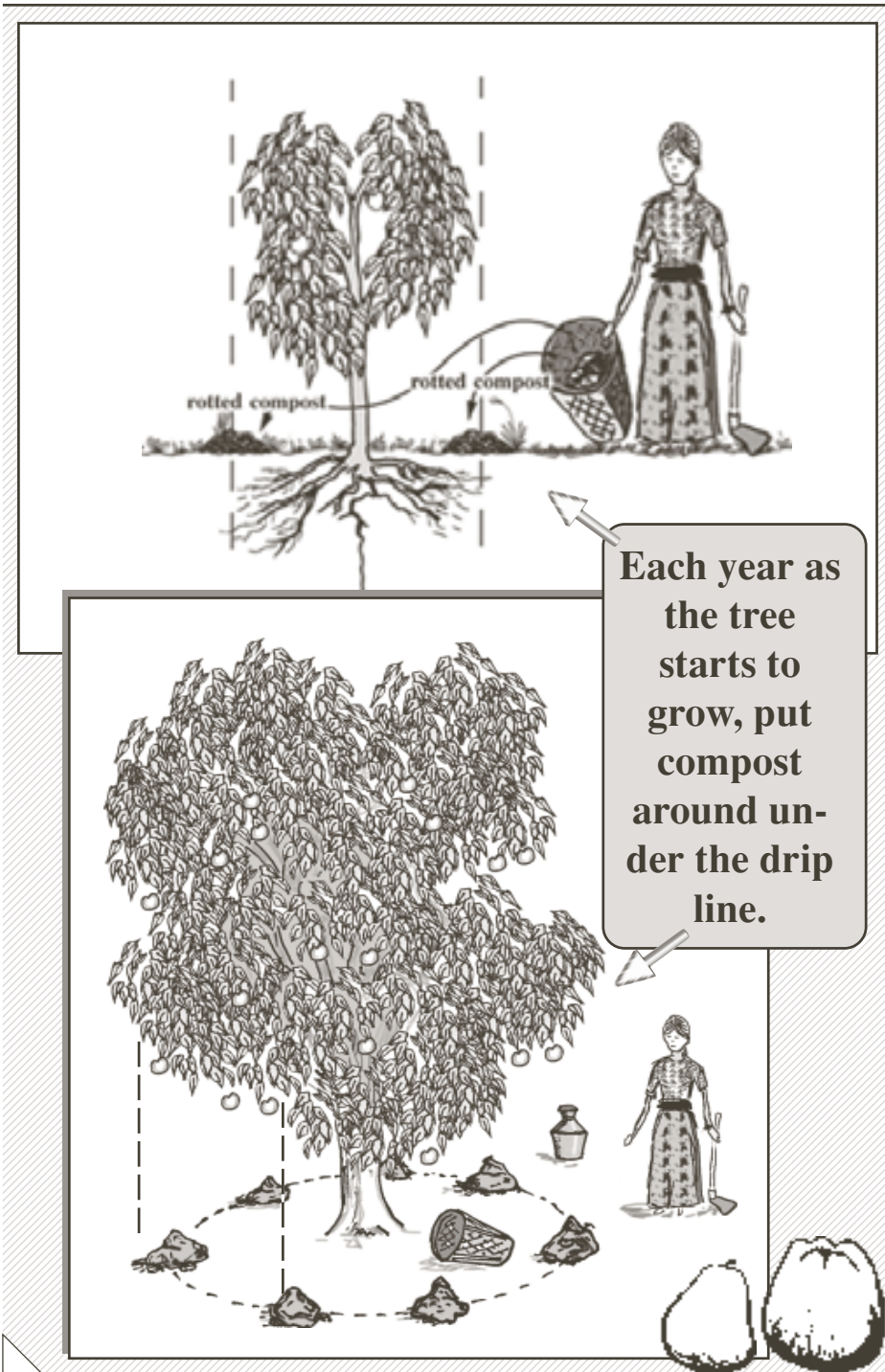
Water:- If there's a rainy season, and if the fruit tree is dormant over winter, you don't need water then. But if there is a dry season when the tree is growing and fruiting, irrigation will make a big difference.

Where to put Water and Compost

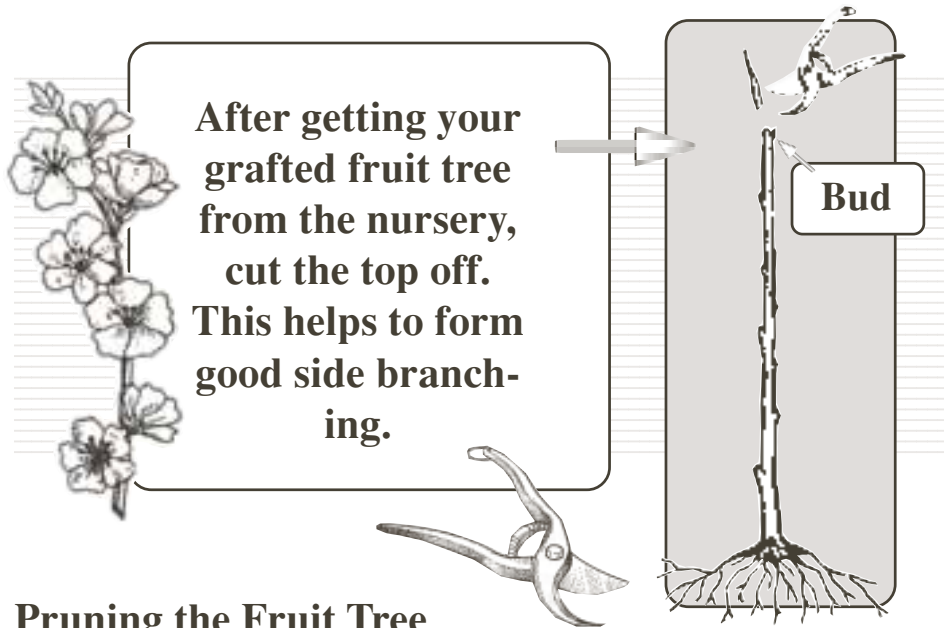
Don't put water and compost right next to the stem of the tree, because the roots that feed grow further away. So water and compost need to be put in a circle away from the tree.

rotted
compost





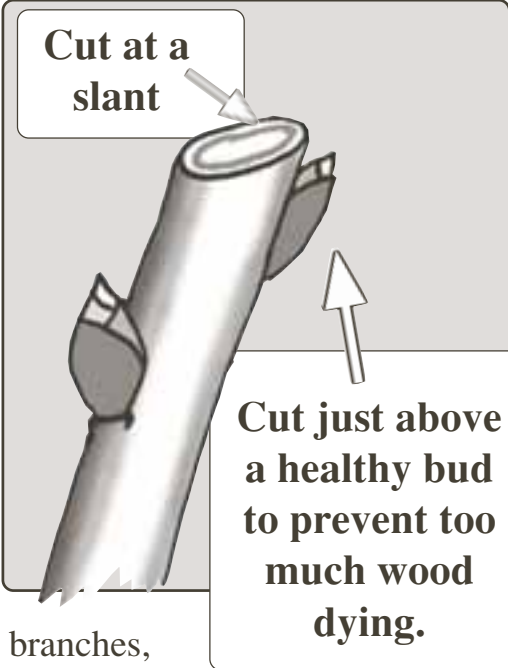
Each year as the tree starts to grow, put compost around under the drip line.

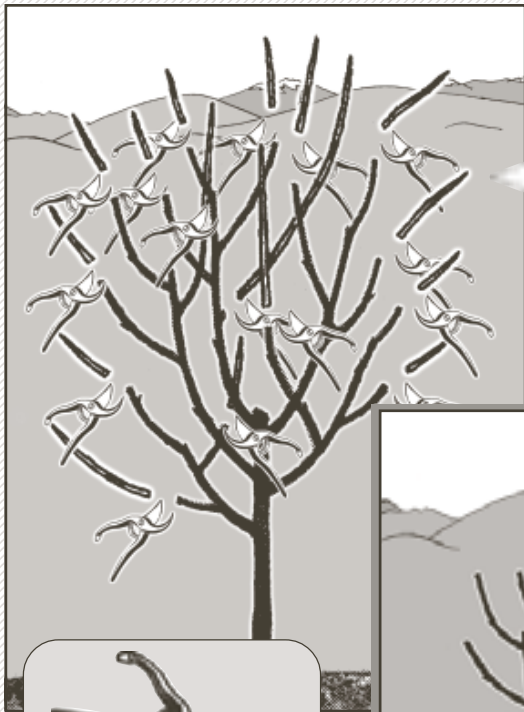


After getting your grafted fruit tree from the nursery, cut the top off. This helps to form good side branching.

Pruning the Fruit Tree

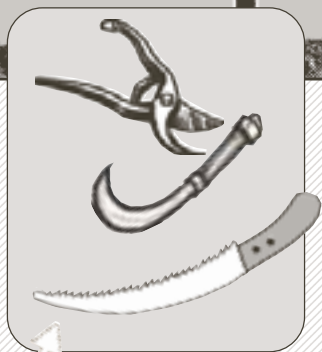
To keep your fruit tree healthy and giving the best production, branches should be pruned once a year when the tree is not growing (it is dormant). Dead or diseased branches should be cut immediately. Any branch touching another, or competing for light and space, should be cut. Use a sharp tool for this. After cutting large branches, cover the wound with fresh cow dung.





Cut out dead, diseased and unwanted branches.

This is how it looks after unwanted branches are removed.



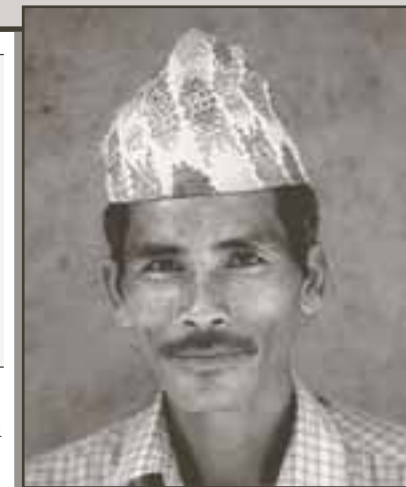
Big branches should be cut with a saw, and small branches with a sharp hook or secateurs.

A good way of irrigating young fruit trees is given in the "Introduction to Fruit Production" chapter.



Farmers' Experience

Mr Dil Bahadur Bucha



Dil Bahadur Bucha

From Ratadada village, Gumi - 3, Surkhet, in Nepal, Mr Dil Bahadur Bucha has had plenty of experience at planting fruit trees. This is what he says.

“ You can get good production from planting fruit trees on empty land. And you don't have to plant every year like grains, but you can still get production each year. Fruit trees are good for keeping bees, so you can get more honey too. I dig a pit a metre wide and a metre deep and in that mix biomass and then good, rotted compost as the pit is refilled. It's important that the roots of the fruit tree are well spaced and pointing down as you plant it. If you get air on the roots the tree can die, so stamp the soil well down on top. I mulch with waste biomass and put rocks on top. That way the moisture is kept in the soil, and I don't need to water so much. Around the pit I plant comfrey and lemon grass for future mulch, so I need less compost. There are lots of benefits from fruit trees, you can even plant pineapple underneath. Now I have mango, pear and peach growing, and the lime is starting to fruit. ”



Read On



Subjects linked to Fruit Tree Planting

To see how to integrate fruit tree planting with other techniques, read these chapters in the Farmers' Handbook.



Fruit Nursery chapter

In this chapter learn how to make a nursery and grow your own fruit rootstock at home for grafting and budding.



Integrated Fruit Orchard chapter

You can plant many varieties of trees to get more production, and faster too. This is explained in this chapter.



Agroforestry chapter

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



Pit Latrine chapter

A fruit tree grows best if planted in a big pit. If you have an old pit latrine to plant in, you can double the benefits. In this chapter learn how to make a hygienic, cheap and productive pit latrine.

