

Irrigation:

Until well established, young fruit trees demand a relatively small quantity of water, approx. 1—2 gal/ tree/ day or should be watered at least three times a week unless it rains.

Fertilization:

Fruit trees obtain their nourishment from the soil. Once a tree has been planted the tree will make heavier demands on the soil each year and nutrients are used at a faster rate than can be replenished naturally - Therefore we do need to fertilize, as a well-nourished tree stands a much better chance against pests and diseases than a poorly fed tree. A healthy plant will usually display a lush green growth.

One should delay the first application of compound fertilizer until the newly planted tree shows visible signs of growth, however if this period exceeds 8 weeks, then disregard the sign and fertilize. For fruit trees a general recommendation is that ¼ - 1 lb. of a compound formulation, such as N: P: K 12:8:24, be applied for each year of growth. This should be split into 3-4 applications per year. If the crop is completely rain fed these applications should be done in the rainy season (beginning, middle and end). The fertilizer should ideally be covered when applied. The fertilizer should be evenly spread around the drip circle of the tree.

Spraying a good foliar product rich in micronutrients (minor elements) is also recommended.

PRUNING

Promptly remove sprouts and suckers below the grafted or budded area.

Remove sprouts and suckers below the scaffold or framework limbs

Remove dead wood resulting from insects, diseases or any die back with the use of sharp, clean pruning shears or saw. Protect pruned areas with a tree wound compound.

Move dead wood well away from trees to avoid further contamination

PEST AND DISEASE CONTROL

Young trees do not require an intensive spray programme but should you have or suspect an insect or disease problem please consult the Extension Officer who will advise you accordingly

Bibliography:

1. Marte, R. (1986)
Planting and Early Care of Your Fruit Tree.
IICA Publication, No A/2 BB-86-01,
Barbados.
2. Skeete, S. (1987)
Fruit Tree Production.
Ministry of Agriculture,
Barbados.
3. Weir, C., et al. (1983)
Fruit Tree Crop Production in the Caribbean
Region
Caribbean Development Bank.

Cayman Islands
Department of Agriculture
181 Lottery Road
Lower Valley, Bodden Town
P. O. Box 459
KY1-1106

Phone: (345) 947-3090
Fax: (345) 947-6501
Email: ciagriculture@gov.ky
www.doa.gov.ky

Revised 12 July 2016



Early Care & Maintenance of Fruit Trees



SITE SELECTION

The first step towards planting a tree is the selection of a suitable location. Several factors should be considered in appraising an area for suitability to fruit tree growing. Two of these; soil availability and good irrigation water are of major importance with depth of rooting next in line. No single factor is more important than site selection with good soil being made available to the plant.

In general, deep well drained soil with no compact layers allow for strong root development and will produce tree of suitable size, with good yields.

Reject any low depression where water stands since water logging will be one of the main enemies of your tree.

Where strong winds occur the tree(s) must be protected by wind breaks. These are set at right angles to the prevailing wind in order to reduce the speed of strong winds and their resulting damage to trees. The effect of a good windbreak can be felt as far away as 15 to 20 times its height.

Mango and naseberry trees will tolerate drainage and wind issues better than avocado trees

For homeowners, plant tree in open sunlight not under other trees or too close to a building. Space for the development of a good canopy is important to guarantee a good tree performance.

SITE PREPARATION FOR PLANTING

For orchards it is always beneficial to rip or plough the area before planting. For home owners, improving the soil around the plant site is usually recommended.

When laying out the field or site, the space required between trees must be taken into consideration

Setting out trees at the proper spacing influences vigor, size, and yield. Planting trees too close will cause roots to entangle, growth of branches to be restricted, shading to occur and create more competition for the available soil water, nutrients, sunlight and root room. Close spacing also increases the chances for pest and disease outbreaks and their rapid spread.

Suggested spacing for fruit trees:

Avocado	25 x 25 ft
Orange	20 x 20 ft
Grapefruit	25 x 25 ft
Lime	20 x 20 ft
Tangerine	20 x 20 ft
Mango	20 x 20 to 40 x 40 ft

After laying out the site, eliminate all weeds and vegetation around the area (3 - 6 ft) where the tree is to be planted.

Your next step is to dig a hole for planting. This hole should be at least twice the size of the container in which the tree is grown.

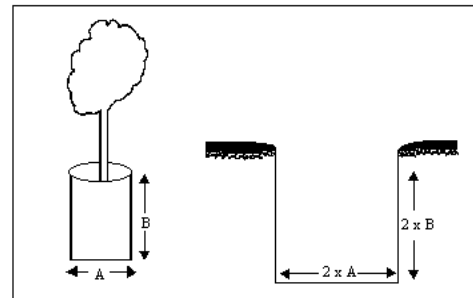


Fig (1)

TREE SELECTION:

Select healthy vigorous trees that show signs of active growth. Tree with mature growth should be preferred since young plants will

suffer during the transplanting. Budded or grafted trees should have a high union (minimum 6 inches) as this is one of the most effective and widely recommended control measures against soil borne diseases.

Avoid plants with signs of stagnation or pest & disease infection. These signs include yellow or poorly coloured leaves, dead branches, or large circling roots near the surface.

Avoid plants with extensive roots coming from the bottom of the pots.

PLANTING THE TREE

Cut the container and lift the tree gently so as not to break the root ball. Pull away or cut any curled and matted roots so they radiate out from the root ball. This will promote root branching.

There should always be a balance between the foliar and root systems. Therefore, if the root system suffers from broken or damaged roots, the removal of some of the leaves and several branches is needed to maintain balance. This operation, rather than hurting the plant, will increase its chances of survival.

The physical and chemical properties of the soil from the planting spot should be improved by adding organic matter. Peat moss or compost should be incorporated to loosen and aerate clayey soils and help sandy soils hold more moisture and nutrients. Well-decomposed farm manure and triple super-phosphate fertilizer (1/2 - 1 lb.) should be incorporated in the soil.

A tree should never be set lower in the field than it was in the nursery. As the soil has to settle, set the tree with the "pot-soil level" slightly higher than the ground level.

Fill around the root ball and if water is available add some while doing this. All the while, press the soil firmly to make sure there are no large air spaces in the root zone.

Finish filling the hole and pressing to firm the soil around the tree. A water basin is now formed around the tree. This basin facilitates irrigation and ensures the penetration of the water to the root zone.

Do not mound soil around the base of the tree.

AFTER CARE

Weed Control:

Weeds compete with the tree for light, water and nutrients; so the grower must try to get rid of them. The drip circle (Fig 2.) should be kept clear from weeds and grass. The operation is done by hand using a hoe or machete but should be shallow so as not to damage the young root system.

Mulching the drip circle is another way to control weeds. When properly applied trees benefit from mulching in a variety of ways including:

- Conservation of soil moisture.
- Reduction of soil temperatures.
- Improving the soil structure and fertility.

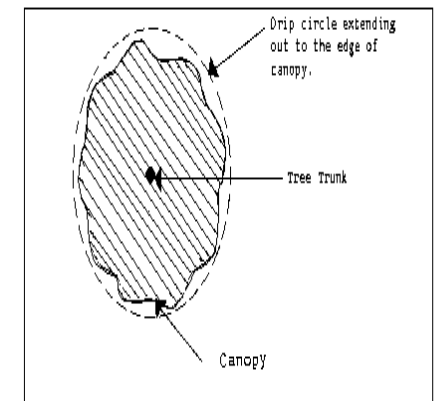


Fig.2