



UNIVERSITÀ  
CATTOLICA  
del Sacro Cuore



PRODUZIONE DI CIBO APPROPRIATO: sufficiente, sicuro, sostenibile

## MANGO (Fam. Anacardiaceae, *Mangifera indica* L.)

### PLANTING

Tropical and sub-tropical fruits plants are evergreen and they arrive from the nursery in container or with a root ball. So to planting out it is necessary prepare a hole with the soil broken up below and to the sides to allow root penetration. The hole may have the diameter double of the diameter of the container but at least about 60 cm width, 60 cm length and 60 cm depth, in this way plants should be planted at the same depth as they were in the container.

Generally it is beneficial to dig in a small amount well-rotted manure or granular fertilizer, below the root zone. Plants also benefit from organic compost being mixed with the soil above the layer with the fertilizer: in this way the roots are not in direct contact with its. Add water directly to the top of the root ball to ensure the roots are kept moist, while keeping the trunk as dry as feasible. And, finally, control that the graft is not covered by the soil (fig. 1).



Fig. 1

### BEST LOCATION AND TREE SPACING

Mango grows best in full sun and on slopes but it is not very tolerant of wind and may need staking. So it is important to choose a sheltered location, against a wall if possible. When planting out it is important don't space plants too close because of their development.

Mangoes, in tropical climates, form large trees with a tall (10-30 m), broad, rounded, spreading canopy. So in warmer regions need to be spaced at 10-15 m to form a square and the best orientation is north-south (fig. 2).



Fig. 2

### PRUNING

Pruning is necessary to obtain healthy trees and to stimulate new growth, reducing biennial bearing. Most of the plants of mango arrive from the nursery with only one central leader so make the first cut under the first node (the black line in fig. 3 shows the region of node) to promote the formation of new lateral shoots. It is important to choose 3 or 4 shoots angled 45° to the horizon, because they will be the main branches of the plant. In this way the canopy will have a structure formed by branching robust to withstand the weight of the fruits and make sure that the fruits can be exposed to light but not directly to the sun, this favors their good maturity and coloration (a reddish coloration of the skin makes them more commercially attractive).

Generally on mature trees a thinning of sprouts is needed to maintain a pyramid shape of the foliage. Topping is made on mature tree to control their size. Because fruit are produced on the present season's growth they can be pruned after fruits harvesting.



Fig. 3

### FRUITING BIOLOGY

Mango's flowers are panicles with a mix of bisexual and just male flowers. Self-pollination can occur but to increase fruit-set it is necessary planting more than one tree.

### FRUIT USES

Fruit is a large drupe with a long fruit stalk and an inedible skin (fig. 4). They are used fresh, frozen (whole or sliced) or preserved in jars (it is possible to make jam). They present an important content of vitamin C and vitamin A.



Fig. 4