

Olive: Emblem of United Nation

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The Olive, (*Olea europaea*), subtropical broad-leaved evergreen tree (Family Oleaceae) and its edible fruit. The olive fruit and its oil are key elements in the cuisine of the Mediterranean and are popular outside the region. It is popularly known as “Symbol of Prosperity and Peace”. Though it is subtropical tree but it requires chilling for fruiting like the deciduous fruit plants.

The tree's beauty has been extolled for thousands of years. The edible olive was grown on the island of Crete about 3500 BCE. Semitic peoples apparently cultivated it as early as 3000 BCE. Olive oil was prized for anointing the body in Greece during the time of Homer, and it was the Romans about growing spread to all bordering the the tree is also planted suitable climates. It is was, a native of Asia times. The olive is a Mediterranean region. diversity of olive like Palestine, Syria and Cyprus.



The olive tree 3 to 12 meters (10 to has numerous leathery and lance-green above and underside and are paired opposite each other on the twig. The wood is resistant to decay. If the top dies back, a new trunk will often arise from the roots. Olive trees bloom in late spring; small, whitish flowers are borne in loose clusters in the axils of the leaves. Flowers are of two types: perfect, containing both male and female parts, which are capable of developing into the olive fruits; and male, which contain only the pollen-producing parts. The olive is wind-pollinated. Fruit setting in the olive is often erratic. In some areas, especially where irrigation and fertilization are not practiced, bearing in alternate years is the rule. The trees may set a heavy crop one year and not even bloom the next.

The olive fruit is classed botanically as a drupe, similar to the peach or plum. Within the stone are one or two seeds. Olives tend to have maximum oil content (about 20–30 percent of fresh weight) and greatest weight six to eight months after the blossoms appear. At that stage they are black and will continue to cling to the tree for several weeks.



Olive grows well and records maximum production even in calcareous soils. Though it thrives well in various soil types, productivity is maximum in soils with good aeration and water holding capacity. While alkaline or acidic soils are not suitable. The pH of the soil between 6.5 and 8.0 is desirable. Heavy clay soil with water logging and poor aeration should be avoided. Commercial olive growing well in a long hot season is needed for good fruit development. Though olive is a day neutral plant, it has an affinity for sunlight. It is growing to areas within 30-45 ° latitude south and north of the equator. For the initiation of flowering, 12-15 weeks with night and day temperatures of 35° F and 60° F is necessary in the winter season.





Olive is a rainfed crop and mostly it is not irrigated. It requires a total precipitation of 100-2000 cm throughout the year is adequate is enough. Heavy rain during flowering results in poor fruit set because of reduced pollination. If a rainfall of 25-100 cm has been received in winter season, olives will result in to the withand extended drought periods severe summer.

The olive has been propagated vegetatively, later by grafting and cutting. Propagation by seeds is not advisable to the heterogeneity of progeny and extremely long juvenile phase. Olive propagation by both sexual and asexual methods is relatively easy. It can be propagated by seed, cutting, layering, budding, grafting, suckers and root cuttings.

In olives, the plant population per unit area is influenced by several factors viz., soil fertility, topography, variety and systems of training and pruning. A high density planting with 400 trees per ha i.e. 5 × 5 metres recorded the highest yield. For soils of medium fertility, a spacing of 7.05 × 7.05 metres is recommended while for poor soils, if the crop is rainfed, a closer spacing of 6 × 4 m is advised. For better production, olives are planted from July- August. Which helps the plants to tolerate transplanting shock quickly and reduce post-transplant mortality. A fertilizer recommendation of 180 :120 : 160 dose of NPK is applied with the full compliment of phosphatic and potassic fertilizers and one third of nitrogenous fertilizers has to be applied as a basal dose during January. A regular use of organic manure is advocated for maintaining the fertility status of soil to improve the soil structure. In an autumn application of organic matter will help the soil warm during the winter months and also to reduce harmful effects of drought conditions.





Three irrigations need to be applied at the critical methods viz., (i) before flowering for reducing premature pistil abortion; (ii) at the time of fruit set to avoid excessive fruit drop; (iii) at the time of maturity to reduce the pre-harvest fruit drop. Watering should be avoided during the flowering or after the onset of fruit ripening. The olive orchard may be ploughed twice a year. The first, soon after the harvest while other at the onset of spring season. Inter cropping with pulses or potatoes, cereals or green manure crop should be practiced during rainy season. The olive orchards may be ploughed twice a year. The first, soon after the harvest and the other at the onset of spring season. Mainly, intercropping with pulses or potatoes, cereals or green manure crops could be done. Fruit crops like Pomegranate, fig can be practiced if planting is done with a wider spacing. Pruning is done mainly with the help of selection of three to five scaffold branches. Espalier, open cylinder, mono cone, poly cone, pyramid, cordon and g-form are the systems of training followed in olive plantations.

The common diseases of olive are as follows in photographic representations;

Olive canker	
Peacock eye	
Olive shield	
Anthracnose	

For controlling the weed control, a combination Simazine and Dimon both @2kg ha⁻¹ have been reported to be most effective, respectively. In a recent study, for floor management of olive plantations, grass mulch glyphosate @ 0.8 lit.ha⁻¹ increased the leaf N, P and K status of leaves which improves shoot growth, trunk girth, height, tree spread of the trees. This results into increased the yield by more than 300 per cent.

The common diseases of olive are as follows in photographic representations;

<p>Black Scale</p>	
<p>Olive Beetle</p>	
<p>Olive fruit fly</p>	
<p>Olive psylla</p>	

Olive is a non climacteric fruit. Olive fruits mature four months after blooming. The fruits attain maximum size by the middle of September then the colour changes from dark green to yellowish light green. Thereafter, the colour changes from pale green to violet at the apical end.

In olive, the problems of poor fruit set and excessive fruit drop which limit its productivity. Fruit thinning and fruit drop control are essential practices for crop regulation. Thinning is practiced 6 to 20 days after full bloom with the help of growth regulating chemicals, auxins, dinitrophenols and ethylene releasing compounds are effective. Fruit drop can be controlled by application of sodium salts of NAA and 2, 4-D could be reduced by the application of 30 ppm. Olives are harvested by different methods, viz., by natural dropping of ripe fruits, pickling by hand, beating with wooden poles and mechanical harvesting. The mechanical harvesters are generally used after the chemical sprays like ethrel or ethephone, as this will reduce the fruit removal force. Olive trees recorded yield of 40-50 kg per year, yield varies widely from 1 to 5 tonnes per acre.