

Olive - *Olea sp.*

General Information: The olive has deep green leaves with greyish undersides, and produces yellowish-white flowers followed by green or black fruit in late summer or early fall.

The olive is a tough customer - it is tolerant of wind (both hot and cold), soil condition and elevation (*O. europea* can live at altitudes up to 4900 ft.!) and can live 800 to 1000 years. It is much loved by bonsai enthusiasts as much for its rich historical and mythical lore as it is for its elegant shiny green leaves and trunk which takes on an aged, stony appearance when old.

Family: *Oleaceae*.

Lighting: Full sun in summer, less in winter. Requires 1000 Lux as an indoor plant.

Temperature: Leaves can withstand temperatures down to 43F; the roots dislike freezing temperatures, although survival at temperatures down to 25F has been reported. Considered to be hardy in zone 9. The olive can be successfully grown as an indoor plant, but it is best to keep it outdoors in the summer, and should be kept below 64F in winter. To encourage fruiting, the plant should be kept for several weeks with nightly temperatures of 35F and daily temperatures of 60F.

Watering: Water thoroughly, but keep slightly dry. Reduce watering in winter. The olive may benefit from daily misting.

Feeding: Every two weeks from spring to autumn. Do not fertilize for three months after repotting. Use liquid bonsai fertilizer or half-strength general purpose plant food. It can benefit from an addition of pulverized organic fertilizer in mid-spring.

Pruning and wiring: Suitable for all sizes, and all styles except broom. Creating your own jin/shari is not a good idea as the bark cracks easily, leaving the tree exposed to fungal infestation, although in my experience there is some natural die-back which may be used in the design of the tree. Marco (Italy) talks extensively about styling the olive:

"Pruning: all bad reputation of olive is why, when it is trimmed, some portion of tree retracts lymph and to first sprout there is an untidy and uncontrollable growth; time for forming's pruning is fall, when there is waning moon mostly if branches have diameter superior to 3cm (1 inch); if one trims in spring or summer there is risk of inflation of this zone; in any case eliminate buds in this part. the second pruning or structure's pruning is accomplished after spring and fall growth before a new vegetative cycle: eliminate buds who grow up or down so to have alternate ramification to right and left of principal branches. pinching is different according buds colors and age of tree in cycle of growth: new buds usually are green, violaceous and

color wood;for young trees one cuts to first or third couple of leaves,according direction of buds,when branches from violaceous became color wood(it will grow only last couple of buds). With less young and aged trees,you pinch when branche is still green or is almost violaceous eliminating last couple of leaves,and leaves and buds who row down.stop pinching if temperaure is down 10C(50F) or up 40C(104F): you will have smaller leaves and shorter internodes. Generally almost all leaves who are in green part ramify and less of half of those placed in violaceous part."

"Wiring: young trees only from 2-3 yr, but warning from late fall to spring and it is necessary to control each week branches,olive wood is soft and easily wire cuts it.in aged trees wire is applied to old branches,but it is good thing to use raffia during tree dormance. It is best to wire olive branches when just freshly lignified, as olive wood becomes very rigid when old."

Propagation: Propagation by seed has only a 30% success rate. Cuttings are more successul, and quite large diameter cuttings (up to 2.5 inches) may be rooted. It is easiest to root cuttings first in a glass of water. The olive also suckers, and may be propagated by division.

Repotting: Every 2-3 years in spring, as buds sprout. Trim about 1/3 of the root ball, and remove a proportional number of the old leaves. If more drastic root pruning is needed, complete defoliation is advised. Repot in free-draining, slightly calciferous soil.

Pests and diseases: Aphids, ants, black mold, scale

Some species suitable for bonsai:

- Olea 'Cailletier': small black olive.
- Olea europaea: common olive - This Mediterranean native grows to 25 feet, with leaves of up to three inches.
- Olea europaea 'Montra': 'Little Ollie' olive, dwarf olive - An excellent choice for miniature bonsai, as the leaves are much smaller than the species, the 'Little Ollie' is becoming popular with bonsai enthusiasts.
- Olea europaea oleaster: wild olive - A natural bonsai subject, it produces less oil than the species, but has smaller leaves.
- Olea europea sativa.
- Olea 'Picholine': green olive.
- Olea 'Tanche': black olive

Bibliography:

Ainsworth's "Art of Indoor Bonsai"

Jahn (ed.) "The Simon and Schuster Guide to Bonsai"

Lesniewicz's "Bonsai in Your Home"

Resnick's "Bonsai"

Tomlinson's "Complete Book of Bonsai"

Species information from Thomas (ed.) "The Hearst Garden Guide to Trees and Shrubs."

