

There was a myth current in Athens that, when Poseidon and Athena were competing to become divine protectors of the new city, Athena won the contest by striking the acropolis with her spear and causing the olive (*olea europaea*) to spring forth as her gift to the Athenians. This tree and its descendants (a tree could live, with luck, one thousand years!) were designated as the holy olives, and oil from their fruit was presented in beautiful amphorae at Athena's special festival, the Panathenaea, to winners of various events.

The edible olive was an amazingly appropriate plant for sub-tropical Greece. It cannot tolerate temperatures below  $-12.2^{\circ}\text{C}$  but requires a winter chilling to produce flowers and fruit. Olives grown in the hot tropics do not produce fruit. Providing conditions are not too severe the olive keeps its leaves year round and has an excellent resistance to drought, being able to survive up to five or six months of rainless summers because of its deep tap root which delves way down into the sub-surface water table. Yet olives do quite well with watering and produce especially large crops when irrigated. However, gourmets claim that the unirrigated olives taste better, and a lack of man-delivered water is likely to have been the case most often in antiquity. The stamina of the olive makes it ideal for dry hillsides and for Attica (the territory of Athens) in general because of its dry, stony soil.

Historically the domestication of the olive can be traced back to Crete from the fourth millennium B.C. On the Greek mainland cultivation of the vine predates olive culture during the Bronze Age but a recent article

in *Classical Views* (XXXI, 1987, 137-176) suggests that radio-carbon analysis of ancient olive pollen deposits indicates that olive production increased dramatically up to 1170 B.C. at which time it crashed (like Bronze Age Mycenaean society itself). This cultivation, of course, resumed as times became more settled. There are good indications that it was burgeoning again (at least in Attica) by the 600's. Proof of this is found in the legislation of the lawgiver Solon, who in 594 B.C. forbade the export from Attica of all produce save the olive oil. The effect of this was to curb the export of grain, all of which was needed at home, and stimulate the cultivation of the olive, whose export earnings would pay, in part, the cost of importing needed grain from outside. Attica offered good soil for olives, poor for grain. Of course the results of this law were slow to take effect for those who rushed out to plant olive trees. It takes 4-8 years for a tree to start bearing, and 20 years to come into full production (in dry conditions sometimes as much as 40 years). By the time of Peisistratos, Athenian oil and the beautiful vessels to carry it were turning the city into a growing commercial power. Years later, during the early Peloponnesian War (c. 430 B.C.) when the Spartans invaded Attica, these fine orchards were cut down to despoil the Athenians of their renewable treasure. (Most of world olive production today is from Spain; Greece produces only c. 13%).

Olives for eating were picked when the fruit was deep green to cherry red (before turning black) in the autumn. Hand picking by climbing or beating the branches with long rods

to fell the fruit onto sheets was used for harvesting. For oil production the blackened olives were left longer on the tree until early winter. Eating olives had to be processed before consumption (like many tourists, I tried one from the tree and found it ghastly bitter). First washed in lye to remove the bitterness the olives were then soaked in a 7% brine solution for pickling for 1-6 months (a sweetener might be added to assist fermentation). Oil probably, as in modern times, was

more likely the major use of this plant product and far outstripped the use of the olive as a fruit. In antiquity this oil was turned into unguents for the skin, used in cooking and last but not least employed in terracotta lamps for the illumination of their dwellings. When you add to all of these benefits a sturdy, rot-resistant wood when the tree eventually fails, you have a truly wondrous plant product whose benefits are as impressive today as in ancient times.