

matter, but the olive does not benefit by being exposed to the sea-spray. From all this it will appear to be the opinion of the generality of these people that proximity to the sea is useful, although I have proved to them that the plants thrive beyond Florence, some sixty or seventy miles inland. In Tuscany we have frequently as much as from 4 to 8 degrees of cold (Reaumer) in the winter, and in 1709 the cold was so intense as to prove disastrous to the olives, depriving many families of their chief support for several years—in fact, until the trees that had suffered had time to grow and bear again. From what I can ascertain respecting the introduction of this plant into New Zealand, the Italians inform me that they would carefully cut out the knots or eyes growing out of the trunks of the trees near the base or ground; these they would cover up in earth and moss, then put them into casks filled with sand, which is then watered and closed up, and if sent a long voyage by sea it would be beneficial to sprinkle them occasionally, so as to keep them fresh and cool within the tropics. In this way they would bear exclusion from the light for several months. On arrival in the colony they would require to be taken out with care and put into well-prepared ground until such time as they had taken root, when they should be dug up with as much surrounding earth as possible, and put into the sites intended for their permanent abodes. These sites, however, should be holes 6 feet square and 4 feet deep, filled with a manure of ground-bone, horns, hoofs, well-fermented horse-dung, and sheep's or bullocks' blood. They would require skilled treatment, as the future well-being of the trees depends entirely on this period of their existence, and hence the necessity of employing only Italians, and more particularly those thoroughly experienced in this culture. Great care is also required in pruning them; in fact, this is an art quite by itself, and can only be done by those whose knowledge has been acquired by years of practice. The trees will begin to bear fruit in five or six years, and the only care they would need would be the cutting of a trench round their bases, and dosing them in the spring with liquid manure. They will flourish if treated with potash, soda, lime, silica, or manures containing these salts: feathers and the scrapings of tanneries are often used by the Italians, as these things take long in decaying.

They should be planted out in rows at a distance from each other from 8 to 10 feet. I calculate an acre would contain from 400 to 500 trees.

Good-sized trees will produce from 20 lbs. to 75 lbs. of oil, the average may be taken at 40 lbs. This, at present prices, which rule low, would give about 20s. sterling per tree, so that the possible produce of an acre of olive trees of good size may be estimated as being worth at from £300 to £500 sterling per annum, and once arrived at maturity would be a desirable and permanent property.

The finest oil in the world is grown in the Province of Lucca, about twenty miles from this city; the next in quality is the Tuscan; then may be classed in order the Ligurian, Provence, Neapolitan, Sicilian, Spanish, Smyrna, and Tunisian, the last only used for soap-making and machinery, being thick, strong in odour, and greasy.

From this it will be seen that the temperate climate of Italy is that best adapted to this tree. The forest oil is of a beautiful straw-colour, slightly tinged at times with green of extraordinary brightness, very liquid, almost odourless, and of exquisite flavour. It is used by the best families on the Continent for cooking purposes in place of butter, and for salads, &c.

I should estimate the value of the entire yield of oil in Italy at not less than £30,000,000 sterling. The exports from Leghorn only were for the years—

		Kilos.		Francs.
1869	...	10,295,833		
1870	...	685,800		
1871	...	9,889,780		
1872	...	4,564,404	value	6,846,600
1873	...	9,390,113	"	14,000,000
1873—export of the whole kingdom	...	60,260,000	...	104,000,000

The statistics of 1874 I have not yet been able to obtain, but am in a position to state, however, that the yield of last year was unusually abundant. The olive may be propagated from the stones; these would require alternate steeping and exposure to the sun for many days until they showed signs of sprouting, when they should be put into rich beds of manure, and at the proper time planted out. These would be only the "wild" olives, into which would have to be grafted the true olive tree.

The wood is very beautiful, and is of a delicate cream colour, in some cases almost white, is susceptible of a high polish, and is much used by cabinet-makers.

The Italians sometimes manure their olive-grounds with the stuff from the cesspools. These receptacles are the monopoly of the municipality, and are periodically emptied by properly-appointed people, who take it into the country, where it is sold to the farmers, who pour it over their fields after ploughing. It is more fluid than the London sewage, and considered of excellent quality, being exclusively house drainage. It is called "bottino," and the men who cart it "bottinai."

The olive will not grow in Piedmont, nor in Lombardy, not from want of warmth in summer, but because the severe cold in winter too frequently kills it. It is the opinion of the Italian agriculturists that in those countries that have mild winters, and where vines, the fig-tree, and the Indian corn thrive and ripen, the olive must of necessity prosper. This opinion has been indorsed by many persons of intelligence and education, who are thoroughly conversant with all that appertain to the culture of the olive. The best time for cutting out the knots or eyes, for export, is the month of October. The time when the Italians gather in the crops is during the months of October and November, and even up to Christmas, when the fruit becomes nearly black. It is then carried to the crushing-mills, and the refuse is put into cane-bags and subjected to great pressure in a machine. The first process produces the finest oil, the second and third inferior qualities. In the kernel or stone there is a small quantity of oil that is crushed out, and the pulverized mass after boiling is generally used for fuel. Care should be taken to fence the fields where this tree grows, as cattle are fond of the bark and foliage. Rabbits are also very destructive to it. The tree, when planted in healthy soils and favourable positions, is not much plagued by insects, but it is well to examine them periodically, so as to guard against caterpillars.