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NEW ZEALAND.

REPORT ON OLIVE CULTURE,

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Presented to both Houses of the General Assembly by Command of His Excellency.

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IN accordance with the instructions I received from the Hon. Dr. Featherston, Agent-General for New Zealand, I have visited several of the olive districts of Tuscany, such as Montopoli, San Romano, the Pianura di Pisa, and the hills in the neighbourhood of Leghorn, and herewith give in detail the results of my inquiries.

I have had much interesting conversation with cultivators of the olive of all classes, labourers as well as proprietors, and especially with those living near San Romano, the very centre of a large olive-oil-making industry. The country around is undulating and very beautiful, the soil appearing mostly of an argillaceous sandy nature, of some two metres in depth, resting upon gravel or tufa, and in some cases upon the blue Staffordshire clay, such as is now made into those hard bricks that are frequently used in London for foot-paving, &c., &c. The olive trees on these hills have been in their present positions from time immemorial; in fact, it is almost believed by the educated that some of them may have been the actual descendants of those planted by the Phœnicians 600 B.C. I say descendants, because, although an olive may be utterly damaged above ground, either by intense cold, fire, lightning, or other causes, there is so much vitality and tenacity of life in the roots, that within a short time it sends up fresh shoots, which soon become prolific trees. No one appeared to be able to fix a limit to its longevity: Bouche gives it upwards of 1,000 years. They grow to large dimensions when very old. There was in Provence some few years ago an old olive tree still bearing fruit, although quite hollow and able to contain as many as twenty persons in its cavity; and even in Tuscany, where every care is given to the culture, you constantly see the remains of trees which have been struck by lightning get vigorous and productive, even when in the surviving half a large portion of the centre may have been worn away. There is no doubt that the olive is one of the most profitable plants that a farmer or landed proprietor can put into the ground, as, if once planted and carefully attended to in its earlier years, it will become a source of perennial income, living on as it does from generation to generation. This tree is found within a few miles of the sea, in nearly all parts of the Mediterranean coasts. Even in Africa it grows in the highlands, but only to a short distance inland. Here the yield of oil is not great, owing to the heat, which frequently dries up the sap, and what is collected is only fit for the purposes mentioned below. The best of all climates for this tree is a temperate one, such as that of Tuscany and, I may add, of Liguria, where the trees are cultivated to the summits of the hills to an altitude of from 700 to 1,000 feet above the sea level, where the cold sometimes is intense in winter and not unendurably hot in summer. The general opinion is that it thrives best within a short distance of the sea, on hills with rocky or argillaceous gravelly soil. The aspect is of no consequence. Too great heat or drought materially reduces the quantity as well as the quality of the oil, rendering it thick, rank, and greasy; nor is severe cold favourable to good crops. Temperate heat and mild winters are best suited to rapidity of growth and large yields of oil. Hence I should infer, from all I have heard and read of the climate of New Zealand, that the Northern Island especially is admirably suited for the reception of this tree.

The soil should not be too rich, as that makes the oil fatty and rank; neither should the trees be planted in a plain, as when the drainage is defective the ground is apt to become sodden or wet, which is injurious to the roots. Hills admit of natural drainage. In some parts of Tuscany, in the plains, where the soil is damp, in order to insure a perfect drainage, which is absolutely necessary, an artificial bed of gravel, stone, or broken rocks or tufa, is prepared of some depth, and thick layers of rich earth laid above this, so that superfluous moisture may drain off. Provided the plantations admit of an entirely free circulation of air to all parts, and the drainage is perfect, a moist, rainy, or windy climate, if not too cold in winter, is anything but prejudicial to this plant; in fact, the oil is likely to become of a more fluid character in consequence, a great desideratum with Italians. In many parts of this province, as well as in Lucca, the hills, that have but little earth on the rocks of which they are composed, are formed into terraces by walls of loose stones; on these platforms they collect all the earth they can, and successfully plant their olives, which are renowned for the quality of the oil. Even where the soil is poor they will dig a large hole, fill it with rich manure, and put their trees therein. Winds are considered favourable when coming from the sea: they are supposed to contain saline