

per ton should be offered for sugar produced from sorghum grown in the colony before the 31st December, 1887. The bonus to be payable from time to time to any persons producing quantities of 5 tons and upwards. That when bonuses have been paid upon an aggregate of 200 tons no further bonuses should be paid. Your Committee recommend that a bonus should be offered, with the view to ascertain the price at which cotton can be grown, and the suitability of the soil and climate of the northern parts of the colony for its production."

A letter from Mr. H. A. Cowper, of Hokianga, relative to cotton-growing, was read and considered; and, on the motion of Mr. Wright, *Resolved*, That the Committee, having read and considered a letter from Mr. H. A. Cowper, of Hokianga, respecting the growth of cotton in New Zealand, recommend that a bonus should be offered with the view to ascertain the price at which it can be grown, and the suitability of the soil and climate of northern parts of the colony for its production.

On the motion of Mr. Wright, *Resolved*, That the letter of Mr. H. A. Cowper be printed.

A letter from Messrs. Bardsley and Sons, relative to soaps and candles, and methyllated spirits, was read and considered. On the motion of Mr. Lundon, *Resolved*, That, as the letter contains statements which are contrary to and opposed to facts, no notice should be taken of it.

On the motion of Captain Colbeck, *Resolved*, That a bonus of £10 per ton should be offered for sugar produced from sorghum grown in the colony before the 31st December, 1887. The bonus to be payable from time to time to any persons producing quantities of 5 tons and upwards. That when bonuses have been paid upon an aggregate of 200 tons no further bonuses should be paid.

Moved by Captain Colbeck, That these resolutions be added to the report.—Carried.

The Committee then adjourned *sine die*.

MINUTES OF EVIDENCE.

MONDAY, 15TH AUGUST, 1881 (Mr. MURRAY, Chairman).

Dr. HECTOR examined.

1. *The Chairman.*] Dr. Hector, we have sent for you to ask you a few questions about different subjects. First of all, the olive?—I have no great experience of olive-growing countries; but, as far as reading can inform me, I know a little about the subject. There was a report made some years ago on this matter by Mr. Glyn (H.-20, 1877), and I find a great discrepancy between that and other information that is available. That report states that olive-trees grow 400 or 500 to the acre, and produce from 20 lb. to 75 lb. of oil each year; but, in a work quoted by Baron von Mueller, who collected information for the Victorian Government, it is stated that thirty olive-trees can be planted on an acre for permanence, and each tree, under ordinary circumstances, will produce fruit for 4 lb. to 5 lb. of oil annually. I only want to point out this great discrepancy as requiring explanation. There is no doubt the olive-tree would grow very well in some parts of New Zealand, as, for instance, in the Upper Mokau Valley, and along the coast in proper situations between Napier and the East Cape. Then, again, there are some suitable spots for it along the coast in the North Auckland District. It requires a loamy calcareous soil, and the direct influence of sea-air. The olive-tree rather enjoys drought occasionally. If it can get root irrigation the tree thrives better with occasional droughts; but, in any dry situation or seasons, irrigation must be resorted to, otherwise the yield of fruit would not be so great. It can stand occasional frost if not too long continued and if the thawing which follows the frost takes place with rain or mist, as dry searching wind is fatal. The lowest average winter temperature it stands is 45° Fahr. This restricts it to those parts of New Zealand I have mentioned. It requires a calcareous soil: there must be lime in the soil, for in too siliceous soils it may grow, but does not bear well. That would restrict a great part of the North Island. It is propagated by seeds and cuttings, but chiefly by truncheons. These truncheons or stumps are placed horizontally in the ground. The slopes of hills are requisite; olives would not thrive or bear fruit on flat ground.

2. What is a truncheon?—A truncheon is a portion of stem cut off the tree. You cut up the tree in lengths of from 1 foot to 18 inches, and the young plants throw from the buds. It is almost peculiar to the olive this propagation. There are two or three species growing in the forest, on the hills in the vicinity. Although they bear quantities of fruit, it is of no commercial value.

3. What name do they go by?—Maire. There is another tree also called maire by the Maoris. There are three species of olive indigenous to New Zealand altogether; there is one in Mr. Brandon's garden now bearing fruit. Of course the production of olive-oil is quite a thing in the future. The growth of olive-trees must be commenced at once, but it would be a long time before they become of any importance. They are extraordinarily hardy and long lived, but the older they grow the better they seem to bear.

4. When do they begin to produce?—I do not know exactly. Sir George Grey has a plantation of olive-trees at the Kawau, and I think he told me last year they got a good deal of fruit from them. It is about fourteen years since they were planted, I think. William Macarthur's olive-grove in Camden is loaded, but, notwithstanding the abundance of fruit, unless you imported people from the South of Europe, where they are brought up in the industry, it is very difficult to turn it to account: as a matter of fact, enormous quantities of olives drop to the ground and rot. At the Sydney and Melbourne Exhibitions they showed olive-oils in quantities from a number of different districts, and especially from South Australia. I think it is twenty or twenty-five years since these olive-groves were planted out, and it is only now being followed as an industry. The olive-oil is of very fine quality, but I understand the yield has not yet reached the yield of that in South Europe.

5. *Hon. Major Atkinson.*] You have got information as to the olive in South Australia?—I can get it.