

The Agriculture Department's vineyard at Te Kauwhata.

Generally speaking, in New Zealand different kinds of grapes are not grown to produce different kinds of wine. There are many thousands of varieties of grapes, and in Europe special grapes are grown to produce special wines. Here, though our varieties are numerous, the grapes are broadly divided into black and white, from which red and white wines are made. Incidentally, we can in some cases make a white wine from a black grape by using only the juice of the grape without the skins. In a red wine the skins are also included in the fermentation to give colour to the wine.

These two divisions may again be divided into dry wines, fortified dry wines and fortified sweet wines. Burgundy and claret are dry wines containing little or no sugar and less than 24 per cent. proof spirit. Dry sherry comes within the second class, for though it contains little or no sugar it is fortified with rectified brandy up to 32 per cent. proof spirit. In the third class, and by far the most popular in New Zealand, come port, sweet sherry, and Madeira, all containing up to 10 per cent. of sugar and fortified to 32 per cent. proof spirit, Burgundy, claret, and port are red wines. Sherry and Madeira are white.

Also it should be realized that these titles applied to New Zealand wines are really misnomers. The originals are named after the localities on the Continent where they are made, and their New

Zealand counterparts bear to some of them a resemblance in colour only.

All of which might seem to indicate that New Zealand wines are not made according to Hoyle, whereas when well made they are an excellent wine of their type. In the case of dry wines the Hawke's Bay district is capable of producing wines that will stand comparison with French.

Grapes need a good soil and a dry climate with low humidity. Rainfall should be light but regular, about 35 in. being the ideal. They

grow from a vine which will usually produce a full crop within four to six years from planting. With care, and provided it escapes the many diseases to which grapes are unfortunately subject, the vine will continue to bear for perhaps a hundred years.

The vines are usually planted in rows about 8 ft. apart, with about 6 ft. between each vine. A five-wire fence runs the length of the row, and up this the shoots from main rods of the vine are trained to climb. The grape-vine is a natural climber, and skilled pruning is necessary each year in June and July to clear away the wood that carried the crop of the previous season and so confine the vine to the rows. The rods are cut back almost to the trunk and the strongest of the first three shoots used as the main supply line for the next season.

Intensive and continuous cultivation with plough, disk, and cultivator is necessary throughout the growing season. Lupins are sometimes grown between every second row and ploughed in to provide humus. Bordeaux mixture and other sprays are liberally used to check pests.

In September the vine flowers; then the grapes appear and fill out into large luscious bunches (if all goes well) by March and April, when they are harvested, This work is done by women and boys, many of them Maoris, at wages of from is. 6d. to is. 9d. an hour.