## SMALL FRUITS

Small fruits, such as strawberries, raspberries, currants, gooseberries, and loganberries, are produced in sheltered localities of most districts. The commercial areas under this class of fruit are distributed as under:—

District,		Area (in Acres).								
12/18/2 Ref.	Straw	berries.	Raspberries.	Loganberries.	Gooseberries.	Currants.	Other Berries			
Auckland Poverty Bay Hawke's Bay Wairarapa Manawatu Nelson Canterbury Otago		148  7 3 2 5 35 20	 4 45 18 290 186 32	8 1 4 3 2 2 2 3	$egin{array}{c c} & 37 & & & \\ & 3 & & \\ & 3 & \\ 28 & & \\ 1 & & \\ 8 & & \\ 26 & & \\ 7 & & \\ \end{array}$	 6 36 2 15 65	1 3 55			
Otago Central  Total area		10 	$-\frac{25}{600}$	$\frac{2}{25}$	110	130	60			
Estimated prod tion (in tons)		5()	750	40	150	150	120			

## VITICULTURE

Grapes are grown out of doors in considerable quantities, mainly in the districts of Auckland and Hawke's Bay, while under glass they are grown in many localities throughout the Dominion. The approximate area under outdoor grapes grown for winemaking is 700 acres, 250 acres of which have not yet reached the bearing stage.

Grapes.—The crop of outdoor grapes was very good in all districts, the condition of the grapes which reached the market being at least 50 per cent. higher than that of the previous season.

No extension in the area of outdoor table grapes occurred during the year, and on account of the high prices being paid by the winemakers for grapes a considerable tonnage which would normally reach the market for dessert purposes was used for winemaking.

In most districts the crop of indoor grapes was in good condition, and growers with heated houses carried late crops through to July. A shortage of labour in some vineries resulted in neglect, but not to the serious detriment of the total crops. No new glasshouses were erected.

The crop of wine grapes in the Waikato and Henderson areas was comparatively good. Hawke's Bay suffered a severe setback when heavy flooding occurred just prior to vintage. Slight frost damage at Greenmeadows and a hail storm at Gisborne at the beginning of the season caused considerable losses.

Assistance is rendered to grape-growers by the Department in the way of free bulletins and practical instruction in all phases of viticulture.

Diseases of Grapes under Glass.—Very little trouble was experienced with any fungous diseases. Mealy bug, however, still continues to do considerable damage, but improved fumigation methods are proving effective. Experiments in this connection are being conducted by the Plant Diseases Division, and with the experience gained therefrom further improvement in control may be expected.

Diseases of Outdoor Grapes.—Downy mildew, powdery mildew, and black-spot were again prevalent, but in vineyards where full spray schedules were maintained a control was easily gained and there was very little actual loss. Winemakers in the Waikato and Henderson districts are being advised to plant the Franco-American hybrid varieties of grapes, which, being more resistant to disease, are far better suited to the damp, humid conditions experienced in those districts.

## WINEMAKING

Sixty individual units are engaged in the manufacture of approximately 85 per cent. of the Dominion's wine production, 50 per cent. of these units being engaged solely in grape-growing and winemaking. The balance of the winemakers are operating on a smaller scale, making from 30 gallons to 300 gallons of wine each per annum, their main incomes being derived from other sources. The types of wine produced are mostly sweet red and sweet white wines, only from 5 per cent. to 7 per cent. of the wine manufactured being of the dry types.

The approximate total quantity of wine produced and consumed in New Zealand since 1940 is as follows:—

				${f Gallons}.$	
1940	• • .	• •	 	 185,000	44
. 1941			 	 186,000	
1942			 	 207,000	
1943			 	 309,000	
1944			 	 348,000	
				,	