hill country, preferably on well-drained slopes lying to the sun. This cannot be too strongly impressed on those intending to embark in the business. The quality of the soil for the vineyard is not so important a matter as the choice of locality, and it may be at once stated that all parts of the North Island are not suitable for the industry. The rainfall varies considerably, and this must naturally influence the grower in choice of district. Hawke's Bay, especially the southern portion, is the best in that respect. There are, however, many other places on the eastern side of the North Island that are eminently adapted for the purpose.

The following varieties have proved suitable for growing outdoors for table purposes:—

Black: Black Hamburgh (early), Besgano Nero (mid-season), Muscat Hambro (mid-season), Chasselas Rose (early). White: Golden Chasselas (early), Chasselas de Fontainebleu (early), Foster's Seedling (early).

All the above are European varieties, and can be grown on espalier fences in the same way as the wine-grapes.

Albany Surprise and Pierce: American (mid-season). For the culture of these see leaflet No. 11, New Series.

## MANURING OF THE VINEYARD.

Some vinegrowers do not manure their vines until they notice a falling-off in the general growth and bearing-capacity. They should not wait to be reminded of the want of plant-food in this way. It is obvious that where a considerable weight of plant material and ripe fruit is taken away some return must be made. It is one of the inexorable laws of plant-cultivation that sooner or later a return to the soil must be made for the annual tax upon it. In the case of vineyards, a green crop, such as horse-beans, field-peas, mustard, rye, or in fact any crop of green stuff that can be ploughed in and gives the least trouble afterwards, should be grown every few years. In the intervening years it can take the form of well-rotted stable manure, bonedust, blood-meal, or artificials suitable to the particular soil. Most hill country is deficient in phosphoric acid, so that phosphatic manures are the best for such locations. The quantity applied should not exceed 2 cwt. to the acre. Sulphate of ammonia and nitrate of soda are more fitted for vegetables and cereals, and should not be used for vines. Slow-acting manures are the best. April is the time to commence this work.

Whereas there were only thirty-nine agricultural credit societies in Russia in 1909, the number increased to 107 by 1912.