

the purpose of bringing the land into a condition to sustain long leas of remunerative pasture; and this object should be achieved as much as possible by the use of forage crops, such as red clover, which will stand extended grazing, and which can be in many cases grown at the cost of little more than the seed by sowing with an oat crop or on stubble, and the rape, kale, and mustard category of crops, which are also cheaply grown.

I have pointed out as an exception to the average run of forage crops, lucerne, which as a semi-permanent crop on all suitable land yields large returns at low cost. The advocacy of lucerne-growing in New Zealand is now of old standing, and it loses nothing in insistence as time goes on. As in the case of the lime question, there is so little doubt as to the benefits that the farmer who neglects to test it by proper methods fails altogether to realize the possibilities of profit from his farming operations.

To revert once more to the subject of pasture: It has been admitted, and can hardly be questioned, that the total production of land under grazing-crops is approximately double what can be achieved from pasture, and hence it would appear at first glance that the creation of pastures and the severe limitation of cultivation is a bad thing from a national point of view. But, as Mr. Martin J. Sutton has expressed it, "until it is considered reasonable that men should beggar themselves for the national good, cultivators must be free to farm in the way that promises the best return for the capital, skill, and labour devoted to the business."

#### ROTATIONAL CROPPING.

I had intended originally to consider the subject of more definite rotations as a means of systematizing farm-management, but in the light of the foregoing considerations there does not appear to be any solid reason for the adoption of rotational farming in the North Island generally. A satisfactory rotation system pursued for a time would undoubtedly tend to a permanent improvement of much of our poorer lands. In fact, it would appear to me that farm-management on these lands must develop along the lines of a system of alternate husbandry embodying the cultivation on a rotational basis of oats, clovers, and forage and root crops, accompanied by judicious liming and manuring, to enable them after such a course of treatment to be sown in grasses and clovers, which will remain productive for a series of years. Such a system is frequently successfully applied to bush