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LIQUID MANURE

The Fertiliser Value of Cowshed Washings

The fact that as yet a very small proportion of our dairy farmers, even in these days of drastically-reduced supplies of artificial fertilisers, have equipped their farms with the means of collecting and distributing the shed washings, makes it clear that some more definite information is required by them as to the real value of this material which is regularly washed away into streams and drains from the great majority of our dairy farms.

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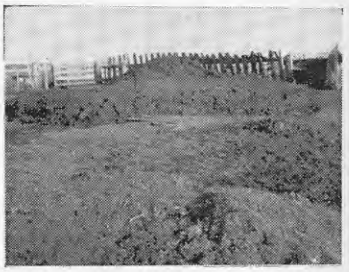
THE experience of the pioneers in the use of the washings from the cowshed and holding yards on dairy farms in New Zealand has resulted in a relatively slow extension of the practice in those districts where the results obtained by the topdressing of pastures and fertilising of crops with this liquid manure have given outstanding results easily seen and understood by neighbouring farmers.

Every good gardener knows the value of liquid manure (animal droppings and water) and would give almost anything to have a regular supply. He envies the farmer who can let tons of excellent manure go to waste each year.

Records and Observations

Knowing something of the actual manurial value of such material in terms of nitrogen, potash, lime and phosphate, and the need to get some accurate details of the quantities of these the average dairy farmer is wasting each year, the author arranged with two dairy farmers in Central Taranaki to keep the necessary records of the amount of liquid manure they obtained during the year from their respective herds. The shed washings were collected in each case in a sump to hold between 5000 and 6000 gallons. Samples of the liquid manure as it came from the sump for distribution on the pastures were taken each month and a complete analysis was made of each sample by the Department's chemist. The measurement of the quantity of liquid manure together with the analysis of the samples has given some very interesting and instructive indication of what liquid manure so collected does actually contain in the way of fertiliser.

The observations and records were made on the farms of Messrs. R. Haseltine and L. Craig, of Pukengahu, who are both firm believers in the value of this manure on pastures. To these farmers the thanks of the author for their assistance and co-operation are recorded.



Several years collection of manure from which the elements are quickly leaching the fertilising ingredients.

Mr. Haseltine's farm is typical of many of the smaller high-producing properties of Central Taranaki having been heavily limed and well topdressed with phosphates over a number of years, while Mr. Craig's farming is on a bigger scale and much less lime and phosphate has been used in the past.

These differences in liming and topdressing are very clearly shown in the results of the analysis of the liquid manure from each farm. Undoubtedly the quality of the pastures does affect the quality of the animal manure obtained from the stock.

Results of Analysis

In the following table, the quantities of liquid manure collected on each farm are recorded for the months of August to May in the case of Mr. Haseltine's farm and for September to May for Mr. Craig's farm. The manurial content of the material collected each month is set out in terms of well-known fertilisers.

Quantities of liquid manure collected per month on Farm 1 and Farm 2. Analysis of monthly collections. Nitrogen, as sulphate of ammonia or dried blood. Phosphate, as superphosphate. Potash, as 30 per cent. potash salts. Lime, as carbonate of lime. Magnesium, as magnesium sulphate.