Potash for pastures.

T. C. Dunne
POTASH FOR PASTURES

By T. C. DUNNE, B.Sc. (Agric.), Ph.D. (Calif.), Chief Plant Nutrition and Research Officer

INSOFAR as potassium is concerned, dairying in the South-West part of the State is a rather exhaustive type of farming. In the main, this is due to the necessity for cutting hay and removing it from the paddocks on which it was grown. The potassium in a two-ton crop of clover hay is at least equal to that in 90 lb. of potash fertiliser and often it is much more.

It is usually the sandy-surfaced soils with little or no clay near the surface which first become potassium deficient. In a number of cases, they have become so depleted of potassium that subterranean clover has completely disappeared from the pastures.

In our earlier experiments on some of these soils we used low rates of potash in the interests of economy—but it proved to be false economy. Last year we arranged for areas to be cultivated and reseeded with subterranean clover and included heavier rates of potash in the experiments.

The answer was definite—on sandy-surfaced soils where potassium has become so low that only silver grass remains, vigorous subterranean clover can be obtained only by reseeding and applying muriate of potash at the rate of about 2 cwt. per acre.

This is a lot of fertiliser—it costs about £3 10s. per acre. Nevertheless, the farmers on whose properties experiments were conducted are satisfied it is profitable and so are we. Let us take the results from Mr. Reading’s property at Vasse.

The no-potash plots cut 23 cwt. of pasture (dry weight) but it was all grass—no clover even though the plots had been reseeded. The 2 cwt. of potash plots cut 43 cwt. which contained no less than 26 cwt. of clover; that is, 60 per cent. of the total cut was subterranean clover. We also checked up on the protein contents of the pasture. The no-potash plot grew 2.2 cwt. of protein per acre while the 2 cwt. of potash plot grew 7.1 cwt. of protein—a difference per acre of 4.9 cwt. of protein. Now this difference of 4.9 cwt. of protein is equivalent to the protein in 35 cwt. of bran. To repeat—for the cost of reseeding and applying 2 cwt. of potash there was an increase in the amount of protein produced equivalent to that in 35 cwt. of bran.

Another striking feature of these plots was that in December when the rest of the paddock was covered with dry mature grass, the plots which received 2 cwt. per acre of potash were covered with lush green subterranean clover which was still growing vigorously.

What of the future on these reseeded areas? If the area is cut for hay—and it
is a great temptation to do so—I think at least 1 cwt. of potash fertiliser should be applied the next year. If it is used for grazing, it should receive a lower maintenance dressing of potash every year just as superphosphate is used. In order to provide for potash maintenance, a superphosphate-potash mixture containing five parts of superphosphate to one part of muriate of potash is now being made up by the fertiliser manufacturers. If this mixture is applied at the rate of one bag per acre it will provide 31 lb. of muriate of potash per acre.

This super-potash mixture is also recommended for a number of other areas including some of the grey, loamy soils where potash deficiency is not yet as severe as on the sandy-surfaced types but where there is ample evidence of potassium depletion. On these areas, subterranean clover has persisted but it does not make the expected amount of growth in the spring. Instead, the edges of the clover leaves scorch and the pasture dies off as though it is affected by drought. These are the symptoms of potassium deficiency and where they occur the super-potash mixture should be used. It should increase production and prevent total decline of the clover. I am sure it is worth a trial.

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