



Topsyman of Woodruffe, son of Topsy Belle, 1st prize Ayrshire heifer under 36 months, Ottawa Dairy Test, 1933. Owned by J. G. Clarke, Ottawa.

Correspondence

Maintaining the Fertility of Orchards

EDITOR THE FARMING WORLD:

In view of the favorable reputation which Canadian apples hold in Great Britain and the European continent, and the large and rapidly growing trade which is carried on in fruit of all kinds, but especially in apples, we, as fruit growers, should do everything in our power to increase the quantity and add to the quality, in face of the increased competition from other countries.

The question, "How shall we maintain the fertility of our orchards?" will be asked by all who heard Mr. Caston, president of the Ontario Fruit Growers' Association, make the statement that a large number of the orchards, especially in the older sections of Ontario, were starving for lack of plant food, and that in many cases the deterioration of certain varieties was principally due to lack of food. A statement of this kind, coming from such an influential fruit grower should cause us to pause and reflect on how we can economically provide this plant food for the trees.

Some say, use stable manure. This is all right as far as it goes, only it is not a complete manure for orchards, having an insufficient amount of potash, and under our present system of growing leguminous cover crops, it has much more nitrogen than is necessary. But the chief argument against its use for the orchard is that no farmer has more stable manure than he can apply with profit to his annual farm crops, and if he applies it to the orchard, he must skip some other part of his farm, which system, if followed for some time, will eventually run down the farm.

This system of "robbing Peter to pay Paul" is seen to perfection in Southern Wisconsin among the tobacco growers, where it is a common saying that tobacco ruins a farm, and a man wishing to buy a farm will steer clear of one which has grown tobacco. Here the fault is not so much with the tobacco as with the farmer.

Tobacco being a money crop, and also requiring large quantities of manure, it is a common practice to apply the entire amount of manure made on a farm to a few acres of tobacco, which practice in a series of years will surely run down the farm.

The same argument holds good in Ontario as in Wisconsin, where they say, or at least the thinking farmers do, that if tobacco will not pay for its fertilizer, better go out of the business. So, before we, in Ontario run down our farms, we had better decide that if fruit will not pay for its fertilizer for, we had better dig up our trees by the roots and plant something else.

The next question would be, "What shall we use?" Those who are situated near towns can buy stable manure, but for the majority of farmers this is impracticable. Even in favorable cases it is doubtful if for large fruit it will pay for the reasons given above.

In some cases as with small fruits, poor land, or where a proper system has not been followed, it may be desirable for a time to use stable manures, but the successful farmer must get his nitrogen cheaper than paying 12 to 16 cents per pound for it, and he can obtain it for nothing by means of a leguminous cover crop. Of all the different crops advocated, I believe Lucerne clover to be the best, as it will make a better growth in the dry weather, which we usually have in the fall, and also a better root growth than the common red clover, which is favorably known for this purpose. Lucerne is subject to being winter-killed, but this makes little difference where it is sown to be plowed under in spring. The Hairy Vetch is also highly recommended for this purpose.

But I would give a word of advice. Don't sow too early in the season, remember that it is a full apple barrel rather than a luxuriant cover crop, which is wanted. I believe that in dry seasons the fruit grower loses an enormous amount by stopping the cultivator too soon, and as a rule, cover crops should be sown a month later than usually advised. Never sow a cover crop until you feel sure that the apples are safe, even in case that no rain should come until picking time. This system might not produce such a fine cover crop, but it will produce more apples. Leguminous cover crops will provide for all the nitrogen necessary, but something else is required, or we will ruin our fruit crop through unbalanced feeding. I firmly believe that the popularity of cover crops, together with the use of stable manure, has had much to do with the

cry that Canadian apples are not keeping as well as they did in former years. We all know that an excessive amount of stable manure, which is largely a nitrogenous manure, will grow a large, pale, soft apple, lacking in color, flavor, long-keeping qualities, and that indescribable element often called "snap," for which Canadian apples are noted. I know for a fact that dealers are beginning to keep records in order to find where the poor keeping apples come from. Thus we see we can provide ourselves with an abundant supply of nitrogen and humus, but we can not get in that way the potash and phosphoric acid which are also needed.

Experiment stations recommend a fertilizer containing 2 per cent. of nitrogen, 9 per cent. of potash, and 7 per cent. of phosphoric acid, but if a proper system of cover crops is followed, I think we can leave out the nitrogen and use potash and phosphoric acid in above proportions. In order to obtain this, the "common sense" would teach us to use our own waste matters, that is, bone meal and wood ashes, which at present we ship across to the United States to improve the quality of their fruit.

In bone meal the steamed will be found more economical than the raw, being less in price and having a higher percentage of phosphoric acid, though lower in nitrogen, which is no detriment in a properly managed orchard.

For the potash we should use the ashes produced at the farm and in addition thereto the commercial potash salts, particularly sulphate and muriate of potash, which are very high grade, containing 50 per cent. of pure potash, while ashes contain only 5 per cent. on an average. Weight for weight, the potash salts mentioned are worth five times the value of ashes, and as a commercial article, the former are usually a more economical source of potash than the ashes.

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Improving the Sulky Two-Furrow Plow

EDITOR THE FARMING WORLD:

The time has come for farmers to economize labor by using three and four-horse teams as much as possible, allowing one man, in a good many particulars, to do two men's work. The sulky plows now have rolling colters which are very much lighter in draft than straight colters. The objection has been that it is using pointers on the two-furrow plows with straight colters, the draft was too great for three horses to pull. This difficulty has been overcome by a simple device to attach the rolling colter and pointer or skimmer to all sulky plows. Where known, they are in demand, as most all farmers will admit that if the draft can be so arranged that three horses can handle a two-furrow plow with jointers attached, the work is so performed as to make a better mould than without the jointer, and at the same time preventing the growth of grass between the furrows, thus making a better seed bed.

We are happy to inform the farmers throughout the country that it has been accepted by the Hon. D. B. Delbert Woolley of this county, who has taken out a patent for the same.

FARMER,
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"How do you stand?" asks the Italian when he meets a friend.

The Polish greeting: "How do you have yourself?"