

What the Corn Plant Requires

Prof. Andrew M. Sault.

The corn plant develops in a comparatively short season. In order that it may do this successfully it has been provided with a very vigorous root system so that it can gather large supplies of food from the soil in a short space of time. But the root system is of no avail unless the plant food is there in soluble form, as it can readily be taken up by the rootlets of the plants and built into its tissues. Think of a corn plant from root to 18 feet in height making its growth from 90 to 110 days, and when we recognize the fact that this growth is based largely on the plentiful supply of four or five elements in the soil, it impresses us with the necessity of feeding the soil with those elements that are essential to the rapid development of the plant. What are these necessary elements? First there is nitrogen, which is responsible in a large measure for the size obtained by the plant. When nitrogen is abundant the growth is rapid and uniform, the leaves are of a rich, dark, green color and the general appearance of the plant is healthy. But, strange as it may seem, there are many types of soils, though not fertilized all these years, where the corn to-day makes a strong stalk, and has all the attributes of a healthy plant. It is apparent therefore, that the land is not in need of nitrogen. When the stalk develops and an ear fails to form, it shows that some very essential element of plant food

that has to do with the development of the grain and seed is deficient in the soil. What can this element be? It is likely to be phosphoric acid. What leads us to this conclusion? Simply the fact that the chief function of acid phosphate, as found out by careful and accurate experimental investigation, is to assist in the development of the grain, no matter what its form and character may be. There is another essential element of plant food that is sometimes deficient in the soil, though it is less likely to be lacking than any of the others, and that is potash. If the stem and leaf of the plant is not sufficiently vigorous, and if there is a plentiful supply of nitrogen and phosphoric acid in the soil and still the ear does not develop well, it is probably due to the need of potash in the soil. This may be applied in the form of muriate of potash, which is one of the cheapest and most effective forms the farmer can employ.—Year Book.

Save All the Labor Possible

For the last 10 years, we have used the return rope and pulley in connection with our hay fork ears and have found it to be an excellent device. This return device should be on every ear, for then the carrier comes back readily by weight, with no human energy wasted. It is well not to use a cast iron weight or stone for this purpose, a sand bag being much preferable, as it is safer in case it might touch any person in its descent. For this reason, we always advocate the use of a sandbag sufficient in weight to draw the ear back.

Labor-saving devices are becoming the order of the day and as men are becoming wise to these facts to a very large degree, accounts for the enormous trade being done in these lines of goods. It is much better for the horse to do the work instead of the man as in the old way, which is a great consideration to anyone who values time and has no desire to do things by main strength and awkwardness at the loss of a lot of flesh. —Tolton Bros., Wellington Co.

Experience an Expensive Teacher

Ed. The Dairyman and Farming World.—Some 10 years ago I started dairying with a herd of common cows, of no particular breeding. These cows, though, were fairly good milkers. I bred them to a Holstein sire

for four or five years. During the next seven or eight years, my herd was made up mostly of Holstein crosses from these common cows, some of the progeny having two crosses of Holstein blood. These cattle were much superior as milkers to the herd we originally had. One of these cows was a particularly good milk, and was worth any other two I have at the present time.

About eight or nine years ago, I moved into another section, where the Shorthorn, or Durham cattle were principally bred. As Durham sires were all that could be had in this district, I bred my Holstein crosses to them, and have since been using a Durham sire in my herd. The result of using Durham sires upon my herd has been that my young stock now are far from being the heavy producers that the original stock were. The cattle we have at present cannot begin to compare with the ones we used to have. You may imagine from this that I have learned enough to get back again into the Holstein breed as soon as possible.—Timothy Garvey, Peterboro Co.

Fore Quarters Becoming Inactive

I have three cows that have gone almost dry in front teats. The milk seems to have nearly all gone to hind teats. Would the manner of milking cause this and how should a cow be milked?—J. McEl.

While this occasionally occurs without appreciable cause, it is singular that three cows in the same herd should be affected at the same time. All that can be done is to massage the quarters well frequently, and milk regularly. A cow should be carefully and gently milked twice daily. All the milk should be drawn from each teat. So far as I can see, no system of milking would have the effect stated on the forequarters, and the hind quarters remain active, unless it should be a failure to milk the fore-quarters dry each time.

Which Is Best?

Editor, The Canadian Dairyman and Farming World.—I have had considerable discussion with a neighbor as to which kind of land is the best for dairying. Which is the most suitable for this purpose, a clay farm or one of sandy loam? We decided to leave it to you to answer through the columns of your paper.—C. H. C., Leeds Co.

This matter is somewhat of an open question. The discrepancy arises from the fact that land which is practically useless for many purposes will furnish good pasture, and hence is spoken of as being suitable for dairying, or in other words, being dairy land. This does not infer, however, that dairying cannot attain its greatest success upon clay soil. The fact of the matter is that more fodder or pasture grass can be grown to the acre upon good clay soil, especially if it be of a heavy nature, than upon lighter soils, such as the sandy loam in question. Therefore, we give it as our opinion, other things being equal, that a clay farm would give better returns in dairying, than would a sandy loam. At the same time we are convinced that dairying should be carried on upon sandy loam soils, because such soils are invariably in greater need of the fertility which they will thereby gain, than are the clay soils.

Selection pays and blood will tell.—C. F. Whitley, In Charge of Dairy Records, Ottawa, Ont.

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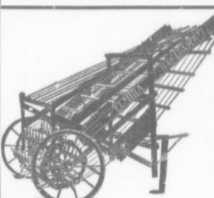
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