

plants within immediate reach of the roots at the moment of their formation. Digging manure deep down and leaving the surface poor is poor practice. I do not say: have the soil poor below; on the contrary, have it as rich as the crops need; but do not, as many do, forget the surface; also remember that young plants like quick acting nitrogenous rather than slower mineral food. The advantage of a good, free start in growth cannot be over-valued, and the start is often slow and weak in strong land, and always so in poor soils. Collect decayed leaves or other vegetable matter, wood ashes, light soil of any kind with a dash of soot, and mix well. When moist, and only then, pour on liquid manure, such as drainings from heaps, or, what is very good, half an ounce of sulphate ammonia to a gallon of water. A few weeks later, when the time of sowing comes, draw deep drills, fill with this mixture, and in it sow the seed. That is food for infant plants, and they thrive on it. This little attention at the outset may make all the difference between success and failure with certain crops in naturally poor or ungenial soils.

Just another sentence or two. Quick-acting nitrogenous manures, such as nitrate of soda and sulphate of ammonia (the former for light and dry, the latter for heavy and cold soils), should be applied early in the season to growing crops, never late in the autumn; phosphatic and potassic manures earlier still, before growth commences and before dry summer weather sets in, or they cannot be appropriated, because not dissolved, by the crops they are intended to support. Chemical manures have often been condemned as worthless, when the fault rested with the users in simply applying what was really good at the wrong time for attaining the object in view. These remarks are founded on practice. I think they cannot do harm to any and may possibly be suggestive to some who may engage in the cultivation of food-producing crops. (1)

Age for Corn Fodder.

I see in your number of 10th inst. on page 772, an inquiry by T. E. E. as to the nutritive value of corn ensilage, and an answer by E. W. S., referring to a statement on page 312 of this volume. I have carefully read the two articles, and confess that I have been somewhat startled by the point brought out. From the reports of all scientific men whose writings about ensilage I have read, especially from the report of the Cornell Experiments last winter, I thought it was pretty conclusively established that corn, cut when the ear was nearly mature or at all events when the kernels were glazed, was, pound for pound, much more nutritious than the same corn cut at any former stage of growth, and consequently I and all my neighbors and those I have consulted with and whose opinions I have read, have been trying to find out what kind of corn would reach the maturer stage in this climate and also give a good bulk. If, however, this opinion or fact, if it is a fact, is to be taken, we can leave out all considerations of maturity and look simply to the different varieties, almost all of which will reach the tassel stage or even show embryo ears. This season I planted 20 different varieties in plats of one square rod, and weighed the product at cutting time, and observed the stage of maturity which each variety reached. Without going into details, I may say that there were some three or four kinds with embryo ears, and in full tassel, and which gave the heaviest growth, ranging at the rate of 20 to 24 tons to the acre, while only one of those with glazed ears gave more than from 11 to 17 tons per acre. There was, however, one kind, thoroughbred white flint, on which the ears were fully glazed, and the growth would give 24½ tons

(1) Very well worth attention.

A. R. J. F.

to the acre. I may say these plats were on fair corn land in good order, but without a light dressing of phosphate as manure. The question is whether a crop which will give 24 tons of corn in the tassel is as good or better than one which will give say 17 tons of corn with the ears glazed. This is a very important point for ensilage growers in this northern climate, and an answer will be of great value. S. A. FISHER. *Knowlton, P. Q., Can.* [Much experiment will be required to settle fully this question. The different varieties of corn do not give the same comparative amount of stalk and leaf as compared with the growth and ripening of the ears. Some of the smaller and earlier varieties, for instance, furnish twice the amount above the ears as below it, both in length and quality; while the tall growing sorts, which reach a height of 12 feet and more, have most of the stalks below the ear. This difference would effect the result, in using the ripeness of the ear as a criterion to judge from, or the same rule of ripeness would not apply alike in both cases. The same amount of fertility in the soil would give unlike results in the two varieties. The same amount of seed to the acre would also vary the results. These and other influences would need many and varied experiments to properly settle the question, and careful and accurate cultivators will find it an interesting subject for inquiry, in addition to the few experiments which have been already made. (1)—*Country Gentleman.*]

SHEEP-WASHING.

A meeting of the Perith Farmers' Club was held last week, when a paper was read by Mr. J. E. Hargreaves, J.P., of the firm of Whitwell and Hargreaves, of Kendal, on "Sheep-washing." Major Barker, of Newtonrigg, presided.

Mr. HARGREAVES said sheep-washing from a farmer's point of view was a subject he did not profess to understand, and he must leave it for practical and experienced sheep-farmers to settle for themselves. His object was to give what information he could on the subject of wool—whether it should be washed or unwashed, and to try and answer the question which had given rise to so much discussion in the country. Like most questions, there were two sides to it. Even Bradford, the great wool centre, was divided. On the one hand, Mr. John Scriven—a practical farmer and a wool merchant—had boldly come to the front in his advocacy of the folly of washing sheep; and on the other hand the Bradford Chamber of Commerce had given their verdict in favour of sheep-washing—treating the subject, no doubt, from a national point of view. In his paper he would treat it from a local standpoint, and his remarks would refer to what was commonly known as north wool—wool grown in Cumberland, Westmorland, and Northumberland, and in the whole of Scotland.

He believed a deal of good had been done in the district by the discussion upon a paper on "Wool" he read at Kendal a few years ago. Salving had been practically abolished in the better bred cheep; but there was room for improvement in this respect with regard to black-faced or fell breeds. He would here strongly recommend farmers to abolish salving or mixing the dip with oil, tar, or anything that discoloured the wool.

Of recent years a great change had taken place in regard to the washing of Colonial fleeces. In 1869 the Australian fleeces shorn unwashed were about 30 per cent. Last year the percentage was 97, only 3 per cent. of the clip being washed. In South America, all the sheep were shorn unwashed, and the same was the case with the great bulk of the sheep in the United

(1) The Provincial Experiment Station at St. Hyacinthe has already taken up the study of this question and will experiment very thoroughly on the matter.

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