

UNIVERSITY FARM PRESS NEWS.

Published Semi-Monthly by the University of Minnesota, Department of Agriculture, Extension Division.

Vol. I.

University Farm, St. Paul, Minn., November 1, 1910.

No. 20.

Entered as second class matter, Jan. 15, 1910, at the postoffice at St. Paul, Minn., under the act of July 16, 1894.

Exchange copies and all correspondence should be addressed to Editor University Farm Press News, University Farm, St. Paul, Minn.

The Curing of Corn.

With the coming of cloudy and damp weather, seed corn will need careful attention. It is presumed that farmers have their seed-corn harvested by this time. Such corn as is not harvested is likely to suffer loss from exposure from this time on. The one important factor necessary for the proper curing of corn is an even circulation of air. If the corn is in piles on a floor, it will be necessary to stir the ears at least once a day, that fresh air may reach each and every one, and thus prevent mold or decay. If the corn is on racks or on strings, with each ear more or less separate from the rest, it will still be necessary to see that a circulation of air is secured. The room must be thoroughly ventilated, by having at least two windows in such position that a circulation may be secured; that is, one on either side of the room. In some instances, wherever it may be convenient, a little artificial heat, to aid in circulation of the air and in warming the atmosphere of the room, will be found useful. Too much heat, however, of this sort will be found detrimental, as it will dry the seed out too rapidly and in this way injure the germ. The Experiment Station has found that about as good way as any to store seed-corn, for proper curing, is in narrow bins made of poultry netting. Two-by-fours are used for uprights, upon which to tack the poultry netting. Four-foot netting, with 2-inch mesh, is purchased at the local hardware store. The bins are eight feet high and two feet across, by any length convenient, according to the room in which the corn is to be stored. The bins may be placed as close as eighteen inches to each other. The long way of the bin should run in the same direction as the air current through the ventilating windows. The corn is simply dumped in these bins, and needs no further attention until about the month of March, when the farmers should begin thinking about their seed-corn supply.

If the supply is saved for commercial purposes it should be shelled and prepared for shipment.

As corn is very susceptible to changes in the humidity of the atmosphere, it would be well to close the windows at night; opening them in the day-time. If, however, the weather should continue humid, it would be almost a necessity to provide some means of artificial heat to overcome the excess of humidity.

In short, maintain two conditions: First, circulation of air; second, a constant drying of the ears. The latter must proceed constantly, but gradually, to make the best seed-corn. Once the ears are well cured, they will contain approximately 15 per cent of moisture. If this can be reduced to 12 per cent, so much the better. If they possess more than 15 per cent and are subjected to freezing weather, damage by freezing is liable to occur.—C. P. Bull, University Farm.

The County Industrial Contests.

The season for the county fair has closed; and the Industrial Contests, held in connection with them or as separate exhibitions, have nearly all been held. In a number of counties the work has been started for the first time, by the county superintendent; and the results attained, as shown by the various county contests, have fully repaid all the time and effort put forth. In at least four counties of the state, the contest has been held as a distinctive county fair, and these fairs have been highly successful. In all the contests the number of entries has exceeded expectations; and the interest of the boys and girls has been lively indeed. With the boys and girls interested, it is an easy matter to lead the parents in the same direction. The contests, when held as a part of the county fair, have proven a very valuable feature, and in some instances have been the big end of the fair.

The Industrial Contest will not solve all the problems of agriculture or education; but the results secured

are sufficient to warrant saying that it must be counted as a strong factor in educating the country boy and girl for practical life. An enthusiastic county superintendent, backed by live, loyal, up-to-date teachers, can almost revolutionize the social, agricultural, and educational life of a county in less than five years.

Occasionally we meet a man who scouts the idea of a competitive contest in any line. He maintains that all work should be shown on its merits, and nothing should come into competition with that made by another—that only the individual effort should be recognized. To carry that idea to a finish would be to send the boy out to run a foot-race alone, and to send back all the pupils in our schools to the instruction of governesses. There can be but little improvement without a standard upon which to attain; and there can be no progress or education toward that standard without a comparison of work done or results attained. In the Industrial Contest work, we care nothing primarily for the county fair or the central contest, but use these, and the premium-money, as a means to an end in the development of boys and girls; to allow public comparison of the work done, and to call public attention to it. The great value of the movement is in the mental effort put forth in the production of the article; and such effort is always stimulated to the highest activity by knowing that the result must come into sharp competition with that produced by one's neighbor.

But, as an adjunct of the county fair, the Industrial Contest is worth all the effort it costs. The county fair is a great factor in the development of an agricultural people. The county fairs of the state have taken on new life and have been better in their exhibits, and better attended, than before in a generation. Not a little of this is due to the samples of work and produce exhibited by boys and girls. An Iowa man visited one of our county fairs this fall; and, when he learned the price of land in the county, he declared that the county fair would increase the price \$20 per acre inside of two years. Prof. Snyder, of the Agricultural College at Ames, Ia., visited one of our industrial fairs a year ago; and, after looking it over carefully, said, "The plan is unique and along right lines. I believe you have the solution of the county fair problem."

And so the Industrial Contest is winning a place for itself as an educational factor in the state. Given a live county superintendent, enthusiastic teachers, and the hearty cooperation of the parents, and the possibilities of the work are beyond belief. If the financial interests of the various counties would back the movement up with plenty of funds, it would grow and spread by leaps and bounds; and no better investment could be made with a little money. It would come back to the county a thousand fold, in a better agriculture, brighter boys and girls, and better citizens, which are the best products of civilization.—George T. Howard, Extension Division, University Farm.

Quack Grass Eradication Work in Winter.

By the time this article reaches the reader it will be too late to do much effective work in the field in the eradication of quack grass. Fields infested with quack grass may be given a shallow plowing just before freezing-up time. The underground stems that are left exposed to the combined action of frost and air will generally be killed, but any underground stem that is only partly exposed will usually live and grow in the spring. Careful observation indicates that in instances where part of the underground stem is above ground and part buried ever so slightly in the ground, the part exposed generally dies out, and the covered part retains life and will grow the following spring.

Quack grass spreads in two ways: first, by underground stems, and second, by seed. During the winter all growth in the plant is stopped, and spreading by the first method is impossible, but this is the time when quack grass spreads by jumps. About the only way quack grass has of getting from one field to another, or

from one farm to another, is by its seed. As a usual thing, quack grass does not mature its seed in hay, or in winter grain crops, since they are cut too early; but, in hay that is left standing for seed, and in spring grains, it does become mature, and is carried from field to field, or from farm to farm, by the threshing machine, in manure, in hay and straw, or in seed-grain or grass-seed.

The first thing to do is to learn to know quack grass seed, and then refuse absolutely to use any grain for seed that contains it. As soon as the fall work is well out of the way, get the fanning mill in working order, and clean the seed grain so well that there is no weed seed of any kind in it. With oats and barley, the work must be done particularly well, since quack seed resembles these to a certain extent, although it is much smaller. Buy your seed grain and grass seed early and be absolutely sure that you get no quack seed in either.

There never would have been any quack grass in this country if some fellow hadn't been careless and allowed some of its seed to get over the ocean from Europe. This happened a long time ago, but quack grass is still "on the job," spreading in summer, by underground stems, slowly; and in winter by seed, in jumps. If you have no quack grass on your farm, you don't want any; and, if you have quack grass on your farm, you don't want any. Look out for that quack grass seed.—A. C. Army, Asst. in Agriculture, Minn. University Farm.

Shipping Dressed Poultry.

After the fowls have been dressed and are thoroughly cooled, they will be ready for packing. Poultry dressed for market should be kept of feed at least 24 hours previous to slaughter, and should not be drawn before it is packed for shipment. The action of the air on the inside of the fowl will cause it to spoil, and make it impossible to keep in good condition. Use a flat box, in which two layers of poultry can be packed. Wrap the head of each bird in paper, so that any blood which may be left in the head will not come in contact with the body of the fowl and soil it. In some cases the whole bird is wrapped in wax paper.

Start a layer in the bottom of the box; take each bird separately and fold the head to one side, and place it in the box with the head up. Continue in this way until the bottom layer is filled. Put in the upper layer the same way, except that the head is in the middle and the side of the breast is up. If this method is followed in packing, either side of the box may be opened when it reaches the market, and a nice, uniform lot of poultry will meet the eye of the purchaser.

The poultry may be packed in barrels or larger boxes; but small flat boxes are preferred, because they are easier to handle, and there is also less danger of spoiling while they are being shipped.

It is a good plan to establish a permanent trade with some commission firm, meat-dealer, or large hotel, to supply them with poultry. This will insure a better price than when shipped only occasionally.

Poultry should be sent by express, so as to be on the road the least possible time. The cases, when shipped, should be plainly marked for whom and from whom they are; the number of birds in the case, and the weight.—W. H. Tomhave, University Farm, St. Paul.

Making the Hen-House Ready for Winter.

One great essential in getting winter eggs is to make the hens entirely comfortable. The first thing to do is to get busy now and clean out the house thoroughly. Remove every useless article and leave the floors entirely free from anything that will obstruct their free use as a scratching place. Clean down the walls; and, if necessary, whitewash or spray thoroughly. Clean the dropping-boards, and make repairs on them and the roosts, so that droppings can be easily removed at all times during the winter. Remove every bit of litter from the floor; and, if it is a dirt floor, take out at least a couple of inches of the old dirt, which should

be replaced with clean loam. Make ready a corner in each pen, that can be used as a dusting-box. This can be kept supplied with the fine siftings from hard-coal ashes, and will be much enjoyed by the whole flock. If it can be placed where the sun will shine on it, so much the better.

Do not close the windows until the weather gets real cold. Let there be one glass window for each pen of 10x12 or 16 feet, and one muslin-covered frame, with at least 12 square feet of surface for each pen. This may look like a cold proposition, but it will be found the muslin does not make the pen any colder than does the same amount of glass surface, and at the same time gives a steady supply of fresh air. This muslin will help greatly in keeping the poultry-house dry during the winter, and will make it much more comfortable than a closely shut-up house can ever be.

For colder nights, have a curtain of cheap sheeting running across the front of the roosting space. This does not need to fit tightly, except at the top, and may hang out some inches from the dropping-boards, giving plenty of room for the fowls to pass to and from the roosts. On the very coldest of nights the roosting-place will be found to be entirely comfortable and in the morning the hens will come out ready to scratch and hustle for their breakfast.

Above all things, be sure to keep a good six inches of perfectly dry straw on the floor, for scratching material. There can be very little comfort for the hen in scratching through a pile of dirty, damp litter that has been on the floor for a month or more.—C. H. Welch, Extension Division, University Farm.

Notes on Potatoes.

The average yield of potatoes in Minnesota for the ten years, 1899 to 1908, was 86 bushels per acre.

The average yield of potatoes in the State of Maine for the same ten years was 171 bushels per acre.

There are about ten thousand hills on an acre of potatoes planted in rows 3½ feet apart and 14 inches apart in the row.

One 8-ounce potato in each hill will produce a yield of about 88 bushels per acre.

Many times, one hill will produce six 8-ounce potatoes; which is at the rate of 520 bushels per acre.

The low yields secured, on the average, must be due to the failure of a large number of hills to produce.

Some of the things that cause the failure of hills are poor soil, improper preparation, poor seed, irregular planting, poor cultivation, bugs, diseases and poor weather. Many of these conditions are controllable; all of them may be influenced by proper methods of culture.

A hill of potatoes stripped by bugs, or on which the leaves are injured by blight, cannot give a satisfactory yield.

Paris green or some other poison should be used to destroy the bugs before they have had a chance to seriously injure the vines. A few days' delay means the loss of a great many hills.

The most successful growers spray from two to six times each year, with Bordeaux Mixture, to prevent injury to the leaves from blight. Paris green may be mixed with the Bordeaux, thus spraying for bugs and blight at the same time.—A. D. Wilson, Extension Division, University Farm.

A Farmers' Meat Club.

Near Hancock, Minn., twenty farmers have organized themselves into a "Meat Club," through which they are enabled to have fresh meat at all seasons, in hot as well as in cold weather. On Friday of each week a beef is killed and cut up into twenty pieces; each piece being numbered. Each person takes a different number each week, so that, at the end of twenty weeks, each one has had a whole beef. The beeves are furnished by the members of the club, and the meat is sold at from five to eleven cents per pound; the owner retaining the hide and paying two dollars for the killing and cutting. The killing and delivering is all done at a central point in the neighborhood. The beef is hung up in a cool cellar Friday night and cut up for delivery Saturday morning.

The plan commends itself as one well worthy of imitation by farmers all over the state, as affording a large saving over ordinary methods, especially in hot weather. It affords another illustration of the benefits of co-operation, and of the ease with which these benefits may be secured when some one is found to take the lead in the simple work of organization.

Furthermore, such a meat club might easily, under good leadership, develop into a co-operative packing company, which would afford a market for all the stock raised in the vicinity.

The plowing under of green crops, like peas, oats, clover, alfalfa and other grasses, is, next to a liberal use of barnyard manure, the most approved method of renewing a depleted soil, and of maintaining the fertility of newer land. Where this is practiced, as at the Minnesota Experiment Station, in connection with a rotation of crops, there need be no fear of any deterioration in the soil. Indeed, if a sufficiency of live stock is kept, and the products of the farm mainly transformed into beef, mutton and poultry before being sold, the land will grow richer and more valuable with each successive year.

Among insects, lice are the greatest enemies of poultry; and their presence is one of the leading causes of poverty in their flesh. Complaint is constantly made that the fowls are fed sufficiently to keep them in good flesh, but that they are still poor. Such birds are frequently examined for insects without the discovery of any; but if the roosts and walls of the hen-house are closely examined, uncountable numbers of insects will be found, awaiting the return of night for another attack upon the roosting fowls. The remedy lies in cleanliness. Poultry insects breed rapidly in unventilated, seldom-cleaned poultry houses, and in places where the birds perch at night. Spray the roosts, the nests, the walls, the cracks and the crevices with kerosene oil. Coal tar preservatives of wood are also valuable insecticides and disinfectants for the henhouse. Success with poultry depends as much upon vigilance in sanitation and disinfection as upon proper feeding and housing. Such is the result of experience at the Minnesota Experiment Station.

Poultry, roosting in trees, is not exempt from insect enemies. This has been proved by the experience of many who make a business of raising poultry. An examination of the limbs of trees where the young flocks roost at night, before the birds have been yarded and housed for the winter, will show countless numbers of mites resting under the loose bark. Chickens generally seek the same roosting place night after night, and carry insects with them. The tree becomes infested and the vermin increase in numbers with wonderful rapidity; finally sapping the vitality of the birds. Then farmers wonder why food does not fatten. When birds are old enough to "climb trees" they should be placed in coops that can be easily disinfected and kept in a healthy condition, if the best financial results are expected. Such is the advice of the poultrymen at the Minnesota University Farm.

Something of beauty—as well as of order, convenience and good sanitary conditions—is needed to make a farm home attractive. In planning such a home, let not this be forgotten. A wide sweep of lawn between the house and the road; a background of trees and shrubbery; low flowering bushes planted close to the foundation and serving, as it were, to bind the house to the soil; vines over the porch or bordering the window-frames—all these do much to beautify the house. From the erection of the first house, however modest, the home-maker should plan for the future as well as for today. He should avoid building too near the road; remembering that prosperity may ere long enable him to build a larger home, which may often be most satisfactorily placed in front of the old one. Barns and other buildings should be located in such relation to one another as to allow for improvements which will result in a harmonious whole.