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UNIVERSITY FARM PRESS NEWS

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

Vol. IV. UNIVERSITY FARM, ST. PAUL, MINN., SEPTEMBER 1, 1913. No. 17.

Entered as second class matter January 15, 1910 at the postoffice at St. Paul, Minn., under the Act of July 16, 1891.

ORCHARD AND GARDEN NOTES.

September 1.

It is desirable to either plant at once, or stratify in sand or leaves, any nuts that are to be planted.

Wealthy apples, carefully picked when ripe, wrapped in paper and stored in a cool cellar, may be kept well into the winter.

The common wild elder has been furnishing an abundance of fruit for pies and jelly this season, besides being an attractive ornamental bush.

Show something in the fruit or vegetable line at your county or neighborhood fair. You will find it not only helps the exhibition, but broadens you.

If one is to find a market for fruit when there is an abundance, it must be carefully picked and graded and put on the market in neat packages.

For exhibition at the fairs, apples should be picked when ripe, as carefully as possible, wrapped in soft paper, and not allowed to become bruised or injured in any way.

The hardy Hydrangea and Clematis Paniculata are at their best now. Among berried ornamentals, the highbrush cranberry, sandthorn, mountain ash, and crataegus are especially attractive.—LeRoy Cady, Horticulturist, University Farm, St. Paul.

ORCHARD AND GARDEN NOTES.

September 8.

A pot or box of parsley, growing in a kitchen window, is both useful and ornamental.

Daffodils and hyacinths often come out well in the spring, though they are not as sure as tulips.

Butternuts and black walnuts may be harvested at any time now. They should be well dried before storing for winter use.

Currants and gooseberries may be pruned this month. Take out all diseased wood; and if the new shoots are too crowded, remove a part of them.

Bulbs for fall planting should be ordered at once. From September 15 to October 15 is a good time to plant them. Tulips and crocus do well anywhere in Minnesota.

Celery may be bleached by gradually drawing the earth up around the plant; being careful not to put wet earth near the stem, or to handle the plants when wet; as this causes rusting or decay. Celery will bleach in from 10 days to 3 weeks. Boards are often used instead of dirt.

Cuttings of this year's growth of currant wood may be made. These should be about eight inches long, and be set firmly in rich, sandy loam. Leave but one or two of the top buds out. When the ground freezes, cover with earth or mulch. They should form some roots this fall, ready for a rapid growth next spring. Cultivate thoroughly next season, and they will be ready to set permanently next fall. —LeRoy Cady, Horticulturist, University Farm, St. Paul.

HOW MUCH SEED CORN TO SELECT.

When you get into your own cornfield during Seed Corn Week you may see so many good plants bearing good ears that you will just feel like keeping a-going. Hope you do and while you are selecting good seed corn for yourself, select some for your neighbors. They need it to help boost the average yield of corn in this State to over forty bushels per acre. How many rows has an average ear of corn of the variety which you raise? How many kernels per row after tip and butt kernels have been shelled off? How many hills will one ear plant, using 3 kernels per hill? One acre of corn checked 3 ft. 8 in. contains 3,240 hills. If your ear has 600 good kernels, it will plant 200 hills, 3 kernels per hill. At that rate, it would require about 17 ears per acre. Remember, however, that in selecting the corn in the field, you go over it rather hurriedly. When winter comes, and you look the ears over carefully, you will find many that will not suit you. Of those that do suit, a number may not grow strong, unless the corn is properly dried and stored. A good rule is to select twice as many ears from good plants in the field as are needed to plant the required number of acres next year. This allows a very close selection to be made during the winter.—A. C. Arny, Assistant Agriculturist, University Farm, St. Paul.

AN EASY METHOD OF PICKING SWEET PEAS.

Sweet peas are usually gathered by pinching the stem with the finger-nail or by cutting with a knife or pair of scissors. A simple way is to bend the flower stem toward the main stem and pull the blossom out from the place where it is attached. It requires a little practice to do this but when the "trick" is learned the blossoms can be gathered very quickly. At first it is best to use the left hand to hold the flower at the base and to bend the stem with the thumb while the right hand pulls the flower off. After a while one learns to pick the flowers with one hand. The flower stem is bent with the thumb or finger and at the same time pushing upward so as to lift the flower out. If the flower is bent the wrong way it cannot be picked as easily.—R. S. Mackintosh, Extension Horticulturist, University Farm, St. Paul.

NUBBED NOTES.

Graded Seed Corn Kernels From University Farm.

Observe Seed Corn Week.

Train the boys while you select the productive ears.

Get home-grown seed of the variety best for your locality.

Hardy, heavy-yielding ancestry is as important to seed corn as to a dairy cow.

Buying seed corn in the ear was a step in advance. The next step is field selection.

The largest yield of shelled corn per acre is your object, so throw out the ear with the big, coarse cob.

Why not obey the Governor's seed-corn proclamation? The dollars go into your pocket, not his.

Get "Selecting and Storing Seed Corn," Extension Bulletin 9, from the Office of Publications, University Farm, St. Paul.

What type of ear has the greatest producing power? Get Farmers' Bulletin 419 from your Congressman or the U. S. Department of Agriculture, Washington, D. C.

If you bring in a good variety from a distance don't discard it because it doesn't do well the first year. Men and varieties must get used to new conditions before they can do their best.

Good seed corn is a profitable investment at from $2.00 to $5.00 if you don't have it. If you can select, store, and test it for $1.00 per bushel, how much will that save on next year's crop? Sell your surplus seed to your neighbor, don't wait and buy from him. —J. O. Rankin, University Farm, St. Paul.

HANGING AND STORING SEED CORN.

The setting apart of a seed-corn day for the gathering of seed is important, but all time and labor is of no value unless the seed is properly cared for after gathering. Seed gathered early in the season in the proper way contains a very heavy percentage of moisture, therefore requires much care in curing or it may mold and spoil. The day corn is gathered it should be husked and put where there is free circulation of air. The ears should be so placed that no two are touching. This method of storing can be accomplished in several ways. The old fashion way of storing was to braid the ears in long strings and hang them in the attic. This method is very satisfactory. Another method that is sometimes used is to strip the ears entirely of their husks and tie them through the middle with binding twine, placing from ten to twenty ears to a string. The strings of ears are then hung in some place out of the sun and rain and where there is free circulation of air. Still another method that is sometimes employed is to hang poultry netting on the wall and place the ears one in a mesh. This gives free circulation all around each ear and is a very satisfactory method of drying. Sometimes finish-nails are driven in the wall and one ear placed on each nail. Where wall space is plentiful, this method is conducive of good results.

After hanging in any of the above described methods for two months, the ears should be dry enough for storing. At this time they may be taken down and stored in a bin, providing they are not piled over two or three ears deep, or better they may be left hanging until ready for shelling in the spring. In either case they must not be exposed to a damp atmosphere as the dry ears readily absorb moisture from the air. During the cold weather freezing will injure the germ if it is damp, but not if it is thoroughly dry.—L. B. Bassett, University Farm, St. Paul.

LOSS FROM POOR SEED

Seed Not Acclimated and of Low-Producing Vitality.

The importance of natural variation and differences in climate in relation to agricultural production, has never been fully realized. Under natural conditions only those survive which can modify their habits of growth so as to make a successful resistance to destructive influences and propagate their kind.

When man enters in as a factor he may, and usually does in a considerable measure, interfere with these natural adjustments. He selects individuals and cultivates them for some natural peculiarity, and as a result intensifies these features; but unless he follows nature's methods and destroys the plants that are not best adapted to his conditions and requirements he soon gets a mixture of individuals, good, bad and indifferent, and cultivates them all together.

On the other hand, if he selects the individuals that give the best results under his peculiar conditions and prevents their crossing with the less desirable sorts, he soon develops a strain of high efficiency and productiveness for those particular conditions; but, like nature, he must continually select the good and persistently destroy the bad, or eventually lose all and see the variety "run out."

The great importance of selecting and growing seed under the conditions under which the future crop must be grown is now apparent.—A. F. Woods, Dean, Department of Agriculture, University Farm, St. Paul.

HARVESTING SEED CORN.

If the farmers of Minnesota are to have a good corn crop in 1914, it is time to lay plans for it now. Every corn crop starts with the gathering of seed. The difference in yield of next year's corn crop resulting from seed gathered at the proper time in the proper way, and the seed as ordinarily handled, may mean many bushels per acre.

The best time to gather seed corn is before the first killing frost, which in Minnesota usually comes between September 10 and 20. In a normal season if the corn is acclimated it should be far enough along toward maturity so that good seed can be gathered at this time. Most farmers know that to get best results from seed corn, it should be gathered before the corn is ready for husking.

When a large proportion of the earlier ears show the dent beginning to harden, the seed-corn day has arrived. The best part of the field should be worked first, examining every hill with the eye, at least. Whenever a desirable seed ear is found it should be gathered, providing it is produced on a hill that has a full stand of corn. No seed ear should be gathered from hills of corn with less than three well-developed stalks. It will be noticed that the larger and more fully developed ears are produced on the hills that have from one to two stalks. It is undesirable to use these ears for seed as their size can be accounted for from the fact that they had less competition in life, rather than inherent tendency to produce heavily.

Seed-corn gathering should be regarded as a specific duty that must be performed on a certain day, and as soon as that day comes all of the work must be dropped and all turned into the cornfield to gather seed. In no other way can the best results be secured. — L. B. Bassett, University Farm, St. Paul.

SUGGESTION TO EDITORS.

Have Seed Corn Articles Ready to Run With the Governor's Proclamation.

Every Minnesota editor is urged to run a special seed-corn number the first or second week in September. The Governor will issue a proclamation setting aside as seed-corn week the week of September 15 or whatever other week the weather conditions and the condition of the corn crop make advisable. It is impossible to include the Governor's Proclamation in this issue of the Press News but we are furnishing you a goodly number of seed-corn articles that may be set up to run when the Governor's proclamation becomes available or may be used immediately in a campaign of education to make the farmers more receptive when the proclamation and further articles appear. In case the week of September 15 should be set aside the next issue of the Press News carrying the Governor's proclamation will be mailed in time to reach editors by September 6, although bearing the date on which it would regularly appear next.

AGRICULTURAL SCHOOL OPENS.

New Teachers and New Buildings Make Crookston School Stronger Than Ever.

Extensive improvements and changes are being made at the Northwest School of Agriculture, Crookston, preparatory to the opening of another school year, October 7. A much needed sewer system connecting with the city sewer system will soon be completed. A central heating plant is under construction. A seed building for storing the pedigreed grain raised at the Experiment Station is nearly finished. A new boys' dormitory will be built this fall, for the winter term students. The Crookston school is equipped to meet the needs of Northwestern Minnesota to a fuller degree than ever before. The faculty has been strengthened by the addition of Prof. Wm. Dietrich, formerly of Illinois Agricultural College, as Animal Husbandman. He is a recognized authority on livestock. His book on swine is in general use in schools and colleges.

KERNELS OF CORN.

Seed corn with deep, well-filled kernels and small cobs has a high shelling percentage and tends toward the production of a high yield of shelled corn per acre. It should be selected as far as possible without danger of late maturity. The shallower kernel indicates earlier maturity and judgment must be used in deciding just how far to go in saving kernels of the type that we would like to be able to mature but that the frost may catch.

The only way to be safe is to select ears that have matured before the time at which killing frosts may be expected in ordinary years. This means about the middle of September, in Minnesota. On this account the Agricultural College urges the selection of seed corn during the week set aside by the Governor's proclamation as "Seed Corn Week."

At least fifty ears of corn should be selected for each acre to be planted the following year. With this number that promise early maturity further selection can be made by more careful study of the ears and the kernels and by eliminating those that fail to germinate strong until the twenty ears showing the best type of kernel, the highest shelling percentage, and the strongest germination test remain.—A. D. Wilson, Extension Superintendent, University Farm, St. Paul.

FISH OIL FOR FLIES.

Fish oil may usually be bought by the barrel at about 45 cents per gallon or in ten-gallon lots at 60 cents per gallon. It is a good repellant for flies and similar insects and may be used in the following mixtures:

(1) Fish oil, 3 parts,
Kerosene, 1 part.

(2) Fish oil, 100 parts,
Oil of tar, 50 parts,
Crude carbolic acid, 1 part.

(3) Fish oil, 1½ pints,
Kerosene, 1½ pints,
Resin, 1½ pounds,
Laundry soap, 2 cakes.
Mix thoroughly and add enough water to make 3 gallons.

(4) Fish oil, linseed oil, or kerosene, 1 pint,
Coal tar dip, 1 pint,
Laundry soap, 1/4 bar,
Hot water, 15 pints.
Mix thoroughly so as to form an emulsion.

Any of these mixtures may be applied thinly to the animals with such a brush as can be purchased for ten or fifteen cents, or they may be sprayed on with a small hand-sprayer such as can be purchased for forty or fifty cents.—C. C. Lipp, Assistant Veterinarian, University Farm, St. Paul.

ALFALFA IN NORTHWESTERN MINNESOTA.

Alfalfa has proved a consistent crop in northwestern Minnesota during a period of several years of observation. At the Northwest Experiment Station, Crookston, alfalfa was sown in 1906. The original field has still a strong growth. Additional fields sown in 1909, 1911, and 1912 are producing good crops. A field of Minnesota grown Grimm Alfalfa sown with no nurse crop in 1912, yielded 8,002 pounds to the acre in the first two cuttings this year. These cuttings were made June 27 and August 1. Alfalfa fields reported in this section of the state show uniformly successful yields. With alfalfa hay, fodder corn in some form, and grain, livestock keeping should become a main part of each farmer's work.—C. G. Selvig, Superintendent N. W. School and Station, Crookston.

WHY OBSERVE SEED CORN WEEK?

Uncle Sam's Figures Suggest One Answer.

Your pocketbook, the principles of good farming, and the Governor's proclamation all suggest the careful observance of Seed Corn Week. The average farmer feels pretty well satisfied if he has an eighty-five per cent stand of corn, but one of our Experiment Stations tells us that improving the stand to ninety-four per cent perfect would increase the yield 2.2 bushels per acre. According to the census our corn crop occupied 108,771,000 acres in 1909. Two and a fifth more bushels per acre at a farm value of sixty cents per bushel would mean about $143,000,000 more in the growers' pockets. A pretty good return for careful selection and testing! Estimate Minnesota's share on the basis of over two million acres in corn and see what this means to you and your neighbors. If you care for further information on possibilities along this line secure Farmers' Bulletin 405 from your Congressman or from the United States Department of Agriculture, Washington, D. C.

You probably find that the difference between eighty-five and ninety-four per cent of a perfect stand would not make you rich, but the bulletin just quoted, says, "As a matter of fact, however, comparatively few fields have over eighty-five per cent of a perfect stand. In view of the opinion of prominent authorities on this subject that the average cornfield has not over sixty-six per cent of a perfect stand, while in many cases the percentage is less than forty, it is difficult to compute the loss resulting to corn growers of the United States from this cause." Your share of the loss is more than you can afford. It will help provide the comforts or luxuries that you want for yourself and your family. The observance of a day or more of Seed Corn Week will pay you higher wages than anything you have done for a long time.—J. O. Rankin, University Farm, St. Paul.

EDITORS AT STATE FAIR.

Make Your Headquarters at Press News Booth in the Southeast Corner of the Main Building.

Every editor who comes to the State Fair is urgently invited to register at the Press News Booth which will be located with the remainder of the University Farm exhibits in the southeast corner of the Main or Agricultural Building. If you wish to rest on a hot day or to leave a coat or lunch basket, call on us. We will take the best possible care, especially of the lunch basket.

Incidentally we will be glad to tell you how we get a million pages a month of agricultural literature before the people and find out how we can make ourselves of more value to you. We are anxious to make the most of this opportunity of meeting you personally and find out what articles in the Press News are of most use to you and what, if any, we might as well not run to the exclusion of more valuable material.—J. O. Rankin, Editor, University Farm, St. Paul.

MINNESOTA SERUM STANDS HIGH.

During the past few weeks the Hog Cholera Serum Plant of the State of Minnesota, located at University Farm, has received requests for serum from a number of the Experiment Stations in neighboring states, including Iowa, South Dakota, North Dakota and Idaho. During the past year orders have been received from all parts of the country, as far east as Rhode Island and as far west as California. Numerous orders have been received from Wisconsin, Iowa, Illinois and Indiana.

It would appear from this that Minnesota serum enjoys a good reputation, in other states as well as our own. The new law under which the Minnesota serum plant is now being operated forbids filling orders from other states unless a reserve of 200,000 cubic centimeters is on hand. This is sufficient to vaccinate from 5,000 to 10,000 hogs, depending upon their weight. This reserve can be used only on Minnesota hogs, and the framers of the law showed foresight in inserting this clause.

The serum plant at University Farm is not the largest in the country, but every effort is being expended toward making it a model plant. Everything is done in a scientific manner, and every lot of serum is carefully tested to see that it comes up to the recognized standards of potency.—H. Preston Hoskins, Assistant Veterinarian, University Farm, St. Paul.