

VALUE OF DUST MULCH

Many Crops in Time of Drought Saved by Method.

Fertility of Soil, Although Absolutely Necessary, Is Not a Bit More Needed Than the Proper Amount of Moisture.

Ordinarily when one thinks of the conditions that are imperative to insure the production of a farm crop of any kind that may be grown, he thinks of the fertile soil as the most important of all. And it is, of course, absolutely necessary that a soil with abundant plant food be planted on to get a crop.

But the soil, or rather the plant food, although absolutely necessary, it is not a bit more so than the needed amount of moisture, says a writer in the Farm Progress.

Fortunately water is in sufficient supply as a rule to make the ordinary crops on most of the arable land. Of course, in the arid regions the water supply is obtained from streams created mainly by melting snows, and as a rule, the irrigation companies know just about what water can be supplied, and the man who has a farm on which he can put water from an irrigation plant is far more certain of results than one who gets his water supply by the acts of Providence.

The irrigation farmer is therefore far more certain as to the outcome of his crops than those in the rain belt, who get little or much water, according to the rainfall.

The water supply is therefore the most uncertain and most important in the greater portion of the arable lands of this country. This is so well known that no farmer who has farmed on irrigated land, having an abundance of water, is willing to go back to the old method and put his dependence on "Providence."

It is a most important point to know whether, under normal conditions, farming in any humid section can be as safe, free from risk, and profitable as the business can be made when one can turn on the water as he needs without reference to rainfall.

I think that all farmers who have studied the water question in connection with crop making, will agree with me, that a great deal can be done to conserve the moisture from all natural sources, and that often a fairly good crop can be made by proper management.

It is hardly safe to say that the rainfall that is usual in the spring is sufficient to make a crop without more rain, but all observant men have learned that the rational conservation of moisture can often make good crops, when by the neglect of this, they will be certain to cause a failure.

This is a very important point, and in some seasons it is absolutely vital to the making of a fair crop. There is no mystery about this; the point to keep in mind is to prevent evaporation of the water from the soil.

It cannot be done entirely; much water will evaporate in spite of us, and much will go on down below the reach of plant roots; but in seasons or only ordinary drought it is possible to conserve enough moisture to make a fair crop of corn, tobacco, potatoes and other hoed crops.

The "dust mulch," or blanket of finely pulverized soil on the surface, say three to four inches deep, will stop the waste of water almost entirely. In fact, if the soil is kept stirred on the surface quite often, it may be truthfully said that all the moisture may be kept in the ground for the use of the crops.

Of course, we can never tell at the beginning of the season whether it is going to be a wet season or a dry one, but if a man cultivates with reference to keeping the moisture in the soil, it will be all the better in case of a very wet season, and it may be the salvation of the crop in case of severe drought. So it is wise to keep this in mind.

It is therefore very important for one to plant no more land than he can cultivate perfectly, and always in a dry season to keep the soil stirred to a depth of two or three inches. No matter whether the cultivation is actually needed or not, stirring as often as possible a few inches of the surface will stop the escape as absolutely as a cover of sheet iron.

Those who doubt this method of saving crops from suffering by drought should try this method thoroughly. It takes labor, but it may save the crops. I know from experience.

Temporary Pasture on Good Land.

The Cornell station recommends the following for a temporary pasture on good land: Timothy, 10 pounds; red clover, 8 pounds; alsike clover, 4 pounds. Four pounds of red top may be added to the above for land that is wet or sour. For a permanent pasture on good land the following seeds should be sown: Timothy, 8 pounds; red top, 4 pounds; Canadian blue grass, 4 pounds; red clover, 6 pounds; alsike clover, 3 pounds; white clover, 1 pound.

Planting Fall Celery.

Celery makes most of its growth during September and October, and if you can get plants of these varieties out in July and August, and a root system started, the chances are good for a crop.

BARE FALLOW IN ARID REAS

Experiments at Indian Head Show Possible Yields That May Be Obtained on Fallow Land.

The experiments conducted at Indian Head, Sask., at the government experiment station, show in a very striking manner the possible yields that may be obtained from growing wheat on fallow land under dry conditions. The figures submitted below cover a period of 20 years. They are field returns, which are always smaller than returns from plots.

The period covered begins with 1891 and ends with 1910. The average yield of red fife spring wheat for the said period was 32.95 bushels. The average precipitation during the entire period was 13.09 inches annually. This, however, does not include the snowfall, hence so far the record is incomplete. But the snow fall at Indian Head is usually light.

In 1892 on a rainfall of 6.92 inches the yield was 28.20 bushels. In 1894 on a rainfall of 3.9 inches it was 17.5 bushels, and in 1899 on a rainfall of 9.44 inches the yield was 33.20 bushels.

During the same years the oat crop on summer fallow land gave an average of \$2.33 bushels per acre. During three of those years it went over the one hundred bushel mark. In 1903, on a rainfall of 15.55 inches, it was 119.2 bushels per acre. These facts are very striking. They show what may be expected in dry areas of the semi-arid northwest where the best of cultivation is given to the land.

In 1892, on a rainfall of 6.92 inches, the yield was 51.6 bushels. In 1894 on a rainfall of 3.9 inches it was 34 bushels, and in 1899 on a rainfall of 9.44 inches it was 84 bushels. It should be stated, however, that the returns in wheat were not exactly proportionate to the precipitation. In 1900, for instance, with a precipitation of 17.74 inches the yield of wheat was only 17.49 bushels, and in 1907 with a rainfall of 13.17 inches the yield was 18 bushels per acre. Other factors, therefore, play an important part in determining yields in dry areas.

It should also be borne in mind that the yields given relate to crops grown on summer fallow land. This would mean that a return of 16.48 bushels was the return for each year in wheat, and that 41.16 bushels was the return in oats. The one crop grown in two years would involve considerably less labor than two crops grown in the same period. The summer fallowing of the land also prevents it from becoming foul with weeds.

PREVENT LOSS OF MOISTURE

Evaporation in Month From Bare Stubble Fields Is Equal to Five Inches of Rainfall.

Loss of moisture from stubble fields left bare after harvest is each month equal to five inches of rainfall so long as there is moisture left to evaporate. Plowed ground left loose, neither harrowed nor packed will, in hot, windy weather, lose in 24 hours sufficient moisture to equal one inch of rainfall. Take Professor Ten Eyck's experiences in the efficiency of moisture, the loss in a month from bare stubble fields of moisture is equal to five inches of rainfall and is a loss capable of producing ten bushels of wheat.

Stubble fields often lay bare two or three months after harvest, many growers thus losing each season sufficient moisture to double their yield of wheat. Following the binder with the disk harrow, driving close to the binder, in the space between the machine and the last row of bundles, produces a soil that checks evaporation. Made immediately after the grain is cut, there is no loss of moisture at all. Farmers short of teams can wait until the grain is cut and then can disk the ground around the shocks, or in the stubble following the header. This not only stops evaporation, but puts the ground in fine condition for plowing later on.

Moisture goes rapidly out of freshly plowed ground, left loose. Harrow attachments are made for the plows which pulverize the furrow as soon as it is made, creating a mulch on the freshly plowed surface that stops much of the evaporation. Some farmers take one section of a harrow, tie an extra horse to the plow team and let him draw the harrow over the fresh turned furrows. This is an economical method and the land gets harrowed two to four times. Other wheat growers unhitch from the plow before noon and then harrow what has been plowed, say up to 11 o'clock, following the same plan in the afternoon, so that each half day's plowing is harrowed immediately after plowing.

Liberal Feeding Best. No matter how good a cow may be so far as breed is concerned, she can not be expected to give in her product what she does not get in her food. In a general way, then, economical milk production means liberal but not wasteful feeding.

Apples to Germany. During 1910 the United States exported 50,289 barrels and 72,311 boxes of apples to Hamburg, Germany. American apples are much appreciated in Germany and are bought by all classes of people.

Economic Production.

When we see the vast difference in the cost of milk production of different farmers, we are forced to admit that the greatest problem before the producer is the study of economic production.

SENT FROM FRANCE

DAINTIES THAT HAVE HIGH PLACE ACROSS THE WATER.

Roast Beef Marseillaise Is a New Way to Serve the Roast—Perfection of a la Mode—Sweetbread Cutlets.

Roast Beef Marseillaise.—Have the ribs of a two rib roast removed and roast dressed up to retain the juices. Many persons prefer the bones left on, and while it is harder to cut this way, it makes a juicier bite. Put half a cup of olive oil into a pan and heat it. Then add the meat, well salted and peppered, cooking either rare or well done as preferred. The French way is well done, but that goes according to taste.

Make a sauce as follows: Mince three onions and color in oil, simmering until tender. When slightly brown add two tablespoons of vinegar, a teaspoon of mustard, salt and pepper and a half pint of well flavored stock of bouillon. Boil for three minutes and pour over the roast, serving in a deep platter.

Beef a la Mode.—Have a juicy piece of top sirloin cut for this purpose and have it larded with salt pork. Brown in an iron pot, using butter and bacon mixed. When the meat is brown add a soup bouquet, two cloves of garlic and a large onion, whole; adding also a calf's foot, split in several pieces. This makes the gravy gelatinous. Add enough water to cover, then set on the back of the stove, simmering at the boiling point, but do not allow to bubble, as that extracts all the juice and makes the meat dry and unpalatable. It should be soft and full of juice. About half an hour before it is done add some small carrots. Some persons add potatoes, but beef a la mode, according to the French style, has no potatoes, these being cooked on the side. It is just as good cold, sliced with the gravy jellied, served on the platter. The gravy should be strained, eliminating the onions and any spices that may be floating loose.

Sweetbread Cutlets.—Wash, parboil, and simmer for 20 minutes one pair of sweetbreads, adding a slice of onion, one of lemon and a bay leaf, with a teaspoon of salt. Drain well and when cool remove the skin and membrane and cut in large slices. Make a sauce with four tablespoons of butter, six tablespoons of flour and one cup of milk, season well with salt, pepper and lemon juice. Cool this also and then put two slices of meat together with sauce, coating it well. Bread and fry like croquettes and serve with green peas or a creole sauce.

Creole Sauce.—Cut in pieces one small onion and two or three green peppers (after removing seeds), and fry slowly in butter. When tender add several tomatoes (also cut in pieces) and cook ten minutes longer. Season well and serve very hot.

Lemon Ginger Made at Home.

Pour over six lemons, sliced thin, two gallons of cold water. Add a pound and a half of sugar and a scant ounce of ginger root. Let come to a boil, then add a tablespoonful of cream of tartar. Strain, set in a cold place and when nearly cool add a yeast cake dissolved in a little lukewarm water. Stir thoroughly, set in a cool place over night and in the morning bottle well, cork air-tight and lay the bottles on their sides in a cool place. Do not use until they have been laid away at least two days.

Asparagus Rolls.

Asparagus tips (fresh or canned) served in cases made of rolls are excellent. Cut the tops from the rolls, remove the crumbs from each, and dry them in the oven. Make a sauce of one cupful of milk, one heaping tablespoon of butter, one egg, add salt and pepper to taste, then add to it two cupfuls of chopped asparagus tips, cooked until tender. Fill the hollow rolls with the mixture, replace the covers and serve hot.

For Ironing Stand.

Many housekeepers of experience still cling to the iron or the asbestos rest for flatirons. An ordinary brick is far more satisfactory, as it is a non-conductor of heat, and an iron resting on it does not cool off as quickly as when on iron or other substance.

Parker House Corn Cake.

Mix one cup flour, one cup Indian meal, one and one-half teaspoons cream of tartar, one teaspoon soda and a little salt together. Then mix one egg and one cup warm milk together, then pour in dry mixture. Beat well and bake.

Citron Cake.

Two eggs, one-half cup butter, one and one-half cups sugar, one-half teaspoon soda, one teaspoon cream of tartar, one teaspoon lemon extract and thinly sliced citron to taste. Flour to make as thick as cup cake.

Lettuce Garnish.

Roll five or six lettuce leaves lengthwise tightly, then crosswise once, and cut into narrow strips with a sharp knife, and you have long, narrow fibers that make a most novel and pretty garnish.

To Brown a Crust.

If the top of a pie is brushed with a little rich cream before baking, the crust will be more attractive. A light sprinkling of granulated sugar over the cream produces an even richer brown.

HE HAD THEM IN A CORNER

Clergyman's Rebuke to Thoughtless Youths at Once Neat and Disconcerting.

A well-known clergyman was one day in a barber's shop, when four or five young men walked in whom he knew by their voices, but who did not recognize the man in the chair, with lather all over his face. They proceeded to spend the time by telling stories and using expressions which, to say the least, were rather strong. When the barber pulled away the towel the clergyman, cleanly shaved, stood before them. So nonplussed were they that no one tried to take the vacant chair, and the barber called several times—"Next gentleman! Next gentleman!"

The clergyman smiled somewhat grimly as he said: "It isn't a bit of use, John. There's not a man here who has the effrontery to answer to that name."

NEW STRENGTH FOR BAD BACKS.

Those who suffer with backache, headache, dizziness and that constant, dull, tired feeling will find comfort in the advice of Mrs. C. S. Tyler, Cando, N. Dak., who says: "My back became terribly sore and lame. I was tired and restless and would arise so exhausted I could scarcely dress. The kidney secretions were terribly annoying and my feet became so swollen I could not wear my shoes. Nothing helped me until I began using Doan's Kidney Pills. They gave me prompt relief and in a short time I was entirely cured."

Remember the name—Doan's. For sale by druggists and general storekeepers everywhere. Price 50c. Foster-Milburn Co., Buffalo, N. Y.

The Fly.

"Where on earth do those flies come from?" is a frequent and despairing question.

They may come down the chimneys, if the fireplaces have tipping dampers. These should be tightly closed in fly-time. An appreciable falling off in their number will be the result.

If the chimneys have not the tipping damper, a screen such as is used for a window can be fitted into the fireplace; or, easier still, a bundle of paper may be stuffed up the chimney. Either method is successful, and no trouble is too great to get rid of these summer pests.

A New Ointment.

Mother was sick, and Janet, four years old, had heard the doctor say that she had ptomaine poisoning.

A short time later Janet was heard confiding to one of her playmates: "Mamma's sick. She's got toe-nail poisoning."

TO KEEP THE SKIN CLEAR

For more than a generation, Cuticura Soap and Cuticura Ointment have done more for pimples, blackheads and other unsightly conditions of the complexion, red, rough, chapped hands, dandruff, itching, scaly scalps, and dry, thin and falling hair than any other method. They do even more for skin-tortured and disfigured infants and children. Although Cuticura Soap and Ointment are sold by druggists and dealers throughout the world, a liberal sample of each, with 32-page book on the care of the skin and hair will be sent post-free, on application to "Cuticura," Dept. 22 L, Boston.

Plenty of Stability.

A western mining prospector was paying his first visit to New York. "What do you think of it?" asked the proud Gothamite as he pointed out the skyscrapers. "Wall," replied the miner, "it looks like a permanent camp all right."—Success Magazine.

Important to Mothers

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it bears the Signature of *Dr. J. C. Fletcher*. In Use For Over 30 Years. Children Cry for Fletcher's Castoria

A sordid love of money is certainly a very senseless thing, for the mind much occupied with it is blind to everything else.—Diphilus.

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For the son of man there is no noble crown, but a crown of thorns.

WELCOME WORDS TO WOMEN

Women who suffer with disorders peculiar to their sex should write to Dr. Pierce and receive free the advice of a physician of over 40 years' experience—a skilled and successful specialist in the diseases of women. Every letter of this sort has the most careful consideration and is regarded as sacredly confidential. Many sensitively modest women write fully to Dr. Pierce what they would shrink from telling to their local physician. The local physician is pretty sure to say that he cannot do anything without "an examination." Dr. Pierce holds that these distasteful examinations are generally needless, and that no woman, except in rare cases, should submit to them.

Dr. Pierce's treatment will cure you right in the privacy of your own home. His "Favorite Prescription" has cured hundreds of thousands, some of them the worst of cases.

It is the only medicine of its kind that is the product of a regularly graduated physician. The only one good enough that its makers dare to print its every ingredient on its outside wrapper. There's no secrecy. It will bear examination. No alcohol and no habit-forming drugs are found in it. Some unscrupulous medicine dealers may offer you a substitute. Don't take it. Don't trifle with your health. Write to World's Dispensary Medical Association, Dr. R. V. Pierce, President, Buffalo, N. Y.,—take the advice received and be well.

HAD CAUGHT THEM.



He (after he had kissed her)—My! what's that noise back of us? She—I guess papa's trying his new motion picture machine.

Cruel Disappointment.

Jugend tells this story: "In the lower court of a small town in Saxony William had served faithfully and well as attendant to the presiding judge for many years without ever having received any reward aside from his legal stipend. On the day of adjournment for the season, when visitors had retired, the judge, who was also about to leave, asked: 'William, do you smoke?' Seeing a square box under the judge's arm, he answered respectfully: 'Yes, your honor.' 'I knew it by the smell of your coat,' said the judge, as he walked out."

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