

Weekly Bureau of Information for All Who Till the Soil or Are Interested in Making Homes

AGRICULTURAL DEPARTMENT

All inquiries and communications addressed to The Times-Dispatch will receive prompt attention. This department will appear each Monday, and contributions or suggestions will be welcomed.

Facts for Farmers, Stock Breeders, Poultry Raisers, Orchardists, Truckers and Gardeners—Queries and Answers

WILD PLANTS USEFUL IN HOUSEHOLD FOODS

Dandelions May be Taken From Lawn and Cooked With Delicious Flavor for Vegetable.

WASHINGTON, April 22.—Many of the wild plants that accompany the advent of spring can be used advantageously in the household. Before modern methods of marketing, storing, and preserving made it possible to have vegetables throughout the year, these plants were eagerly sought by housekeepers to furnish relief from the monotonous winter fare. Even now they will form a welcome change, and, above all, they may be had for the trouble of picking, as substitutes for purchased greens.

Foremost among these plants is the dandelion. Its use as a vegetable is so common that it is sold in many city markets. Occasionally it is cultivated by market gardeners, but much more frequently the plants sold are wild ones and ought to cost less than cultivated greens. When some one in the family can dig them near home, there is no need to stand in the economy of using them, if they are taken from the lawn, there is the further advantage of removing a troublesome weed—providing always that the digging is carefully done, so that the dandelion should be removed, not broken off at the top, else several crowns of leaves may grow in the place of one. As in most stem and leaf vegetables, the texture and flavor are both best when the plants are young.

Growing as they do close to the surface of the ground, dandelion greens are likely to be full of earth and grit, and must be carefully washed and rinsed in several waters. The water in which they have just been rinsed should be poured over the greens, but the greens should be lifted out of the water so that the dirt which has settled to the bottom may not get back on the leaves. In which case, the greens should be lifted out of the water in which they are boiled.

BE COOKED LONG

The most common way of using dandelions is as a potherb or greens. As with most green vegetables, it is a mistake to cook them until they are needed to make them tender. If they are boiled with one-eighth teaspoonful (level) of cooking soda to each quart of greens used, they will keep their color better. Young dandelion greens may also be used uncooked as salad, a tartness less common in this country than in Europe, where the tender plants are sometimes blanched like asparagus. More dandelions are available than can be used as potherbs, and they may be preserved for future use. They may be canned by the method used by the canning clubs for spinach, or they may be "put down" in salt brine. Young dandelion greens in man homes it is a common practice to preserve dandelion greens with salt in stone crocks, putting in first a layer of greens, then a layer of salt, then another layer of greens, and so on, until the crock is filled. To cook them, they are covered with a close-fitting plate or board, on which a weight (a clean piece of marble or a stone) is placed to keep the greens packed solid.

Other dandelion greens are fresh, curly-dock, pigweed or lamb's quarters, chickweed, mustard shoots, purple milkweed shoots, young horse-radish leaves, marsh marigold (sometimes called American cowslip), poke sprouts, bitter greens, purslane, and others. In the Southwestern States some sorts of cactus leaves and stalks, as is frequently the case with horse-radish leaves, may be lessened by changing the water once or twice during cooking. Rightly cooked, all of the plants mentioned are harmless. Marsh marigold is sometimes said to be harmful, but this is unfounded. Young dandelion greens, other potherbs appear later in the season.

A little later in the season a few other potherbs appear which, though cultivated rather than wild, are so seldom utilized that to use them means much saving as if no care had been spent in raising them. Among these are the tops of turnips, radishes, beets, and onions, all of which may be cooked like spinach or dandelion. The onion-tops should be cut up into inch lengths before cooking. They are excellent served with meat, chicken, and omelets, and are also a favorite when they are obtainable.

There are also a few salad plants to be had for the picking. Like all food materials eaten without cooking, they must be very carefully washed before using. Turnip greens are perhaps the one which is most commonly used, and is cultivated. It should never be eaten if it has been grown where there is any chance of contamination from typhoid fever or other disease. This is true of any vegetable that is uncooked, but must be remembered especially in connection with plants growing near water, since the latter may have carried the disease germs a long way from the place where the illness was. Peppercorn, or peppergrass, is also a wild plant useful for flavoring other salads, if too sharp to use alone. Sorrel may also be used to give a pleasant acid taste to lettuce or other mid-flavored salads, though the ordinary wild kind is too strong in quantity as a potherb like the varieties cultivated for that purpose.

Of plants cultivated in the flower garden, the leaves and unripe seeds of nasturtium may be mentioned as a seasoning for salads.

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Self Helps for the New Soldier

Practical Home Hints on Military Training That Will Stand You in Good Stead When You Are Called to the Colors. By A United States Army Officer.

(Copyright, 1917, Wheeler Syndicate.) The First Lesson of the Soldier. The first thing of all that the young American of the new army will be taught, and must learn thoroughly if he is to serve his country efficiently as a soldier, is obedience—obedience expressed in discipline.

Discipline is the fundamental of the soldier. Discipline is not punishment. Discipline is the proper sense, is control—control for a definite purpose. Obedience is merely the adapting of oneself to such control. And to make the system effective from the private to the army corps, the discipline of the soldier must begin with the discipline of himself.

Obedience or discipline is not intended to convert a man into an automaton. A soldier who can think is twice the soldier who cannot. The most efficient national guardmen in the United States are those who are able to think for themselves. A man who does not attempt to do so is a man with the machinery of action after his thoughts have been blasted to pieces by shells. His motions must be controlled by the machine. What discipline through steady drill, the system of camp, and "the school of a soldier."

No man is fit to command who has not first learned to obey. Command, in the nature of things, will fall to those who are most quickly, most intelligently, and most obediently. Discipline, to the young American soldier, will be manifest in his conduct in the way he carries himself—the poise of his head, the erectness of his shoulders. It will be evident in the neatness of his uniform; in the way that he buttons his uniform; in the way that he ties his shoes. It will be evident in the degree that he keeps himself washed and brushed; in the scrupulous fashion in which he dresses his feet, his hands, his face, and his hair. It will be obvious in the conscientious manner in which he attends to all the routine duties of the day; in his observance of the code of military etiquette.

Discipline of this character runs throughout the whole day, except when a man is off duty, and then he can be as care-free as he likes. But a man whose mind and muscles have had the training of a soldier no longer is a man who is at ease in the old slouchy, flabby slump of the civilian. The figure that Nature intended, both walking or sitting.

The fact that discipline runs through the day—and the night—is important. This is the method by which it becomes a habit. If disciplining, then it would impress itself only when marching or drilling—at other times to be forgotten. This would not save the situation if the camp were attacked by surprise. The point is simply this: the soldier learns that everything he does is the way most carefully studied out to bring the most effective results from a large body of men, with the least confusion, the least loss of energy, and the least power. When he has learned this, the young American will have learned his first lesson as a soldier.

To-morrow's article will explain the soldier's place in a group formation.

FINANCE AND TAXATION PARAMOUNT, PERPLEXING

Problems Created by War Are Features of Dull and Irregular Week.

(By Associated Press.) NEW YORK, April 22.—Government financing and taxation in relation to the war were again the paramount and perplexing features of the day in the first half of the period were largely, if not wholly, lost in the enforced selling and bear pressure of the past few days.

The Death of Two Gentlemen One left a house worth \$10,000 fifteen years ago. It sold for \$5,000. The other left a \$10,000 life insurance policy bought fifteen years ago. It was good for \$10,000 the day he died.

For one widow's benefit, large cash outlay at the start, small gain at the end. For the other widow's benefit, small cash outlay at the start, large result at the end. Two gentlemen died—but only one wise man. The Life Insurance Company of Virginia Home Office: Capitol Street.

gone conclusion that all war shares, including many of the less distinctive issues, will be made to contribute toward the financing of the revenue.

Shipments were again under severe depression, because of the British government's extension of control over its merchant marine, a step soon to be followed by a broadly intimated, by the authorities at Washington, that in line with this action are the many measures now under congressional consideration which have for their object the enforcement of price regulation of all commodities, especially foodstuffs. The spectacular course of the grain markets during the week, it was thought, may hasten the enactment of such legislation.

The investment market continues to await developments at the cotton market. It is understood here that more than half of the proposed \$5,000,000,000 bond issue will be offered at the outset. The price regulation of all commodities, interest on the offering, the prospect of a 3 per cent materially enhanced the prospects of that offering, for which preliminary subscriptions already have been effected.

Widespread opposition by shippers to the tentative freight rate increases, which occupy the attention of the Interstate Commerce Commission during the next few weeks. Publication of United States figures for the first quarter of the current year will be one of the interesting events of the coming week.

Weekly Cotton Review. NEW ORLEANS, April 22.—Wide declines were recorded in the cotton market last week as the result of pressure from the short side and heavy liquidation of long contracts. Selling was based largely on fear of government regulation of commodity prices, and, to some extent, on the belief that the flotation of the \$5,000,000,000 war credit in this country would mean a change in financial conditions.

RICHMOND BANK & TRUST CO. PIONEER IN THRIFT. 11th & MAIN STS. SAFE DEPOSIT BOXES \$3 PER YEAR AND UP. FIRST NATIONAL BANK NINTH AND MAIN.

Old Dominion Line Steamboats. Leave Richmond, foot of Ash Street, Tuesday, April 24, 1917, for Norfolk, Va. Leave Norfolk, Va., for Richmond, Va., Friday, April 27, 1917.

Seaboard Air Line Railway Company. The Progressive Railway of the South. Leave Richmond, Va., for Norfolk, Va., Monday, April 23, 1917.

Richmond & Petersburg Electric Ry. Leave Richmond, Va., for Petersburg, Va., Monday, April 23, 1917.

ACTIVITY OF STABLE-FLY PEST CAN BE CONTROLLED

By F. C. BISHOP.

Readers literally worrying cattle, mules and horses to death and killing them by extracting their blood, the deadly fly also transmits disease from one animal to another. A tropical disease known as surra is undoubtedly transmitted thus. Fortunately this does not occur in the United States at present, but unless great care is exercised in importing stock it may be introduced here, and the deadly fly given a chance to spread it. A related disease of cattle, horses and sheep, known as surra, and a malady of dogs and cats are also carried at least in part by this pest.

Investigators consider the fly to be an agent in transmitting glanders, while a disease known as infectious anemia or swamp fever of horses is thought to come to be carried by the fly. A number of years ago it was found to act as a transmitter of a species of roundworm that infects cattle.

Animals weakened by loss of blood are more prone to contract other diseases. Texas fever in an acute form often attacks live stock that has become less energetic in fighting with stable flies. The joints of both horses and cattle are often swollen when they sought protection from flies, that they can hardly walk.

Man Not Immune From Attack of Stable Fly.

Even man may be inoculated with disease by this pest. Surra, a blood poisoning, is considered to be carried by it, and demonstrations of famous physicians have pointed to the possibility of the transmission of infantile paralysis in the same manner. Thus it will be seen that the transmission of a formidable array of diseases is chargeable to the stable fly.

The stable fly is one of the most widely distributed of insects, being common in both tropical and temperate regions where domestic animals are reared. In regions bordering on the tropics the flies are of importance throughout the entire year. In the extreme southern part of our country there is no month during the year in which flies are not annoying to horses and cattle. In the Northern States the fly is particularly injurious and abundant in the late summer and fall. Investigations made during recent years showed clearly that the vast majority of stable flies bred in straw stacks. It was also shown that while the fly breeds in pure horse manure, it favors a mixture of this substance with straw.

The fly was found to be breeding in manure greater abundance in out straw than in wheat straw. Rice straw was also found to furnish suitable breeding conditions, and there is little doubt that barley and rye also serve as food for the insect. The development of this insect is what slower than that of the house fly, and it is, therefore, quite necessary that the eggs be deposited in rather track over the butter, the meat or take a bath in the milk.

1. Why is the fly considered a nuisance? No. 2. Why is the fly considered dangerous? It is man's worst pest. It is more dangerous than rattlesnakes or ticks. It carries deadly infectious diseases. 3. What diseases does the fly carry? It carries typhoid fever, tuberculosis, and various intestinal diseases. 4. How does the fly carry these diseases? The germs stick to its legs, mouth-parts, hairs, wings and feelers. 5. What is the correct name of this human pest? The typhoid fever fly. 6. Has it ever caused anyone's death? It killed more American soldiers than all the weapons of the Spaniards. It has killed thousands of soldiers during the present European War.

11. Why is typhoid fever so prevalent during the summer and fall? Because flies are most numerous during those seasons. 12. Why is typhoid fever common in one community and not in another? Largely because the common house fly is abundant in one locality and is controlled in the other. 13. Where are flies most abundant? Where there is most filth.

14. How can you kill the fly? (a) Destroy all filth about the house and yard; (b) Put lime into the vault and over the manure; (c) Trap all flies before they enter your home by using fly-traps; (d) Kill all flies, large or small, with a "swatter"; (e) Use sticky fly paper or fly poisons around the house or store; (f) Pour a borax solution over manure, filth or other places where the fly may rear its young.

15. How to Control This Pest. As with most insects, the destruction of the pest is best accomplished by those concerned. With this species, as with many others, this is the most difficult time to accomplish the desired result.

During a recent outbreak in Texas many different substances were tried with a view of repelling the flies from the stock. Although some materials gave a measure of protection for a time, none had a lasting effect. In addition to the temporary value of these substances, injury was sometimes produced by their application. Many of the materials, particularly those made of an oily nature, have some value, but in preparing these, care should be taken that they are not made too strong, particularly when animals are being worked in the hot sun. If they are made too strong they are likely to cause overheating of the animal and produce shedding of the hair.

EARLY HATCHING FOR EGGS

By F. C. BISHOP.

Early hatching is the secret of winter egg production. The pullet that is hatched early matures early and is ready to lay eggs in the fall when the supply is scarce and prices highest. Chickens that are expected to be revenue producers for their owners later in the year should be out of their shells by April 30th, at the latest. If they are hatched later, they will begin to lay eggs at the very time that eggs are most wanted.

To a great extent the poultryman of the country has overlooked this simple fact. For one thing, birds hatched later in the spring or summer are not inclined to become broody until late in the following season and thus an unprofitable cycle is formed. Each year pullets mature too late to produce in the fall and winter, and the result is that for their offspring to do any better, the poultryman who wishes to get really good returns from his flock must break this cycle.

The growing use of incubators has made this comparatively easy. There is no reason why incubators should not be filled in March and early April and the hatching over before May 1st. An incubator is available if it is possible to secure broody hens in the neighborhood. That they will repay the trouble and expense necessary to obtain them, is indicated by results at the government poultry farm in Maryland. There it is not unusual to get a daily average of one egg for every five hens throughout the fall and winter, and in some pens the average has been as high as one egg for three birds.

How, then, can the percentage of eggs that can be obtained on farms, the ordinary poultry farmer would derive real benefit from the high prices which eggs invariably bring for a period of several months.

The question of the use of incubators resolves itself into this: Do you want the maximum of profit from the number of fowls which you keep? If so, an incubator is a necessity. If the farmer has a broody hen, and there is no real need for a machine, March and April are the two most profitable months for hatching, and not enough hens will become broody before the last of March to satisfy the demand for the average farm flock. The incubator enables the owner to control the date of hatching and maturity of his chicks—a very important item in the success of the business.

One difficulty in setting eggs in spring at selected dates if the natural system of incubation is followed is in finding broody hens at the proper time. In natural incubation it depended upon exclusively, it probably will be best for the poultry raiser to disregard dates and make settings whenever broody hens are available. A good nest for a single egg is a wooden, fifteen inches square and about fifteen inches high, with a top. The front is open except for a board six inches high. Three or four inches of straw should be packed in the nest and on this straw, hay, or chaff should be firmly packed. The hens should be dusted thoroughly with insect powder. It is a good plan, also, to sprinkle a little of the powder in the nest.

Gasoline Engine the Farm's Handy Man. I have a two-and-one-half-horsepower, New York alcohol-gasoline engine which I call the handy man on the plantation. This engine has been running daily for five years. It furnishes the power to pump water from a well 115 feet deep into a tank eighteen feet high. At the same time, the pump is running, it can be used to run an emery wheel, where drills and other tools are ground.

It runs a pea thresher that ordinarily requires five hands for operation, and it can be used to run a saw. This engine is a wood-saw engine, and it can be used to saw wood can be sawed than could be done by six or eight men in the same time. I saw wood for my neighbors for years, and it has saved me a great deal of money. It can be used to run a saw, a pump, a mill, or a generator. It is a very handy engine, and it is well worth the money that it costs.

Bees Must Be Well Fed. Sufficient food is essential. Every colony should have at least thirty pounds of honey on hand. Honey is best, although any white sugar is good. Dark honey should be used sparingly, and honeydew honey not at all. An account of the waste it can be made of, and it is well worth the money that it costs.

Dairy Cows. The great demand for dairy products has caused the price of good dairy cows to rise. Reports from the associations of dairymen show that it is impossible to buy first-class dairy cows at even \$50 a head. With such a demand for cows in old dairy districts, it is not surprising that the only way new districts can be supplied must be by breeding up the common stock by the use of good dairy-bred bulls.

USES OF SOY-BEAN OILS

By F. C. BISHOP.

The oil extracted from the soy bean belongs to the semidrying class of oils; that is, these having properties intermediate between drying oils, such as linseed oil, and non-drying oils, such as olive oil. This oil has a good color, has but a faint odor, and is rather palatable. In many respects it resembles cottonseed oil, but is of a more pronounced drying character.



With the rapid growth of the soy bean industry many new trade uses for the oil have been found, and on account of its lower cost it has become an important competitor of other vegetable oils.

One of the principal uses of the oil in Asiatic countries, chiefly China, is for food, it being consumed largely in the crude state by the poorer classes, but among the rich it is boiled and flavored with other ingredients. The oil is also utilized in the Orient in the manufacture of foodstuffs, paints, waterproof goods, soap, varnish, and printing ink, and for lubricating and lighting purposes.

Soy-bean oil was at first used in Europe and America in its crude state primarily in the manufacture of soft soaps. It is now claimed that some soap manufacturers have a secret process by which the oil can be utilized in the manufacture of the best grades of hard soap. To some extent it is being refined and placed on the European market for use in the manufacture of lather substitutes and in the Mediterranean countries to blend for salad oil. In the search by chemists for new oils to replace linseed oil for paint purposes, the refined oil of soy beans has been found the most suitable.

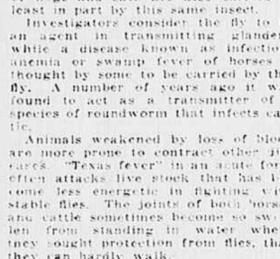
In Europe and in the United States, paint makers are using large quantities of soy-bean oil successfully in the manufacture of certain types of paint. Other trade uses of this oil are the manufacture of linoleum and of a rubber substitute, which a factory has been established in Germany.

FARMERS MUST LEARN TO GRADE PRODUCTS. The average farmer doesn't yet give enough attention to grading and classifying his products. And yet successful marketing depends upon this matter. Neither the merchant nor the consumer is willing to buy "just potatoes" or "just eggs" or "just butter," or "just watermelons." Prices will always be unprofitably low for any product offered ungraded and unclassified.

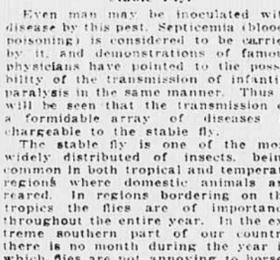
What is a Day's Plowing? Farmers frequently want to know how much land can be plowed in a day and how much work it requires to break up an acre. Records at the Missouri College of Agriculture show that six acres of land show that it required 24 hours of man labor and 5 1/2 hours of horse labor for each acre. Of course, the time required to plow an acre will depend on the size of the plow and the number of horses used. A four-horse gangplow with two twelve-inch bottoms will average about 4 1/2 acres a day of 10 hours, when it is running six or eight inches deep. A three-horse gangplow with a fourteen or sixteen-inch bottom will average about 2 1/2 acres a day of 10 hours, when it is running six or eight inches deep. A six-horse gangplow will break a quarter of an acre less. A three-horse gangplow with a fourteen or sixteen-inch bottom will average about 2 1/2 acres a day of 10 hours, when it is running six or eight inches deep.

Cold Injurious to Calves. The exposure of young calves to the sharp spells of winter weather, which occur frequently during the fall, causes a shrinkage in live weight and is a hindrance to rapid and economical development. Older calves seem to stand this sort of treatment with less loss. It is doubtful, however, that animals become accustomed to winter weather, but frequent changes from fine fall weather to bad storm retard gains in calves without shelter.

Chickens Eat the Insects. Let your poultry have the free range of your orchard. There they will not only find the shade so grateful to them in hot weather, but they will feed on multitudes of insects which may be injurious to trees and shrubbery. Brooder Chickens. Brooder chicks should begin to grow from the first day of their existence, and grow constantly. Two days of drooping and ill condition will set them back ten days in growth. The importance of correct care and feed, therefore, cannot be overestimated.

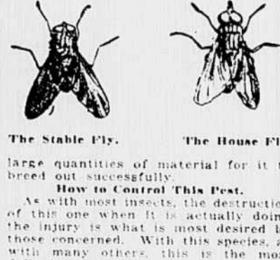


Head of the Stable Fly.



The Stable Fly. The House Fly.

large quantities of material for it to breed out successfully. How to Control This Pest. As with most insects, the destruction of the pest is best accomplished by those concerned. With this species, as with many others, this is the most difficult time to accomplish the desired result.



Blue Bottle Fly. Green Bottle Fly.

All stacks not consumed by stock during the winter should be promptly disposed of in the early spring. This may be accomplished in the same way as has been suggested for the fall. Heavy rainfall on freshly threshed straw produced an unusual large unit for food for live stock and thus offering breeding places. In such instances their immediate destruction by burning or scattering is necessary to relieve the condition. The work should be done thoroughly, and when the stacks are scattered all the straw should be completely exposed to the influence of the elements.

It is best to plow under the scattered straw soon after it has become well dried out. In sections of the country where headers instead of binders are used, the straw is much more likely to be scattered. The general adoption of the field thrasher would completely solve the question of the straw stack. It is reported that this machine reduces the expense of harvesting from 11 to 2 cents per acre.

Potatoes. Irish potatoes and most other vegetables and fruits tend to make the body tissues and fluids alkaline, counteracting the tendency of meat, fish and similar foods to create acid conditions. Since the body performs its work best when it is neutral or slightly alkaline, this function of fruits and vegetables is important, especially to the hearty meat eater.

A Useful Plant. Soy-bean food can be used successfully in making manure, and his cuts much in the same way as corn meal is used.

Keep Live Stock. The cheapest and best way to restore fertility to the soil is through the adoption of some sort of live-stock farming.