

THIS IS A FREE SAMPLE COPY!

The date opposite your name on this label means nothing whatever. Read this issue and if you are convinced that the paper is everything we claim for, it send us \$1.00 for a year's subscription.

PROGRESSIVE FARMER

TO POSTMASTER: If this sample copy is not delivered to person named please hand to some intelligent farmer.

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

Vol. 14.

RALEIGH, N. C., OCTOBER 10, 1899.

No. 35

PUBLISHED WEEKLY

DISCONTINUANCES.—If a subscriber wishes to discontinue his subscription, notice to that effect should be sent. Otherwise it is assumed that a continuance of the subscription is desired, and all arrearages must be paid when paper is ordered stopped.

Money sent by registered letter or by express is safe. Please don't send stamps. Be sure to give both old and new addresses in ordering change of postoffice.

Rate of Advertising Rates: ten cents per square line. Liberal discounts for time and space.

This item is marked to remind you that you should carefully examine this sample copy and send us \$1 for a year's subscription. Will also send paper on trial 6 months for 50 cents, or 3 months for 25 cents. Or we will send you paper free for one year if you will send us \$5 in new subscriptions, or free six months for \$3 in new subscriptions, at these rates.

We want intelligent correspondents in every county in the State. We want facts of value, plain, and briefly told. One solid, demonstrated fact, is worth a thousand theories.

THE PROGRESSIVE FARMER is the Official Organ of the North Carolina Farmers' State Alliance.

PRACTICAL FARM NOTES.

Written for The Progressive Farmer by the Editors and Guy E. Mitchell.

Keep up the fight against the round cotton bale. Don't be deceived by the articles appearing in so many newspapers, but remember that the American Cotton Company is paying liberally for its advertisements appearing in so many newspapers as editorial matter. And The Progressive Farmer has proof of this charge.

In some recent Virginia Station experiments conducted in feeding hogs an exclusive silage ration the results were unfavorable as the animals lost in weight and general appearance, but in further tests in which the silage constituted only a part of the ration, the animals consuming from 28 to 35 pounds of silage and 14 to 21 pounds of corn on the cob per week, were kept in good condition through a severe winter on this ration. By using the silage in this manner a saving of nearly one third in the cost of feed was effected.

Approps of Philippine trade, Consul-General Moseley writes from Singapore, an adjacent port, that the attention of our large packers of bacon, ham, and lard should be directed to the high prices of the product of the hog in that market. Bacon retails at 45 cents silver a pound; ham from 55 to 65 cents a pound; and lard at 45 cents.

"So far as I have been informed," says Mr. Moseley, "there is no American bacon, ham, or lard for sale here. Singapore is a depot for a large territory, and I believe a good demand for the products of the American hog could be created here, if proper efforts were made." Such a result would be of great benefit to American stock raisers.

In an Ohio Station comparison of the relative merits of commercial fertilizer as compared with home mixtures made from slaughter house tankage, acid phosphate and muriate of potash, it was found that spring crops showed but little difference from the two kinds of fertilizers, but wheat and clover showed a marked preference for the home mixture.

Apparently the chemical treatment, by which it is claimed that the nitrogen of the factory fertilizers is made more available, resulted in making it so readily soluble that it was washed out of the soil before the wheat and clover could make use of it.

Crimson clover is, says Mr. A. T. Williams, of the Department of Agriculture, an excellent crop for soiling. It is ready for use some time before red clover and at a time when there are few other forage crops at hand. It is particularly valuable for this purpose on dairy farms. In experiments made at the New Jersey Station, nearly one and one-half tons per acre of digestible food, valued at \$25 were secured. A ton of crimson clover in proper condition for soiling contains about 325 pounds of dry matter, of which about 55 pounds of crude fat, 50 of crude protein and 150 of carbohydrates are digestible. Rape is sometimes sown with the clover when a soiling crop is desired and the resulting forage is excellent. For silage this is one of the best of the clovers. The yield of forage is large, is easily handled, and it makes a better quality of ensilage than most other legumes commonly grown for this purpose. The silage is especially valuable for feeding dairy stock.

The Indiana Experiment sends out this summary of the results obtained in their corn-growing experiments thus far:

1. Planting corn early in May gives best results on the Indiana Experiment Station farm as a rule.
2. The greatest average yields of both ears and stalks have been obtained when the stalks stood twelve to fourteen inches apart.
3. Thick planting has reduced the size of the ears and the per cent. of grain.
4. Thick planting has in dry seasons produced the heaviest yield of stalks and the lightest yield of ears.
5. The yields of corn from cultivation, one, two and three inches deep, have been about equal.
6. Cultivation four inches deep has considerably reduced the yield of corn.
7. Heavy applications of manure and fertilizers have not proved profitable in continuous corn culture.
8. In continuous corn culture the effect of a heavy application of fresh horse manure has not been exhausted in fifteen years.
9. Cultural implements differing much in construction and action upon the soil, have produced nearly the same yields of corn.
10. Of the several cultural implements under trial, preference is given to the spring tooth cultivator for soils similar to that of the station farm.

The best method of raising calves on skim milk is a matter of interest to every farmer. In some tests made at the Iowa Station it was found that the best and most economical gains were made on corn meal and skim milk. Linned meal also gave lower and more expensive gains and was in every way less satisfactory than either oatmeal or corn meal and flaxseed. It may be that the results of these experiments are contrary to prevailing opinion concerning the relative value of these feeds, but it is not unnatural or in any way unreasonable that the carbonaceous grains should be more suitable for feeding with skim milk than a highly nitrogenous product like linseed meal. Skim milk is nitrogenous itself. Some experiments were made in Holland to test the effect of increasing the fat in skim milk for calves or adding starch. Enough whole milk was added to skim milk to make the desired amount of fat. When starch was fed it was cooked to a paste in the skim milk. About 94 per cent. of the starch was digested, the coefficient of digestibility being as high as in the case of the adult animal. The addition of starch to the ration diminished the digestibility of protein somewhat. It was, however, on the whole considered satisfactory. When it is possible to supply skim milk (containing protein) and the supplemental carbonaceous material in an inexpensive form, the profitable feeding of calves is assured. In the experiments cited above carbohydrates (either in form of starch or cereal grain) were successfully combined with skim milk and in this way the animal was supplied with an abundance of protein and energy and made good growth.

Dairying is a branch of farming which is being neglected by North Carolina farmers. It is a paying branch, but one in which there is a nearer approach to manufacturing than almost any other, and which calls for strict business management, and this must here be coupled with some practical knowledge of science as related to botany not only of the flowering plants, but of that branch of botany known as bacteriology. The proper handling of milk to make butter or cheese is a culture of bacteria of the right family and species of produce the desired quality of butter or cheese. It will be in vain that the utmost pains are expended if cleanliness and low temperatures are not maintained. This is not because of cleanliness in itself, or of the low temperature. Cleanliness, boiling water, or steam, on clean utensils, and the bright sun both kill the bacteria and their spores or seeds, which are left attached to every speck of curd or cream in seams and on the surface of rough or imperfectly cleaned vessels. The low temperature so hard to reach for seven or eight months of the year which experience learned to be best of dairy operations and which science has more recently demonstrated to be needed to check the development of some families of plants and leave others which can thrive at the lower temperature to take possession of the

dairy utensils and their contents. These are the families which give the familiar flavors of butter milk, butter and cheese.

In case of cheese many more kinds of plants are concerned than in butter making and these need a much longer period of low temperature which can be controlled than is needed for butter making. Without means for this control or a natural climate suited to nearly maintain the low temperatures, cheese cannot be successfully conducted without the establishment of rooms and apparatus to secure steady temperatures at the desired degrees for such time as may be needed. All the necessary conditions can now be produced and maintained continuously at the present time if business enough can be done to warrant the outlay.

Obviously this cannot be afforded on any ordinary dairy farm. It must be done on a comparatively large scale in order to be successful. A farm to use a cooling plant must be large enough to feed and milk 100 to 200 cows or it would cost too great to compete with those in the North which have more suitable climatic conditions in summer but who are under a severe winter climate. The high temperatures of the North Carolina summer climate can be overcome successfully by combining the products of a number of farms, thus reducing the cost per unit and enabling producers to compete successfully with the products brought from less favored territory for this kind of farming.

Formerly it was thought only certain sections could produce the best dairy articles as these could produce certain grasses which could not be produced elsewhere, and these gave flavors, etc. All this has been overcome. Dairying has spread to all kind of climates as men have advanced in means of controlling the climate of the dairy and curing rooms until the most favored place for dairying may be said to be now where animal comfort can be maintained the year round at least cost combined with the greatest production or cheapest production of food for cows. The cost of cooling in North Carolina combined with cheapness of forage or low cost of producing it with two crops per year from cheap land may well be set against the same conditions in the North but reversed cost of warming combined with cost of food with only one crop of forage per year on high-priced land.

A few farmers near our small cities are appreciating this business. If more were to do so and prepare to cooperate they would soon cease to discuss four or five cent, cotton at the village store and to find profitable employment for much time which counts for little on a cotton farm. This is not against cotton—one of the richest and best crops produced—but may be construed as an unfavorable contrast with the system of depending on one crop alone for a farm income.

If twenty farmers near almost any cotton or tobacco-growing town of North Carolina were to cooperate in doing a dairy business with from ten to twenty cows each, they might at first be short of cotton and feel awkward about feeding so much stock, but within five years it is safe to say they would be able to produce their average number of bales per acre on half to two thirds of the land now used and at no cost for chemical manure or only a small application of potash and phosphoric acid. This may be demonstrated and no doubt can be proven by some other practical farmers who have been trying a dairy on a cotton or tobacco farm.

The Western North Carolina farmers have in some places ideal conditions for dairying, and can store ice, or make it as they choose, thus having the dairy climate at control for almost the absolute minimum cost while they have the Northern climate for grasses in perfection.

The advantages of North Carolina farmers for the development of this branch of farming are numerous and important. It is also in harmony with the apparent natural development of the Southwest and a still lower reduction of the price of cotton unless there is a more general move toward diversity of crops by the farmers of the South. Those who are fortunate enough to see and change especially on the farms where cotton raising is up-hill business, will be greatly the gainers for having made the move to diversify or change from cotton or tobacco to dairy and live stock.

We hope to have this matter discussed in the columns of The Progressive Farmer. F. E. E.

FARMERS' QUESTION BOX.

This is to be a permanent department of The Progressive Farmer, one which we hope to make of much service to our subscribers and worth alone the subscription price of the paper. If you desire any information regarding crops, tools, stock of any kind, best methods of cultivating crops, new crops, diseases of crops or of stock, or any other farming matter, send on your inquiry to The Progressive Farmer and it will be freely answered by competent and experienced authority.

CABBAGE CULTURE.

EDITORS PROGRESSIVE FARMER:—Please tell us the best varieties of cabbage, best fertilizers and methods of culture.—L. A. Thornburg, Gaston county, N. C.

For fall sowing would advise using Jersey Wakefield or Flat Dutch, for winter sowing would advise using Jersey Wakefield. For spring sowing, Henderson's Early Summer or Flat Dutch. For summer sowing, Flat Dutch and Late Drumhead.

For fall and spring sowing would advise the use of a cold frame with glass protection. For winter a hot house would be better if convenient. In transferring from hot house to ground it is best to re set in cold frame and harden or temper. Then transfer to open ground. For fall and spring sowing of seed the plants should be tempered before transferring to open air.

The best fertilizer to be used would be horse or cow manure well decomposed, the latter preferred. Broadcast on land at the rate of ten tons per acre. Turn under with a two horse plow, harrow thoroughly. Lay off in rows three feet apart and apply commercial fertilizer in the drill at the rate of 500 to 1,000 pounds per acre. Fertilizer should contain 3 per cent. of nitrogen, 8 per cent. of phosphorus and 3 to 4 per cent. potash. Mix thoroughly in the drill as the roots are liable to be burned by the fertilizer.

Set out the plants three feet in the drill, wrapping the stem of each plant with a strip of paper to prevent cut worms from cutting them down. If terrapin bugs are liable to come the rows had best be four feet apart and mustard or turnips drilled in the middles. The terrapin bug prefers mustard or turnips to the cabbage or collards and will spend most of his time there. And then if you wish to spray you can kill them on the mustard and not interfere with the cabbage plants.

When plants are well started there is no necessity for deep culture. Cultivate the surface often.

If cabbage lice or cabbage worms infest the plants the plants they will have to be taken off by hand, as spraying them would do but little good and might prove harmful. However, the worms could be sprayed with poison when the plants have their first leaves. "Bug death" is said to be an effectual remedy carrying with it no danger from poisoning to the human system. Very respectfully,

B IRBY,
Agriculturist for N. C. Exp't Station

CULTIVATION OF ASPARAGUS.

EDITORS PROGRESSIVE FARMER:—Seeing that you have established a "Farmers' Question Box" for the convenience of your readers, will you please give me some information regarding the culture of asparagus?—A. C. Wake county, N. C.

Asparagus is one of the most healthful plants grown, and should be cultivated by every farmer, gardener and soil tiller, for home use and the market. It possesses many medicinal virtues, comes to the table in spring when vegetables are scarce, and is very profitable, when properly handled. There are probably 100 species of this plant, all coming originally from Europe, where it grown extensively and has been relished as a food product for several centuries. Growers are becoming more numerous every year, as the plant is in demand on all markets, selling at an average of 10 cents a bunch throughout the weeks of its usefulness. The crop usually ranges about 2,000 bunches an acre, thus giving the grower \$200 and sometimes more for the product.

The plant may be started from seed or roots, but in either case takes two to three years to mature sufficiently to make the beds profitable. If seed is sown in a bed where brush has been

burned, early in the spring, the roots may be taken up and transplanted the following spring and will begin to yield the third year from seed sowing. The best and probably cheapest plan is to set two-year old roots, which will yield some the first season, and return good results the second year. These roots can be purchased from nursery men at about \$4 per 1,000, and 2,500 roots will be sufficient to plant an acre.

The soil should be well drained, of a loose sandy nature, and fairly fertilized before planting. If it contains much clay, the surface will bake, or if wet from subsurface water, the roots will not grow to perfection. The bed should have plenty of sunshine and be free of weeds. Deep plowing is necessary for planting, as the beds will remain for many years, and demand abundant soil food. Some old time planters dig deep trenches and fill partly with well-rotted manure before putting in the roots, but the present method has more to recommend it, as it takes less labor and the fertilizing elements are put on the top as required.

When the ground has been put in condition furrows can be marked with a shovel plow, making them three feet apart. Set the roots in the furrows, thirty inches apart, leaving the crowns three to six inches below the surface, and fill level with loose soil. The first year the stalks should not be disturbed until late in the fall, after seeding, when they should be mown and left on the ground for winter mulch. Some growers cover the beds with coarse barnyard manure and rake it off in the spring. A top dressing should be given in March, using some good fertilizer containing as a rule 8 per cent. phosphoric acid, 5 per cent. potash and 5 per cent. nitrogen. The Department of Agriculture has numerous reports from various sections recommending fertilizers containing these elements, using all the way from 500 to 2,000 pounds per acre.

The plants are ready to cut as soon as the crowns show above ground. Sharp knives should be used for this purpose. When cut, a double handful of stalks will make a bunch. This should be washed and tied with strings near each end. The butt ends are then cut off by a knife and made smooth for marketing. In early spring the asparagus sells at from 10 cents to 20 cents a pound, and one of the bunches usually weighs 3 pounds. After the season of market is over the young shoots may be canned, by packing in jars with some salt, and kept for the entire year. Some European growers make good money in drying their surplus crop. The green stalks are placed on scaffolds in the sun for two or three days, or strung on strings and hung up to dry. After becoming brittle they are put away for winter use. By boiling or soaking in hot water the stalks come out to their original size, are bunched and sold for Christmas. JOEL SHOMAKER

FARM AFFAIRS.

SOME POINTS ON KEEPING SWEET POTATOES.

Correspondence of The Progressive Farmer.

The importance of the sweet potato crop is often underestimated. Some farmers do not make this crop an important one because when storing for winter use they so often lose them from rotting in banks or houses where stored. If potatoes rot it is because of neglect, or a want of knowledge as to their best keeping qualities, &c.

One thing not known by all farmers, is that potatoes grown from vines keep far better than those grown from sprouts. Knowing this fact from years of experience, I do not put up potatoes grown from sprouts expecting to keep them later than the first of January. I either sell or feed them away by that time.

In putting up potatoes to keep, I dig after a killing frost and do not sort out or pick out large from small ones, but cart them in from the field and put in a long row all together just as dug, preferring to keep them as much as possible on the bunches as they grew; this enables me to make the pile higher and thus cause the water to shed off better. I make the pile four or five feet high, and about six feet at the base and long enough to hold the crop of those I expect to keep late, cover at once with pine straw about one foot thick all over, then if warm, wait till a cool spell to put on dirt. When a cool spell comes I bank up about eight inches thick in dirt nearly to the top of

bank, leaving an air hole in the top. Then I shelter the top or often nail two wide boards together at right angles, making a wide gutter, which I put over my banks, thus shedding the rain and snow off the top.

When I desire to use these potatoes, I begin at one end of the bank, take out enough for a week or two at a time; there is then more leisure to sort out the large ones from the small ones. I feed the small ones to hogs or milch cow, as they make better milk than any other roots I can get, and can be raised as cheaply as any others in our section. I have raised and housed a crop of sweet potatoes under favorable circumstances at a cost of only six cents a bushel, and I think the crop can be raised in our county on an average for ten cents a bushel.

Since I have been growing from the vine for keeping, and putting up as described above (about ten years) I have not lost from rot more than five per cent. of any crop. Last winter the mercury was down to six degrees in that hardest froze and snow and the covering as described was sufficient to keep them right.

I think many more potatoes are lost from being too hot, or being banked up while it is warm, than are lost from getting too cold. When land suits sweet potatoes, and is fertilized right for them, it is not difficult to get 200 bushels per acre, and often more than this has been gathered.

If potatoes are put up just for hogs, they may be piled up in convenient piles and covered at once with dirt alone, covered all over and left there till needed to be fed.

When put up this way they do not sweeten, but keep just as well here in our county as if carefully put up in straw.

I had rather have vines set in July than earlier if for late winter use. DANIEL LANE,

Craven Co., N. C.

TAKE SOLID COMFORT ON THE FARM.

The following article from Wallace's Farmer, of Des Moines, Iowa, is just as applicable to conditions here in the South as in the State in which that paper is printed. Read and you will see for yourself that it is full of sound logic and good philosophy:

There is no man on earth better entitled to solid comfort than the man who owns his own farm and works it himself. There is no man who can have more of the substantial comforts of life than this same farmer. There are some things he cannot have, but they are all things he can do without. He cannot always have good roads, nor concerts, nor swell parties, nor prize fights, nor 6 o'clock dinners, where the ladies wear silk dresses with trails two yards long and the men claw hammer coats, low-cut vests, and expansive shirt bosoms. He can have, however, fresh milk, fresh eggs, fresh vegetables, fresh chicken, unadulterated food, fresh air, and sleep for which the millionaire would pay \$1,000 a night. He can have his boys and girls at home every night, can be in close touch with their lives every day, and can teach them habits of industry as no other man can. The farm is the place to raise the right kind of boys and the right kind of girls, able to adapt themselves, with proper training, to any situation in life.

We are sorry to say that farmers do not always avail themselves of their privileges, as the preachers say. They do not always make their homes as inviting as they should be and could be with a little additional expense. There is an excuse for scant accommodations in the house when the farm is not paid for, but unfortunately this condition of things exists long after the excuse for it has passed away. There is no better investment than solid comfort in the home. The farmer is not a creature fore-ordained to raise corn to grow more hogs to buy more land to raise more corn to grow more hogs, in endless repetition. He has but one life to live in this world, and he should aim to get as much solid comfort out of it as possible; a comfortable bed, a pleasant home, conveniences for the wife, music for the children, evergreens and flowers, whatever tends to make life more comfortable or desirable.

We do not wonder why some boys leave the farm as soon as they can, and why some girls marry at the first opportunity for securing what promises to be a more comfortable life. A bare,

[CONTINUED ON PAGE 8.]