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



# FARM AFFAIRS.

DRAINAGE.

Its Importance in Making Fertility Avail

Correspondence of the Progressive Farmer.

The question of drainage is one to which the farmers of the South will have to address themselves, if they hope to compete with their Northern brethren in raising big crops. The South is subject to very wet spells at certain sessons of the year, when the soil becomes saturated with water and remains so for weeks at a time. During one of these seasons, such as we passed through in the summer of 1898, all our work and fertilizes seems to have been wasted. Except on a few particularly well drained spots, things began to turn yellow, and plant growth was almost at a standstill Then, after one of these spells, the soil together badly, and become tough and hard before it is dry enough to plow, and it is next to impossible, where crops are growing, to get it into good condition again So much for the upland. In the bottoms, most of which are drained only at very wide intervals by a few shallow open ditches, stock will mire up often to the knees. Here, weeds and grass soon take possession and the farmer says the wet weather ruined his crop. The annu l loss throughout our Southern country for the want of proper drainage, is appalling, and yet this first, and fundamental principle of successful agriculture is apparently the last to be thought of.

Before preparing for the crop of 1900 it behooves our Southern farmers to think about this matter, and not only think about it, but go to work this winter while they have plenty of time, and underdrain the worst places first.

As a rule it does not pay to under drain our red clay upland. Where such drains have been put in, they very seldom, if ever, run. It has been tried at the Georgia Experiment Sta tion without any beneficial results, and we have several such drains on our place, and shall not put in any more. These lands are naturally well drained if the hard pan which lies six or eight inches below the surface, is well broken. On these lands deep plowing and subsoiling is all that is necessary, and the water will take care this hard pan, and if you will notice, this condition does not occur on new ground. The old land has been plowed for years only about four to six inches deep, and the continuous tramping of the stock in the bottom of these fur rows, has formed the hard pan through which the water will not per soil becomes too wet, this excludes the air, nitrification stops, and with it, the growth of the crop. This is exem which forms upon land which is con be naturally quie rich, while the plants which thrive best is these locali ties, have their root system almost en tirely on the surface; with the excep tion of perhaps a few water plants. By this we see that the roots of plants and anything which excludes this air, will stop the plant's growth. Let us commence at the beginning then, and

see that the conditions of our soil are right before we plant. We cannot afford to throw away work and fertili zers on a crop which may fail for want of this one essential crop point. We cannot afford to run risks.

I recently rode through a neighbor's bottoms where the corn crop was a failure on the richest land he had, be cause it was too wet. All the land had been prepared and fertilized alike in the spring, but where he should have had his best corp, he had the poorest What a lose! And it could have been prevented so easily by a little under draining last winter when he had the time, and could have done it well enough. How many years the crop has been a failure on that piece of and. I do not know, but a great many, I should judge, for the land has been in cultivation a long time and every wet season adds to the debit side of the ledger against those acres

Now is the time to do this work, and keep at it until you are ready to start your plows next spring. No investment that I know of will begin to pay as well as money and work put into under-drains in the right places, and when the work is well done, it will oring with it a steady revenue each year, to say nothing of the pleasure and satisfaction of knowing that you are doing your bist.

Now, friends, remember that in every successful undertaking, it is necessary to begin at the bottom; and n agriculture this often means at the bottom of the ditch.

F. J. MERRIAM, Battle Hill, Ga.

### WINTER KILLING OF INSECTS.

Correspondence of The Progressive Farmer.

It is refreshing to learn from scien tific sources that other things be side fruit rees, winter wheat and other farm products suffer from cold, open winters. It appears pretty clear now that many noxious insects are killed by the intense cold, and in some sections they are nearly exterminated. is in a deplorable condition; it has run | Sudden changes of temperature are specially destructive to these insects, and an open, severe winter is generally followed by a fewer number of noxious insects, while a winter of a uniform temperature and with plenty of snow on the ground is succeeded by a good crop of early bugs and insects. It will be noticed that the same kind of winters kills the insects that generally in jure the fruit trees and crops. Consequently we can make some calculations as to when we need to be the most en ergetic in spraying.

The insects that are specially in jured by the severe winter weather are the white peach scale, the harlequin cabbage bug, the grub, thrip and simi lar insects. In fact, very few of our injurious insects can withstand the ex treme changes of freezing and thawing which characterize some of our win ters. All of these insects can be frezen up in blocks of ice and they will come out again as lively as when they went into hibernation quarters. But freez and thaw them for several days or weeks in succession, and they quickly

Insects which winter in the ground are thus subject to destruction by the intermittent cold and warm weather of winter, but the noxicus and friendly insects are alike killed in this way. If we could devise some means of saving the latter we would find a real benefit in our winter weather; but unfortun ately this seems impossible. As there sult the friendly insects are often of itself. The saturated and poor con- killed off in such numbers that some of dition described above is caused by the noxious which are bred in protected places appear in larger forces than ever because their natural enemies are fewer in numbers. There is quite a problem to learn how to control the in sects in winter as well as in summer. It has been suggested that by spread ing some food for the insects in a certain field late in autumn they can colate freely. The result is, the top be attracted to a restricted area, and by keeping this place free from the protection of snow most of them might be killed off. But this plan has more plified by the weak and sickly growth of the experiment in it than actual Davy Crockett's advice, "Be sure facts After it has been once demon tinuously wet, although the land may strated scientifically that alternate thawing and freezing kill the insects in may not be so long before some means may be discovered to make this knowl dge of practical value. Heretofore we thought the insects were absolutely proof against cold weather in any

> that is one great step in advance. JAMES S. DOTY. New York.

SHALL THE SOUTHERN FARMER DIVERSIFY; AND IF SO, TO WHAT EXTENT?

Mr. G. H. Burgess, of Mississippi, who has contributed a number of excellent agricultural articles to The Pro gressive Farmer, writes the Practical Farmer on the above subject. He

We are heartily sick and tired of hearing so much of that visionary being, the all-cotton farmer. Who is he, anyhow? We have traveled extensively over the cotton belt; have been engaged in raising the fleecy staple for upward of a quarter of a century, and yet we have never seen him. If there is such a being at all, he is undoubtedly a negro ;one who dosen't know anything else except how to raise cotton, and precious little of that. He doesn't read farm papers, hence their advisers kind ly sympathy is lost, and their advice wasted on the desert air.

We make a specialty of cotton; have done so for upward of a quarter cantury, and expect to the remainder of our days. At the same time we are an ultra diversificationist. No man in the South has studied any harder to find a crop that could be made to super sede cotton as a money crop We haven't found it, and neither will any one else.

The man who quits cotton, a crop he thinks he knows all about, to engage in the raising of truck, a business that he really knows nothing about, or melons, or strawberries, or pears, or peaches has got a hard row to hoe. He has swapped the devil for a witch, and it he don't mind, will find that he has thereby thrown all his fat in the fire

There is lots of good money to be made by horticulturists, truck farmers, melon-raisers, etc., but unfortunately, it is more often the case than any other way that this hard earned money goes to enrich, not the producer, not the man who toils and sweats and becomes prematurely old while humping his back up to the hot sun while setting out plants, after scouring the universe in trying to secure the very best of good seed, and paying out all the money he can rake and scrape for fertilizers. No, it is not he who gets the money at all. Who then is it that gets the money? It is the transportation companies that get it more often than anyone else. It is the case in Florida, in Georgia, in Mississippi, and in Texas. In each State the kind and obliging railroad officials are ready at any and all times to gobble up the hard-earned money of the producer. This truck business is good on the rail roads, but hard on the producer.

As a sample, we quote from a late issue of the Texas Farm and Ranch:

"Lat us be honest and look at the truck and melon growers' side. Here is a statement of three cars: One car shipped to Chicago lacked several dol lars of paying the freight. One car shipped to Cripple Creek, Colorado. brought on the market \$237 91, a splen did price. Of this amount the railroads extracted as freight \$236 36; com mission 1ee, \$23 99; total expense, \$260. 25 leaving a shortage of \$20.34 which truck shipped from Texas to Chicago brought \$247 50. The freight bill was drainage. \$240 and commission \$7 50 "

As a result of this short sighted unbusiness-like and suicidal policy of the the golden egg, quite a considerable so successful on gardening and truck transmorgrified into pork by being fed | seed buying. He says:

year in raising truck.

There is but little hope of becoming suddenly rich in raising cotton at present prices, but results such as those re corded above never have yet, in the entire history of this country, been recorded of cotton, and we are satisfied, never will. In bringing about such a comple e revolution, then, as quitting cotton in order to raise some other crop as a money crop, one should by all means make haste slowly. Take you're right, then go ahead."

There is one plan of diversifying that could be put in practice by each and every Southern farmer with absolute safety, and with every assurance of ultimate success; a plan that cannot possibly fail of being both profitable and satisfactory. This plan consists must have air as well as the foliage, form. Now we know differently, and in so arranging matters that the farm shall be as nearly as practicable selfsustaining. In other words, that we Still with a great many of our vege should make a living, and a good liv- tables, locality has little to do. With well known horticulturist of Bishop,

the farm, then raise all the cotton you can, always being sure that it is cotton

poultry, eggs, etc., and usually at prices that will enable the wide awake producer, who takes the trouble to understand his business, to realize a profit thereon. Although sudden changes from cotton to tobacco, or truck, or indeed, any other sudden change in the way of cash or money crops, oftentimes entail a decided and disastrous loss, there is no possible chance of loss in gradually enlarging our pastures, in raising more hay, more small grain, as wheat, barley, oats and rye, sowing more land down to cow peas, putting out more fruit trees, and taking better care of our orchards, enlarging our vegetable gardens and raising vegetables in greater variety and greater abundance. Then, when we have done all this, incressing our supply of live stock of all kinds, entil we have enough on hand to consume the increased amount of forage, farms be rendered really and truly self-sustaining; then would the acreage devoted to provision crops be so in creased, and the acreage devoted to cotton so decreased, as to insure remunerative prices for all the cotton that could possibly be produced on this decreased acreage. Then would the cotton raiser be rendered largely independent of the indolent, and often times impudent, class of labor with which he is at present accused Then would that humiliating and enslaving habit of depending on the merchant for the veriest necessities of life, as meat, bread, etc., become a thing of e past, and instead of having these things to buy, he would have them to sell. This is the kind of diversification the South needs, and needs badly. eystem of diversification that shall rander them largely independent of, obliging merchant; second, the indolent, shiftless labor, the transportation companies and the fertilizer manufacturers; in short, it would work hardship or injustice to none, while it would render the Southern farmer the most independent being on the top side of God's green earth. In this not worth striving for?

## SEED BUYING.

A few weeks ago we published an article from Farmers' Voice telling of the methods by which Prof. F. J. Mer riam, of Battle Hill, Gs., and his associate make from \$5 000 to \$10 000 per year on general truck farming and gardening. We had just published an interesting letter from Prof. Merriam and stated that our readers might ex pect to hear from him again through our columns. Accordingly we have the shippers had to pay. A carload of this week from his pen an excellent letter on the important subject of

We find in a recent issue of the Sou hern Cultivator some of Prof. Mer rian's suggestions regarding seed buy rathroads, killing the goose that laid ing and give them herewith. A man portion of the Florida melon crop was ing is necessarily good authority on

With the advent of the New Year mammoth vegetables and beautiful flowers. Indeed the catalogues of the large seed houses of to day are works of art, and we welcome their coming with pleasure, and examine their contents with increasing interest. With every succeeding year these catalogues tell us of new varieties of our standard labor and placed before the public at great expense. These so called novelties are necessarily high priced, and while the bulk of our crop must be planted of the older sorts, it is always interesting to try a few of these new

and tried kind. It is wisest when placing your order to seleat those varieties which have That has been my belief, and my expebeen tried and proved successful in your locality, certain varieties of to matoes, for instance, succeeding much better in some localities than others.

ing at that, not off of cotton, let the Irish potatoes, the newer kinds will be Ill., remarks what is worthy to be conprice be what it may, but utterly and | found as a rule, the most prolific, the entirely independent of cotton. First seed having more vitality, for it has make the living off of the products of been shown that all varieties of Irish set in unsuitable soil than from any potatoes are apt to deteriorate as they grow older. In fact, all seeds need be set where the soil is supplied with and not provisions that is the surplus constant breeding up, to ensure the sufficient store of plant foud." best development, and this is what the There is and always will be a brisk large seed houses are doing for us. An and constant demand for beef, butter, eye must be also kept on the demands of your market, and those varieties selected which have proved favorites with the trade.

Nearly all of the large and well known seed houses are reliable. If they are not, they would not be large and well known. And, unless you live near a city where you can procure their seeds from agents, it will pay you to order direct from the big firms Indeed it often pays to do this anyway, for then you are sure of getting what

you want and getting it fresh. Now don't put off ordering your seed until the last moment, and then expect to have them when they are needed; but give yourself plenty of time by ordering early, and have your seed on hand in advance. Then, when the season is just right, you will be ready to plant. You know that it is diffi :ult to catch the land dry enough to work in the very early spring, and then would we be able to increase, in- | if you have not already procured your stead of continually decreasing, the seed, it is liable to rain again before fertility of our soils. Then would our | you can get them, when your planting will be delayed possibly several weeks, making you late with your crop. This matter is most important to the success of the earliest vegetables, and we have already ordered a large portion of our seeds.

#### HORTICULTURE GOOD ARTICLES AND WIDER MARKETS.

Correspondence of the Progressive Farmer. The question of increasing the profits of fruit growing must always interest farmers, and at this season of the year it is a good time to lay plans for the next campaign. Most of us are just ordinary fruit growers who follow the old ways of others without trying to ferior or worthless before it is gathmake any particular reform. On the ered. whole the man who always sticks to old, tried principles is safe, but he does to secure apples to exhibit at Paris first, the thrifty, kind and extremely not make the most of his talents ale next year I let Secretary Bruner have ways My father and grandfather five barrels of the fifteen to be furraised fruits before me for a living, but nished by the State. - G 30. E Boggs. I cannot make the money they did by in Charlotte Observer. following their business methods The reason seems to be that the times have changed and the new conditions demand new plans and ways.

> Specializing an industry frequently brings better results than anything else: for years I have tried to specialize the work of raising fruits. My special ties are simple enough, and some would hardly dignify my efforts as such. But | ing pork? I have some well defined plans which I am working out and everything moves | ling pork for summer use? toward their completion. My first specialty is that of raising fine fruits It must be a good article, or I do not ship it to market. Whether the crop is of pears, peaches, apples, plums or berries, it must be above the average to ward this end all the time, and I be lieve it is in that line that we must expect to find the greatest profits. Better articles each year is what I strive | tinue the smoke two to three weeks. for, but I do not always succeed.

The next point of specializing that I wish to refer to is a wider market. Many people speak of widening their markets, but do they understand that | desired and salt down in bulk. Thorthey have got to have the right goods to enter wider markets with? A lot eve y step. Use from one to four of ordinary fruits raised in one corner ounces of powdered saltpetre dusting We are acquainted with one gentle- there appears upon our table the seed of the country could not seek wider man in this State who sunk \$6 000 last catalogue profuse in illustrations of markets where transportation rates are large, but if they were exceptionally fine fruits they might go to the used less, but have never tried to premost distant markets and command a pare hams for long keeping. Rub salt premium. You cannot widen your freely over all the cut surfaces and pile markets unless you have superior articles to sell. First raise a good article, good drainage. In three days re-pile then, if prices warrant it, ship them a and salt over, allow the meat to rethousand miles away. I have sent | main about one day for each pound in vegetables, originated with infinite | fruits this distance and obtained excellent returns on them. Usually, however, markets nearer home will absorb all the fine products that can be cut surfaces thoroughly with pepper. raised. It is quite a rare occurrence for any large city market to be glutted stiff mixture of pepper in molasses. with very fine products. It is the invarieties in comparison with the old ferior and second rate articles that pull in smoke house and smoke two to down the prices. Raise only the best, and you can always find purchasers. rience with fruits bears it out in every JAMES S. FMITH. detail.

> In a note to the editor of The Farm ers' Voice, Charles E Himmel, the

sidered by all orchardists. He says:

"More orchards fail through being other cause. The trees should always

### SAN JOSE SCALE IN GEORGIA.

Thirty thousand fruit trees, comprising the entire orchards of D. C. & G M. Bacon, in Mitchell county, Ga., were burned Monday by order of State Entomologist Scott, owing to the ravages of the San Jose scale.

In the immediate neighborhood os De Witt, Ga., in the counties of Irwin, Berrien, Worth and Mitchell, are more than 300 000 fruit bearing peach trees, and in justice to the owners of neighboring orchards, as well as to perform a service of the State, the trees will be destroyed. Toe work of destroying the orchards will require several weeks

### WESTERN CAROLINA APPLES.

It is well to severely criticise the careless-often reckless manner-in which apples are gathered and marketed in this region, but more should be said in regard to the shameful neglect of the trees in too many instances. In fact it is the exception when they are really properly cared for. Too many are scarred, hacked to pieces, instead of being carefully and intelligently trimmed, and left to battle unaided with injurious insects and fungous diseases that are increasing so rapidly that the time is soon coming when only those who give faithful, intelligent and unremitting care to their trees will secure choice fruit,

What with the numbers of worthless seedlings that are allowed to continue bearing their inferior fruit instead of being grafted into good varieties, the hasty and injudicious selection of varieties often made when growing or buying trees to plant, and the neglect of the trees after being planted, a great deal of the fruit is in-

During his recent visit to this region

# FARMERS' QUESTION BOX.

CURING MEAT; PICKLING PORK.

EDITORS PROGRESSIVE FARMER:-Please answer the following questions through the columns of your

1. What is the best method of cur-

1. What is the best method for pick-H. F. C.

Cumberland Co., N. C. (Answer by Corresponding Editor Enery, M. S)

1. We do not know that the method we have used is the best though it has in quality to suit me. I am working given very toothsome hams. We curtailed the curing some not liking the strong smoky flavor so well, but for summer use it would be well to con-

> Kill pigs in the early part of a cool wave. Cool the meat by hanging at least 24 hours, but do not allow any part of it to freezs. Then cut up as ough cleanliness should be observed at it over the fissh sides. Some have a rule to use one fourth pound for each hundred pounds of pork. We have on a bench or clean plank floor with each ham or shoulder. We have shortened this some. Then break bulk, wipe off excess of salt and cover the This is best done by making a rather This wards off insect attacks. Hang three weeks, observing to increase the smoke every day. If omissions occur lengthen the time. Hickory chips or trimmings, corn cobs, or oak are the best smoke fuel. When smoked inclose hams, shoulders, sides and breakfast scrips in close fitting muslin or

[CONTINUED ON PAGE 8.]