



## What Farmers Want to Know

By W. F. MASSEY

### The Moon Has Nothing to Do With It

"I WANT to know what time of the moon to cut the second crop of red clover to prevent its salivating horses. I have heard there is a certain time to cut it by the moon."

Better drop all notice of the moon in farm matters. The moon does not care when you cut the clover. You can cut it as soon as the heads are well grown and beginning to mature, but I have never found that any time of cutting will make it safe for horses. Feed it to cattle.

### Sowing Cabbage Seed for Winter Plants

"WHEN is the best time to sow seed of cabbage to have plants for sale in winter and fall?"

The best time depends somewhat on the season. I usually sow from the 15th to the 20th of September here in southeast Maryland. Some seasons these may get overgrown, and I make another sowing the last of the month, for while I want to get good plants I do not want overgrown ones that may run to seed in spring. In Johnston County, N. C., from the 20th to the 25th of September will be the safest time to sow. Do not sow too thickly in the rows, but give the plants a chance to develop. Sow early Jersey Wakefield.

### Growing Wheat

"WHICH is the best time for sowing wheat? How should the land be prepared? Should it be fertilized and what kind? Will it grow best on high land or low? Is there a different variety for low or high land?"

You are in the lower coast section of North Carolina, and your land is largely of the black pocosin sort. I do not know any soil in your section where wheat can be profitably grown. Wheat grows best on the high red clay soils of the upper country. In your section the plants will grow, but will almost invariably be overrun with rust and the wheat made almost worthless. You will get straw and very little wheat. You might try some on a small scale on the highest and stiffest land you have. The land should be well prepared a good while beforehand and let settle and then harrow fine and tramp with teams, and in November drill in five pecks of a bearded wheat like Fulcaster an acre. Oats sowed in September will make a far more profitable crop than wheat in your section, for I know of no good wheat soil there. The crop should be well fertilized with a mixture of cottonseed meal and acid phosphate in equal parts, about 300 pounds an acre.

### Dodder in Clover Fields

"I AM sending you sample of a little yellow vine on clover. Some call it silk vine. Does it hurt clover for feed or seed? I cannot find any root that it has. People say that it will kill cattle if fed to them. I intend to thresh the clover for seed."

You have about the worst weed that can infest clover. It is *Cuscuta trifolii*, commonly known as dodder. It makes no leaves but a great abundance of little flowers and seed, and if you thresh it with the clover you will have an abundance to seed another season. The seed germinate on the ground and grow to the extent of the food in the seed, and then if it does not catch a clover plant it dies. But getting hold of a clover plant it lets go the ground and inserts its suckers into the clover and saps the clover till it kills it. The best way to manage it is as soon as a bunch is seen is to put some straw on it and set it on

fire and burn the plant and seed. But never cut and thresh the clover from that spot. If you gather and examine the seed you will be able to detect them in clover, as they have a general resemblance to clover seed, and you should never sow clover with these seed in them. In buying clover seed I always get a sample and examine them with a magnifying glass, and never buy seed with this seed in them nor any other weed seed. Better pay three prices for the clover seed than sow seed full of weeds, and dodder is the worst weed you can sow.

### Growing Figs in North Carolina

"I AM trying to prove that field culture of figs is practicable and profitable in North Carolina. My fig orchard consists of 100 trees on one acre of ground (Celestial figs). These trees were imported from South America three years ago. They are now four feet high and beginning to fruit. Is there a fig growers' organization in the state?"

You are in the southern end of the central Piedmont section. You can grow figs probably in good shape for canning, but now and then you will have a winter that will cut them. Figs grow better on the coast near salt water than in the interior. I know of one orchard with trees as large as peach trees near the tip end of Cape Charles in Virginia, where they have the ocean on one side and bay on the other. I have seen a tree on the shore of Chesapeake Bay in southeastern Maryland in which I climbed and ate figs sitting on the limbs,—the largest tree I ever saw north of Florida. At Fort Monroe, Va., the officers have big and productive fig trees all around their dwellings. But where I live, only 25 miles from the ocean, we have to protect the trees well in winter with green pine boughs. I have grown figs successfully in northern Maryland only 25 miles south of the Pennsylvania line. There I branched them at the ground and bent the limbs down in fall and buried them with earth, and they did well. I do not think you can grow figs and ship the fresh figs far, but can sell them on the Charlotte market or can them. But why import the Celestial, a Chinese fig, from South America? There are plenty of them in Southern nurseries, and you could have stuck down cuttings three years ago and had trees more than four feet high now. I know of no organization of fig growers.

### Growing Frame Lettuce

"I HAVE one lettuce bed under cloth and want to grow two crops of lettuce. When must I plant in order to carry out this plan?"

As a rule it is not wise to replant the same bed in lettuce after the first crop, for you will be sure to have the "drop" disease worse. I grow lettuce in frames six feet wide and use sashes 3x6 feet with two layers of glass with a dead air space between. I use small portable frames with the corners fastened with angle iron. These frames hold three of the sashes, and I find that they are very convenient, for I can move them to fresh soil for a succession crop, and not replant the same soil. But when I leave them in the same spot and grow a Christmas crop of lettuce I replant in January with beets and radishes in six-inch rows. The radishes come out quickly and the beets then have the 12-inch rows. Then in March the frame is removed from the beets which no longer need it and is set elsewhere to set tomato plants in from the greenhouse to harden them for setting out in April. I have a number of these small frames and when the outside of

the frame is banked with earth it will take below zero to get frost in the bed. Cloth is cheaper at the start than glass but in the long run the sashes are cheaper. I have sashes made of clear cypress and have had them in use for ten years, and they are as good as ever, while cloth has to be renewed at least every two years. Then the glass makes a third better lettuce. I begin sowing lettuce the first week in August for a crop to head outside in the fall. These plants are Big Boston and Hanson, and I set them in beds six feet wide and ten inches apart each way and keep them well watered and fill the beds with rotten manure before setting, and use nitrate of soda between the rows. These will head in October and No-

vember. Then for the frames I sow seed of the Big Boston the last of August or early in September and set the plants in the frames 8x10 inches as soon as large enough. The frames are stuffed with manure that has been piled and turned all summer till fine and black. Then after they start to grow I scatter nitrate of soda between the rows and cultivate it in. For a succession crop I sow seed in a frame in October and set the plants along in December or January to succeed the crop grown for Christmas, but do not set in the same place the first crop grew. After setting the plants in the frame in the fall do not put on glass or cloth till the nights get quite frosty, and then uncover on all warm and sunny days.

## \$500 More a Year for the Average Southern Farmer

MORE FOOD AND FEED AND MORE COTTON ON FEWER ACRES  
By PROF. W. F. MASSEY

TO IMPROVE the land and get more than the \$500 per year you must get out of the idea that all other crops but cotton are simply "supplies" to enable you to grow more cotton. True, every farmer should grow the feed supplies for his stock, and a large part of the family supplies. He should be independent of purchased corn and feed of all sorts, and should have homemade meat and make it better and cheaper than the packing house product for home use and some to sell.

### Plan a Rotation

IN MUCH of the cotton country the farm can be easily planned into a three-year rotation, giving cotton one-third, corn one-third, and wheat or oats one-third, with peas and clover coming in between, and plenty of pea hay to save the wasteful stripping of blades, and to supplement the cut down corn and the straw.

As a small grain winter crop, oats will prove more profitable than wheat on the level sandy soils, while wheat can be profitably grown in the upper red clay of the Piedmont sections.

I have often suggested the following rotation, and where it can be adapted to local conditions it has been found to be useful in the rapid improvement of the productivity of the soil. But this matter of a rotation long or short is a problem for each farmer to settle. What is essential is that the rotation should contain peas and clover as often as practicable, and that they be used for the improvement of the soil either by turning under or cutting and feeding and returning the manure to the land, and always to have a green winter-growing crop on the land to prevent loss of fertility in winter. Any rotation which accomplishes these things is good.

The rotation suggested is, first year, corn, with peas sowed at last working. The corn is cut at maturity and set in shocks to cure, and the shock rows set as wide apart as convenient. Then peas are disked down and the land disked till the surface is fine, and oats sowed in September in the northern sections and October farther south. The oats are harvested and the stubble well broken and prepared and peas sowed, preferably with a wheat drill set to sow two bushels of wheat. Give these peas some acid phosphate and cut and cure them for hay, and sow crimson clover on the pea stubble in September.

Turn this clover for cotton and aid it with liberal amounts of acid phosphate and some cottonseed meal, and again sow crimson clover about the first picking of the cotton, always using 15 pounds of seed an acre.

Then during the winter get out on this clover as fast as made all the manure made from feeding the pea hay, corn stover and straw, and in the spring disk down the clover and plow it under for corn and repeat the

rotation. After a few rounds of this rotation you will find that the peas sowed in the corn will get too heavy for the disk, and these too can be mowed and cured to feed.

The rows where the corn shocks stood can be sowed to oats as soon as the shocks can be removed after the corn is shucked out. Then it will usually pay to have the corn stover shredded. More of it will be eaten in this way, and whatever is left will be in better shape to go into the manure than the long uncut stalks.

### Corn After Clover Pays

BY ADHERING to some such systematic rotation you will soon find that your supply crops are getting larger and larger, while your cotton crops increase per acre, and will find that there is money in corn when grown economically by the aid of clover and manure, and that the corn and oats or wheat will rapidly enable you to get on a cash basis, and save more than the \$500 a year. As I have before said, there is as much profit in saving expenditures as there is in making more direct.

In short, then, to increase the revenue of the farm we must increase the productivity and fertility of the soil, and must make a greater variety of sale crops to give us the needed cash to enable us to buy on better terms what must be bought.

Then, too, the growing of these other crops in the rotation will rapidly show us that the farmer who farms in some such systematic rotation and exchanges his cotton seed, for meal will never need to buy nitrogen or ammonia in a fertilizer. After a while, as the soil gets more humus, he will find in the red clay sections that he needs to buy no potash, especially if in each second round of the three-year rotation he limes the soil after turning clover for the corn crop. This will leave him no fertilizer to buy except some carrier of phosphorus. And here, too, he can save, for as his land gets better supplied with the vegetable decay he can profitably use the pulverized raw phosphate rock at a far smaller cost than acid phosphate, and with greater permanent benefit to his soil in the prevention of acidity.

### Don't Sell Hay

THEN, with only phosphorus to buy, and buying that in the cheapest form, he can well afford to use it lavishly and at a smaller cost than to be everlastingly buying complete fertilizers for every crop, and the land getting no better all the time.

With a good rotation, strictly adhered to, and legumes, humus and lime there is no reason why any farm in the Cotton Belt should not soon be making more cotton on one-third its area than it will now make on the whole under the old all-cotton method of soil destruction. Then when you get more cotton on the one-third (Concluded on page 22, this issue)