Professor Massey's Editorial Page.

Farm Work for May.

WRITING FOR Southern farmers, one is apt to forget how big the South is, and how far one section is ahead of another. I had a letter yesterday (April 22) from a correspondent in Louisiana, who said that his corn was over knee high, while mine is just fairly above ground. Hence these notes and suggestions may not always exactly fit in every part of the South. But these notes are intended more to remind our friends of what they might forget rather than to tell them what to do.

Of course, the great work for May is the finishing of the corn planting and the getting the cotton in the ground. April is all right for cotton planting in the far South, but there is no advantage in the upper South in getting the seed of cotton or corn in very early.

Where one has a crimson clover crop to turn for corn it is well to let it stand till after cotton planting and turn it after it is dead. It will do more good then, and there is always plenty of time to make a corn crop in the South from late planting. Where the clover is grown to be followed by cotton it should be turned under as soon as in bloom in April, the soil well fined and the planting done on the level.

Try planting some of your upland cotton on the level, and use the smoothing harrow and the weeder on it in the early stages, and see how easy it is to get ahead of the grass.

A number have written to me indicating that they will not plant cowpeas because of the high price of the seed. But peas have been high for several years, and why should any Southern farmer have to buy them? They are grinding them for protein in the stock feeds North, and peas are going to be a profitable crop for the Southern farmers. There will never be any more 75-cent peas, and you can not afford not to sow them, no matter what the price.

Soy beans are somewhat lower in price, and a mixture of the Tall Yellow soy bean and cowpeas, sown half and half, is excellent, for the soys will hold up the peas from the ground and make the harvesting and curing easier. The Tall Yellow soy bean is the best variety for the South, while the dwarf-growing ones and earlier ones will do in the more northern localities and the high mountain sections of the South.

On the western mountain plateau and valleys of the Southern Appalachian system the Medium Early soy beans will very nicely take the place of the cowpeas where the summer nights are so cool. The seed should be planted in rows like cotton and cultivated, though they can be sown broadcast. But, like the cowpeas, they should not be planted till the ground is warm.

Cowpeas sown in May as soon as the land is warm, will make a heavier crop of hay than sown later, but for seed-making, the later planting is best. Now make up your mind that next spring you will have peas to sell at $2.50 to $3 per bushel instead of having them to buy. There is always going to be a demand for them at paying prices, and with the machinery now in use, it is easy to save the seed from the hay, and have the hay to feed, for if the crop is cut at the proper stage, the seed will mature well in the hay.

Growing peas or soy beans especially for seed, they should be planted in rows and cultivated. I believe that a better crop of hay can be made from drilling them all over the land with a wheat drill than in any other way; certainly a far better crop than by harrowing them in broadcast.

Do not be afraid to go over cotton and corn with the weeder and break the crust all around in the rows by running the weeder across the rows. It will not hurt many plants, and will save having sore-shinned cotton from chafing against the crust, and will kill grass while it is just starting. You can go over the land so rapidly that you hardly notice the labor. In a season that is rainy the weeder will be invaluable in getting the crop ahead of the grass.

Perhaps you have begun an improving rotation of crops, and are finding that your crops were better last year. Now do not be tempted because you made a good crop of cotton on a field last year, to put that field in cotton again, but stick to the rotation and continue the improvement.

Thousands of Southern farmers have found that the level cultivation of corn is best, and the crop is heavier where the roots are not damaged by running a turning plow through and hilling the corn up. On low swamp lands the hilling should be done before planting, and the beds maintained for drainage, but the cultivation even then should be shallow.

The same is true of cotton, for the cotton roots run as far as corn roots across the rows, and the crop will be damaged by the turning plow as badly as corn. Planting on raised beds on low lands is all right, but shallow cultivation is right there, too.

Then why not try the level and shallow cultivation on tobacco? Try it on part of your crop this season, and I believe you will abandon the laborious hilling of tobacco. There are machines now in use for setting tobacco plants two rows at a time, which save a great deal of labor and get the crop set rapidly.

May on the Truck Farm.

WATERMELONS and cantaloupes are, of course, up and growing in the lower South, and the planting is done even as far north as southern Maryland. Thin cantaloupes to 18 inches in the rows and watermelons to 3 feet. Here the cantaloupes are planted in rows 5 feet apart and watermelons 10 feet. When the cultivation is finished, and the soil is still fresh from the last working, sow crimson clover all over the land. It will do no harm to the melons, and will give you a winter cover and a humus-making crop the next spring.

Spraying should be begun on the early Irish potatoes as soon as they are a few inches high, using the Bordeaux mixture. As soon as the old beetles are seen around laying eggs, add 5 ounces of Paris green to 50 gallons of the Bordeaux mixture and spray before you see any young ones hatch, for you can kill many of the old beetles and stop their egg laying, and the poison will be there ready for the young ones as soon as they hatch. In many trucking sections they use Paris green and water only, but it is far better to use the Bordeaux mixture to prevent the blight, as the early blight often cuts the crop short.

Where spraying for the bugs alone you can put a pound of arsenate of lead in 30 gallons of water and kill the bugs with less damage to the plants than with Paris green. It mixes better with water, and sticks better to the leaves than Paris green.

If any of the green lice appear on the early garden peas, dust them over with tobacco dust. If tobacco stems are used in the furrow in planting the peas there will be few lice.

What Farmers Want to Know,

WILL YOU KINDLY tell me the best fertilizer to use on sweet potatoes?" asks a North Carolina reader. To him I replied:

The fertilization for sweet potatoes will depend on the condition of the soil in which they are to be grown. If the soil is well supplied with humus or has a crimson clover sod turned down, I would use no nitrogenous fertilizer at all, but would apply acid phosphate and potash liberally.

In the great sweet potato growing section of eastern Virginia, the growers rake the pine woods and haul the pine straw on the land during the winter to plow under for the crop, and they make good crops, too. Some growers there, however, are using crimson clover as a preparatory crop and are doing well. One large grower told me that he made 254 barrels per acre after clover, with, of course, some acid phosphate and potash. On thin soil that has little humus in it, would advise an application of 400 pounds of acid phosphate, 50 pounds of nitrate of sola, and 100 pounds of sulphate of potash per acre.

ROTATIONS—Doubtless a two-year rotation is preferable to no rotation at all; but it is doubtful if any two-year system can give as good results as one that embraces more crops and runs for a longer time. Here is a letter I had and my reply:

> "I have a field of seven or eight acres that I have been sowing in peas one year and corn the next. Have kept this rotation up for three years, and have more than doubled the yield. I raised a fine crop of pea hay last year on this field. It hasn't been plowed since. I will plant it in corn this year. The soil is a light sandy, with a red subsoil, easily put in good order. I want to sow annual clover at the last harrowing of the corn, and thought I would apply 300 or 400 pounds of acid phosphate per acre. At what time would you apply the acid phosphate, and how would you put it in the land?"

While planting corn with peas will certainly for a time increase the yield, it will finally exhaust the phosphoric acid and potash and result in decreased yiesids. Peas and clover will give you all the nitrogen needed in a good rotation, and by following a three-year rotation, you can permanently increase the productive capacity of the soil. By taking off a crop of pea hay you have drawn heavily on the phosphoric acid and potash, and the field should have the manure made from the feeding of the hay if you wish to prevent loss. Taking a crop of pea hay from the land and returning no manure, is a good way to run it down. It would have been far better to have sown crimson clover on the pea stubble last fall if you want to put it in corn again, but it would have been better to have applied 400 pounds of acid phosphate on the stubble and have sown to wheat or oats, and followed the wheat with peas this summer for hay and then sown the clover and spread the manure made from feeding the hay and turned all under for corn.

CRIMSON CLOVER HAY.—Another reader asks as follows about making hay of crimson clover:

> "I have a piece of land in crimson clover I intend putting in corn. With the clover there is about one-half of a stand of volunteer oats. Can I let them stand until they are large enough to mow and then make a crop of corn? Or would you advise plowing up now and preparing for corn?"

This man can make a good hay crop by plowing the clover and oats as soon as the clover is in bloom without any reference to the condition of the oats, for if he lets the clover stand till the heads get brown, the hay will be dangerous feed for horses. Or he can let the clover stand till dead and still have time to make a crop of corn by turning the whole under.

LIME FOR BROOMSEDGE.—The value of a permanent meadow should not be underestimated anywhere, and we have all too few in the South. Among the worst enemies of meadows and pastures is broomsedge. One correspondent who has been troubled writes to ask if lime will help his clover and timothy, and how to apply it.

Lime will, doubtless, be a help in keeping out broomsedge. The broomsedge thrives in acid conditions in the soil, and lime will sweeten the soil and encourage the growth of better grasses. Spread 25 bushels of slaked lime per acre and brush it in with a smoothing harrow.

APPLYING NITRATE OF SODA.—Among recent inquiries is one as to second application of fertilizers, as follows:

> "How shall I put second application of guano and nitrate of soda mixed to cotton to get best results? When should this application be put to cotton? I will put down 200 pounds with seed with a Cole planter and use remaining 300 pounds as above-mentioned."

Now, I would never make any second application to any crop except of nitrate of soda. There is no danger that acid phosphate or potash will get away from you in the soil, but it is better to use all that will be needed of these at the planting, since they are not so quickly taken by the plants as the nitrate is, and the soil will hold on to all of these that you may apply till some plant takes them. Where cotton shows a pale color after starting, it is well to apply 100 pounds of nitrate of soda alongside the rows when the leaves are dry, as it may scald them if they are touched when wet.

In applying nitrate of soda to cotton, I would wait till after a good stand is chopped out and the plants seem to need help. If the land already makes a strong weed, the nitrate may do more harm than good in making a ranker growth. It is the phosphoric acid and potash that make the lint and seed, the nitrogen making a greater vital activity in the growth. Put in all the phosphate and potash you are going to use when you plant.