



## What Farmers Want to Know

By W. F. MASSEY

### Sundry Queries

**FROM** South Carolina: "Up to a few years ago I had no difficulty in making more butter beans than we could use in my garden. For the past few years they grow very strong, but do not bear well. Have tried acid phosphate but not much potash. How are dahlia plants sold by the florists propagated? Is there any way to prevent the worms getting into the squashes? I have prevented the English sparrows by setting stakes along the rows of peas and stretching white cotton strings on them."

The best Lima bean for the South is the small Lima or butter bean. The Large White Lima is always unproductive here. The thick seeded or Potato Lima is better, and the best of these is the bunch form known as Fordhook. I think that in a garden where you have used manure freely you can grow the Limas with acid phosphate, or Thomas phosphate perhaps will be better by reason of the lime it carries, and then add some potash. If you can get hardwood ashes use these freely with the acid phosphate.

Dahlias are propagated by the florists by bringing the old roots into a warm greenhouse in winter and then making cuttings of the green shoots with an eye at the base of the shoot. To make small roots for mailing they grow them a whole season in three-inch pots packed in frames on coal ashes.

I keep the sparrows away from my garden by shooting them every time they put in an appearance, and they have learned to stay away.

The worms that attack the squashes and cantaloupes in the South are what are known as pickle worms in the North, where they attack cucumbers mainly, and can be prevented by spraying with Bordeaux mixture in which a pound and a half of lead arsenate is mixed to 50 gallons of the Bordeaux. This will not only prevent the worms but will prevent the blighting of the foliage.

### Southern Second Crop Potato Seed Prove Best

**I** HAVE for many years insisted that our late fall crop of early potatoes, either second crop from the early crop or cold storage seed planted late, made the best seed for our planting. But as a rule the experiment stations have given the preference to Northern-grown seed.

It is interesting, therefore, to note that Southern-grown seed have beaten the Northern on their own ground. Potatoes sent from Accomac County, Va., to Maine and planted there made 20 barrels an acre more than the Maine seed, and I have before me a letter of the Maine grower making this statement. The Department of Agriculture had some of these same Virginia potatoes planted in western New York and Maine, and they report that those planted in Maine made 377 bushels of prime and 69 of culls per acre, while the Maine-grown seed alongside in the same soil made 337 prime and 92 culls per acre. In western New York the potatoes were subjected to such severe drouth that it was not considered proper to make a comparison. The Maine yields given were actual acre yields, not plots and estimates. This summer the Department proposes to plant on its experimental grounds in Maine seed grown from last year's Virginia seed, as well as seed direct from Virginia and Maine.

Many stocks of the Irish Cobbler are badly mixed with Green Mountain and other sorts, and Mr. S. J. Costen, of Cape Charles, who grew the seed in the above tests, is using

every effort to get a perfectly clean stock of Irish Cobbler. Last summer I was judge at a potato show in southeastern Maryland, where all the exhibits were claimed to be Cobblers, and yet I found only three or four samples entirely pure Irish Cobbler. Growers should watch their crops and pull out every plant showing white flowers, if they wish to grow a late seed crop pure.

It is very evident that we do not need to send North for seed potatoes every spring, if at all.

### Properly Used Acid Phosphate Does Not Injure Land

**FROM** Virginia: "Is acid phosphate injurious to land? Some say that it kills out the bacteria that are beneficial to the soil? I have tried it on peas alone and also with potash, but could see no effect, while the scrapings around an old house showed wonderfully. Have sown it on manure, put out with a spreader, but manure without the phosphate did

product. A station investigator weighs carefully everything. Acid phosphate may be so used as to bring injury to the soil, and has been used so, but properly used it is an efficient means for soil improvement and is one of the best carriers of the most essential plant food in our older soils.

### Oyster Shells and Lime

**I** HAVE cleared and prepared 20 acres of black soil. There are great banks of fine rotten shells and mud along the shore. Will it do to use these or had I better get fresh shells and burn them to lime the land?"

Many years ago on the shore of the Chesapeake Bay a farmer owned one of these so-called Indian shell banks. It covered acres of land five feet or more deep. He sold to some of his neighbors the right to get shells there for a certain time. Most of them hauled the shells and burnt them, while one man took a gravel screen and screened the rotten shells and hauled the fine portion heavily on his land, and he claimed that he got good results and more cheaply than by burning them.

There is no doubt that the finely ground shells will answer for liming land when used twice or more as heavily, as burnt lime. If I had the same problem you have and had the

## HERE'S TO THE CORN CLUB BOYS!

**B**UT just now we are developing down home a new declaration of independence. We are not writing it, we are not speaking it—we are growing it. But when we have finished it it will spell one hundred bushels of corn to every acre planted. And the heroes who are growing this new declaration of independence are the Corn Club boys. Last year these boys made an average of 63 8-10 bushels of corn to the acre, while the balance of the State made 18.

In my opinion, the Boys' Corn Clubs are the most helpful organizations in the State. There is nothing high-sounding or spectacular about them. They do not pretend to compete with the Daughters of the American Revolution or the Sons of the Colonial Dames. There is just a plain, one galled country boy standing with an ear of good seed corn in his hand, but to me this boyish figure looms large against the horizon, and is eloquent with the prophecy of a better day. For I devoutly believe that in him there is found another child of the bulrushes, destined to deliver his people out of their bondage for bread.

So here in this metropolis of the nation, amid the beauty and splendor of this banquet scene, and to this distinguished company, I give the toast,

"Here's to the Corn Club Boys,  
May their tribe increase."

—From an address by Attorney General T. W. Bickett before the North Carolina Society in New York City.

just as well. Is it possible to improve land without manure?"

When farmers use acid phosphate continuously and make no effort to maintain or increase the humus in the soil there is no doubt that the bacteria die out, being starved, and the soil is brought into such an acid condition that the nitrifying bacteria cannot survive. The effect of acid phosphate is not to make the land sour directly, but as Dr. Thorne, of Ohio, suggests, it may be that the crops use the phosphoric acid and set free the sulphuric acid and this unites with the lime in the soil, making sulphate of lime instead of carbonate, and this does not maintain the alkalinity of the soil as the carbonate does, and the land becomes acid from being robbed of lime carbonate. The remedy is liming and proper rotation of crops and the maintaining and increase of the organic decay in the soil. You applied acid phosphate and potash to peas, and did not find as rank growth as from old scrapings. The old scrapings had more nitrogen probably and that made a more luxuriant growth, which you mistook for a superior effect. If you had measured the difference in the seed product you would probably have found that the acid phosphate and potash beat the scrapings. At the Ohio Station it was found that as little as 40 pounds of acid phosphate added to a ton of manure almost trebled its crop-making power. Simply estimating results by the eye is not the true way for calculating differences in

old shell banks right at hand, I would screen out the finer parts and use this on the land at rate of three or four tons an acre.

### Celery Gets Pithy

**FROM** Virginia: "I have been growing celery on the same land for more than 10 years, applying stable manure heavily each year. For the past two or three years I have had trouble from pithy and hollow stalks. Giant Pascal was most affected. I have Professor Beattie's book on celery, and he places a good deal of stress on quality of seed, recommending the foreign seed. Where can I the foreign seed?"

One thing that I suppose has affected your celery is the constant use of stable manure only. This has given you in your strong valley land an excess of nitrogen, producing a rank growth and tending to pithiness. You should add acid phosphate heavily. It is true that the French seed is the best. Any of the leading seed houses will sell you French-grown seed if you insist on it, or you can get seed direct from Vilmorin Andrieu et cie, Rue Messagerie, Paris, France.

### Green Manure

**O**N A PIECE of poor, gullied land I sowed cane last year and turned it under. Will it be best to sow cane again or to sow peas? Some say that cane injures the land."

Turning under a growth of cane

gives you some humus-making material, but all the plant food in the cane came from the soil, and it adds nothing but organic decay to the soil. Sow peas and they will get you nitrogen from the air and better organic matter than the cane. Cane exhausts land if you ripen the crop and take it off, but not when turned under.

### Serradella

**FROM** Arkansas: "I am sending you a clipping from a seed catalog which speaks very highly of serradella as a forage plant. What do you think of it?"

Serradella, *Ornithopus sativa*, is a legume that has been boosted by some because of its ability to grow on very poor sand. We have in the South many better legumes in cow peas, soy beans and crimson clover, and the serradella will not add anything of value.

### Navy Beans Again

**FROM** North Carolina: "Please give me directions for the cultivation and harvesting of Navy beans and tell me if they will grow at a profit here."

I have already told another correspondent that he can grow some just as he would grow snaps or string beans for home use, but in your climate you cannot make a commercial success with them as is done North, as there will be too many damaged beans and too many weevils in them.

### Ball Lye as a Fertilizer

**FROM** North Carolina: "We have on hand five cases of ball lye gone to pieces. The company selling it has made good to us and says that it has a fertilizing value. How would it do to mix with manure?"

If the stuff is really caustic potash it may have some value, but it is more probable that it is caustic soda and of no special use. It will do no harm, however, to mix it with stable manure, about 40 pounds to a ton of manure.

### Growing Magnolias and Cedars

**FROM** Mississippi: "How are magnolia trees grown, from cuttings or seed? How are cedar trees grown? What makes roses blight, and how may it be prevented?"

Magnolia trees and the common red cedar are grown from seed. Roses are often affected by mildew. Spray them with 2 per cent solution of formaldehyde before any mildew shows and repeat if any shows.

### Onions Again

**I** AM still getting letters daily asking about growing onions. I answer these, of course, but if those interested will turn back to the issue of *The Progressive Farmer* for August 1, 1914, they will find what I have written about onions and more than I have time to write to each inquirer. Any reader who files his papers can usually turn back and find what he wishes to ask already answered.

### Grapes Mixing

**FROM** North Carolina: "If I grow a James grape and a Scuppernong on the same arbor, will they mix?"

If you were using the seed to grow new vines it is probable that you will find that they have crossed. But so far as the fruit is concerned, the James grape vine will make James grapes and the Scuppernong will make Scuppernongs on the same arbor.

### Spring Wheat a Failure

**FROM** North Carolina: "Will it do to sow wheat now as soon as the soil is fit?"

As I have already told another inquirer, no. You can sow it, of course, and it will grow, but it will come to head in the heat of midsummer, and in your climate will make nothing but straw.