organism and inoculate the soil. These cultures can be obtained in limited amount from the Bureau of Plant Industry U. S. Dept. of Agriculture, Washington, D. C. There are also companies that are manufacturing these from the Government formula.

However, for successful use it must be remembered that these inoculations are not designed to take the place of the usual careful preparation of the soil, nor do they do away with the need of mineral fertilizers, nor are they valuable for any crop other than the particular legumes for which they are recommended.

Varieties of Corn and Corn Cultivation.

A recent series of corn experiments at the Tennessee Experiment Station are described in a new bulletin, and the following conclusions arrived at—conclusions which the farmer would do well to consider before selecting his seed corn for this year or deciding on methods of cultivation.

1. The best average yields of corn for four years were made by Hickory King with 46.87 bushels, Champion White Pearl with 43.41 bushels, Improved Leaming with 42.13 bushels, Early Leaming with 41.51 bushels and White Rockdale with 41.66 bushels.

2. The smallest per cent of cob to dry ears was shown by Hickory King, 13.09, the largest per cent by Large White Flint, 25.07; Yellow Creole was a close second with 23.78, and Improved Leaming third with 19.76 per cent. The variation in the per cent of cob may amount to nearly 10 per cent. The cob is by far the poorest part of the crop, being innutritious and indigestible, and the breeder of corn should strive to reduce the per cent of cobs to a minimum.

3. Of the varieties grown for three years, Wisconsin Early White Dent made on an average the largest yield, 43.52 bushels per acre; Reid's Yellow Dent was a close second with 43.11 bushels; and Virginia Horsetooth third with 42.30 bushels.

4. For light uplands Hickory King is certainly one of the best varieties that has been grown to date. Other varieties are Early Leaming, Iowa Gold Mine, 100 Day Bristol, and Golden Beauty.

5. For soils of medium fertility, such as second bottoms and rich uplands, Coke's Prolific, Virginia Ensilage and Virginia Horestooth are all excellent varieties. Probably the best of these is Cocke's Prolific. There is one drawback to it in that the stalk is somewhat weak, a defect that can be corrected by selection.

6. For rich river bottoms Huffman is one of the best types. It is a hardy variety, growing a large stalk and a fine ear. The ear is almost ideal in many respects; the grain is flinty and rich in protein. Cocke's Prolific and Shaw's Improved also give satisfactory results on river bottom soils.

7. The farmer should remember that in growing corn he is after two things—grain and fodder, and not a large, coarse stalk containing a high per cent of indigestible matter and a large per cent of cob.

8. The common practice of planting 5 feet each way and one stalk to the hill is not compatible with the best yields. To show the importance of planting closer than is commonly done the following statement is presented: 100 acres of Hivkory King planted at 48 inches would have yielded 500 bushels more grain than if planted at 54 and 1,000 bushels more grain than if planted at 60 inches.

9. The importance of selecting corn is shown by the fact that there was a variation of 7 to 19 days in the dates of ripening and from 9.8 to 14 tons per acre in the yield of green crop and from 54.65 to 68 bushels of grain per acre with ears of Cocke's Prolific corn planted in single rows. Cocke's Prolific is a well established variety, yet the results obtained from planting single ears show remarkable variation.

10. In a general way corn planted on soils of moderate fertility will respond to the use of fertilizers, particularly to phosphates and potash. Corn loves a soil well supplied with vegetable matter and this can generally be supplied through the medium of farmyard manure or green crops more cheaply than in a commercial form.

11. In tests to compare the effect of fertilizers on Hickory King and Cocke's Prolific corn some remarkable results are noted. It seems that Hickory King did not respond freely to the use of fertilizers, whereas, Cocke's Prolific gave greatly increased yields, as much as 22.10 bushels with farmyard manure, 20.9 bushels with lime, and 18.31 with a complete fertilizer, consisting of 100 pounds of nitrate of soda, 150 pounds of acid phosphate and 50 pounds of mutriate of potash. These facts explain why farmers sometimes fail to secure satisfactory results with the use of fertilizers, as varieties seem to vary widely in their capacity for utilizing the same.

How Farmers Can Save Money.

Messrs. Editors: There is scarcely a farmer who is not a buyer, and it becomes him to buy the cheapest and best. I have often had farmers say: "Well, I want to buy so and so, but don't know where to go to get it." If you took a good live agricultural paper you could find it advertised in its columns. Again, you often hear of men saying this or that is a fraud. I have for years bought more or less from men advertising in farm journals, and I have always found fair treatment. The advertisers are as anxious to suit you as you are to be suited. It costs money to advertise, and when they get a customer they want to keep him, and they know it can be done only in one way, and that is by fair dealing. Last spring I concluded to buy a lot of small fruit. The tree agent came along and I made a bill of the kind of trees and plants wanted, and the best I could do with him was $18 for the lot. I thought this too much. I took down one of the agricultural papers and looked over its columns and found several men advertising just what I wanted. I wrote them to give me figures on my bill, and by return mail got an answer saying that for $6 they would fill it. I sent the money and got the plants in a few days, and they were all right—more of each kind than I ordered and much fresher and stronger plants than those got from the tree agent. Thus I was saved $12 on one order—enough to pay for the paper for twelve years. This is only one instance of many. Yet you will find farmers every day saying that they can't afford to take this or that farm paper, when if the truth is told they can't afford to be without it.

I consider the advertising columns of a paper one of the best features of the paper. It puts you in touch with the manufacturers and you frequently save a good deal money by it.

It is not long since a neighbor sent quite a distance for a two-year-old bull, and he was complaining bitterly about the railroad charges, and I asked him why he didn't buy close to home.

"You could get just as good stock for less money."

"Why," he says, "I didn't know who had such stock for sale."

"Why didn't you look over the advertising columns of your paper?"

"Oh," he says, "I stopped my paper; couldn't afford to take it."

Thus you see, again, this man's economical habits cost him about $35 or $40 to save a dollar.

Our best farm papers to-day are very careful about taking fake advertisers; they don't do it under any circumstances and one is safe in buying from the advertiser.

There is scarcely a week goes by but what I look over the advertising columns of the paper, whether I wish to buy or not. I wish to know what is going on in the world. It is as necessary as to read the editorials, and generally more so.

H. W. KING.

Live Stock and Dairy

CONDUCTED BY CHARLES WM. BURKETT, Professor of Agriculture, N. C. A. & M. College, and Agriculturist North Carolina Experiment Station.

Inquiries of Progressive Farmer readers cheerfully answered.

Lesson for Young Men.

There is a young man farming on a rented place near Newcastle, Ind., named T. J. White; he is known as "Tim" White to the Hosiers, and Wrights, and Bundys, and Hodsons, and Meyerses, and other Jersey cow devotees in Henry and surrounding counties. Two years ago Tim White found himself with liabilities aggregating two thousand dollars; his assets consisted of forty-three dollars; good health, ambition, a good wife, and a knowledge of dairy farming, coupled with the conviction that Jersey cows would "put him on Easy Street" quicker than anything else he could handle.

He began buying them here and there—on twelve months' notes—selling their milk, doing practically all of the work, and feeding them on home-grown stuff exclusively, except a little grain he had to buy in winter. Every cow he bought has paid for herself before the note was due, and a profit besides. In two years these Jersey cows have made his assets exceed liabilities, besides making a living. The first year he disposed of the milk in various ways and no record was kept. Since August 1, 1903, he sold to the Newcastle creamery; we went to the owners of this creamery and got the memorandum of milk received from Mr. White and the money paid therefor; following is the monthly account, with number of cows milked each month:

	Lbs. Milk Delivered.	Cash Received.	No. Cows Milked.
August	9,173	$134.04	16
September	8,086	115.56	16
October	4,931	70.44	16
November	3,867	55.20	14
December	3,764	53.76	12
January	3,611	51.60	9
February	2,504	35.76	8
March	2,352	33.60	9
April	3,188	45.48	10
May	6,914	98.76	12
June	11,143	159.12	15
July	11,688	166.92	20

A total of $1,017.24 in the year, milking an average of thirteen cows, or an average return of over $78 per cow. Since January 1st, considerable whole milk was fed to calves, and in May one hundred pounds of butter was made and sold. Every cow giving milk is counted, whether old or young.—Jersey Bulletin.

For the cost and trouble required in raising them, guineas are among the most profitable fowls which can be raised on the farm. They prefer to seek their own food in the meadows and fields, and so long as they can find plenty themselves they will not come to get it. In this way they eat up a great number of worms and grubs and keep down bugs and beetles to a great extent. A good flock of the fowls needs a large range, and every farm of any size should be blessed with a few at least. It is not profitable to attempt to raise them on small ranges, for they will not thrive when cooped up the same as other barnyard fowls. A flock of about 20 will range over a farm of 50 to 100 acres, and by their persistence will help to keep down all the bugs and insects. They will do more. They will help to keep down many noxious weeds and wild plant. The guineas are also the most trustworthy watch-dogs. If taught to roost in the hennery, or close to it, they will give the loudest alarms as soon as an enemy approaches. Dogs, foxes and human beings alike attract their attention, and they keep up the shrill cries until the enemy has left the place. A great many poultrymen try to keep a few guineas in their flocks simply for this one purpose of giving the alarm when chicken thieves come around.—Exchange.