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and The Cotton Plant.

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CORN GROWING TALKS.

I.—Important Deductions from Field Tests by the Department of Agriculture.

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It will probably not be out of place to give, at this time, a series of short articles on corn and cotton growing from data drawn principally from our experimental work in the field with these staple crops.

During the past four years on the Test Farms of the North Carolina Department of Agriculture comparative field tests have been made with forty-eight varieties of corn. The number of varieties in the different tests have ranged all the way from eight in 1900 to twenty-nine in 1904. The different tests of varieties at the several farms were grown as nearly under the same conditions of soil, fertilization and cultivation as it was possible to provide. To eliminate all inequalities in the character of the land, if any, the varieties at the different farms were planted each in separate rows, arranged consecutively, and this plan was repeated from three to five times, varying with the length of the rows, in order to give the desired acreage to each variety. As the soil plays such an important part in the comparative yields of different varieties of not only corn, but all agricultural crops, it is deemed not unwise at this point to give a brief description of the soils of the different Test Farms on which the variety tests of corn and cotton were made, as it is thought that this description will aid farmers in applying the results to their different soils in a more intelligent manner.

Test Farms of the Department of Agriculture.

The soil of the Edgecombe farm, located in Edgecombe County, consists principally of sandy loam, with moderately fine sand, underlaid by a rather tenaceous sandy clay subsoil at a depth, generally, of from eight to twelve inches. The subsoil is a moderately retentive clay, such as is found under the larger portion of the lands of the Eastern part of the State. This type of soil responds very readily in renumerative crops to proper fertilization and cultivation and represents a large and important part of the coastal plain region which comprises something like 40 per cent of the total area of the State. This farm has some over two hundred acres in it, most of which is in cultivation.

The Red Springs farm, located in Robeson County, has a coarse, sandy soil with a sandy clay subsoil from twelve to fifteen inches below the surface. This type of soil is representative of a considerable area in the Eastern and Southeastern part of the State. This type of soil, as it dries out readily and warms up quickly in the spring, is especially adapted to the growing of truck and other crops where early maturity is an imperative consideration, for a few days difference in shipment may mean the difference between selling at a handsome profit and at a price not sufficient to pay freight. Although the soil at the Red Springs farm is not so strong as that at the Edgecombe farm, nevertheless it will produce fairly good yields of corn and cotton under liberal fertilization and proper cultivation and rotation of crops.

The Statesville farm, located in Iredell County, has a deep tenaceous red clay soil and subsoil. This type of soil is the prevailing one of the Piedmont plateau region of this and other South Atlantic States. Generally, the only difference between the surface and subsoil in this type of soil is that the former has been broken up by cultivation and weathering and has more organic matter worked into it.

This soil is naturally strong and is susceptible of high state of productivity under judicious fertilization and proper cultural management. It is especially adapted to the growth of grains and grasses. This farm, too, embraces some over two hundred acres, the greater part of which is under cultivation.

What is a Variety?

A variety is supposed to represent a class of plants with one or more distinguishing characteristics, but with a cereal like corn, which mixes so freely, variety does not mean much unless proper precautions have been exercised in its growth.

Take some variety of corn, say Cocke's Prolific, that has been bred carefully and intelligently through a number of years for high yield of shelled corn per stalk, and grow it continuously in or adjacent to a field of inferior corn and in a very short time, especially if proper seed selection is not practiced, it will give much smaller yields, when grown under the same conditions, than the original pure-bred corn; this being due to the fact that you no longer have pure Cocke's Prolific, but a mixture of "scrub" and Cocke's Prolific corn. This fact emphasises the importance of securing seed from reliable parties. We have had Cocke's Prolific seed from different sources to vary in our tests as much as four and one-half bushels of shelled corn per acre when grown under the same conditions as far as we could provide them.

Buy Seed Corn in the Ear.

Seed that can be purchased for the least money are not always the cheapest; but, on the other hand, are usually the most expensive. Poor seed, which are generally sold cheap, are expensive at any price, even as a gift, if they are planted. Of course, there are seed sold at a high price that are worthless, but if one buys these from a reputable firm, they will only be too glad to replace them.

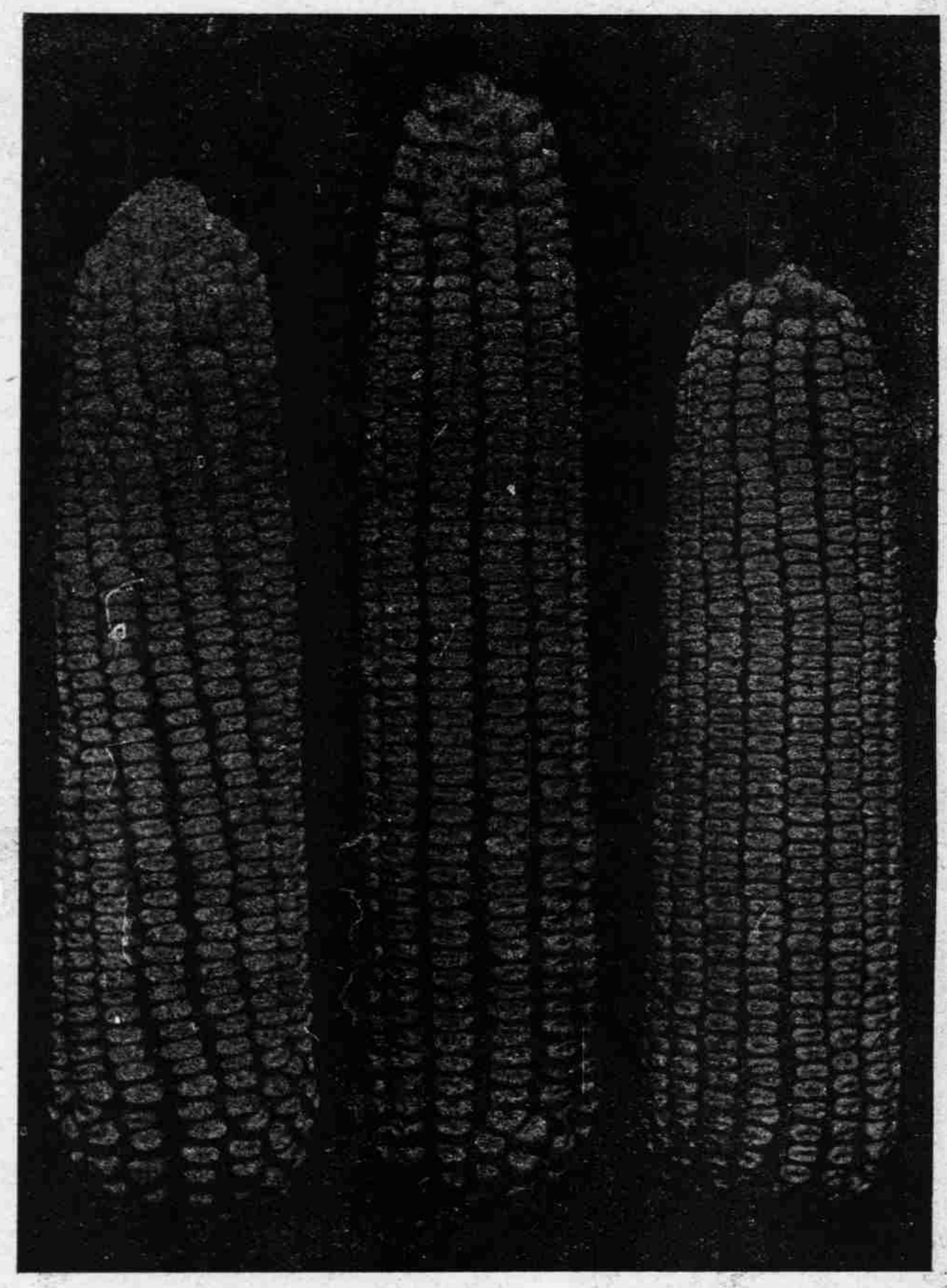
The farmer, to safeguard himself in buying seed corn, should have it shipped to him on the ear and require the sender to supply him a certificate as to where the corn was grown. This is the only safe way to be reasonably certain what one is purchasing at all times, and that the corn will be suited to the climate and soil of the purchaser.

In our variety tests, we have found that the best varieties originated and grown in the Northern and Northwestern States, when shipped to us and incorporated in our tests, generally give much smaller yields than our best local varieties, although the seed from the West and North were secured through the most reliable sources.

Lack of acclimation is, not doubt, an important factor in depressing the yields of these Northern and Western varieties of corn when planted in the South.

In next week's Progressive Farmer we shall consider the varieties of corn best adapted to our section—early, medium and late maturing sorts.

HOW TO SELECT YOUR SEED CORN.



A B C

(A) Too great distance between grain rows and poorly filled at tip and butt. (B) too small ear. (C) well shaped ear—the best type for seed corn.