

Address Of David R. Coker Delivered In Selma Feb. 27

Presents to Farmers Some Essentials For the Restoration of Prosperity to Carolina Agriculture

By DAVID R. COKER.

Fellow Carolina Farmers, I am very much afraid that many of you have come here today under a misapprehension. Some kind of friend has circulated a report that I produced four thousand bales of cotton on four thousand acres last year. With reference to that story I am very much in the position of the old negro who was accosted by a traveling man who asked him to change a five dollar bill. The old fellow took off his hat and bowed politely saying, "Boss, I can't change your money but I thank you for the compliment." During the past two years we have had distressing conditions in an area of four or five counties in eastern South Carolina. Only one farmer in that area that I know of has succeeded in making as much as one hundred bales on one hundred acres in that time and that was on one of our farms managed by Mr. George Wilds, our head plant breeder, who produced one hundred and fifty, five hundred pound bales on one hundred and forty-three acres. My section has been visited by such storms and excessive rainfall in these two years that few farmers have produced even half their normal yields. The rainfall at Hartsville last year was a little over seventy-two inches and for the year preceding practically the same. If any of you are here for no other purpose than to hear me tell how I raised four thousand bales of cotton on four thousand acres you may now retire and look for the man who started that story.

I have been invited to Selma to speak to you today upon the essentials of successful cotton production but I am taking the liberty of broadening my subject and will attempt to outline to you what I consider the main essentials of agricultural success for this region.

Of course as our agriculture is based largely upon cotton and tobacco I must spend a considerable part of my time in discussing these two crops. However, I would like to say in the beginning that I believe that few farmers can make a conspicuous and permanent success if they devote their time and acreage exclusively, or almost exclusively, to these so-called "money crops."

The Trouble.

One great trouble with the agriculture of the eastern South today is that it is not properly balanced between food crops, feed crops and livestock on the one hand and the so-called money crops on the other. So I believe that the only sound basis for successful agriculture in this general section lies in a sound and sane diversification program. Such a program will involve the production of some livestock and poultry on every farm; the raising of practically all of the food consumed by the farm animals; the production of most of the food for the farm family and farm laborers; the improvement of the soil by animal manures and rotation with leguminous crops and the growing of the main money crops only on soils in a good state of tilth.

Grain and Forage Crops.

I have made during my long experience as a farmer almost as close a study of the grains and legume crops as I have of cotton and considering them as I do, of at least equal importance in the economics of the farm. I have no regrets as to the time expended upon them. I will not go into great detail, however in discussing these crops. The soy bean which I presume is well known all over this section is, I believe, our greatest combination plant for animal forage and soil improvement. The velvet bean is a close second.

The Cow Pea.

Most of us have greatly neglected the valuable cow pea in recent years and should go back to the system of planting a considerable acreage of our lighter soils in this nutritious food crop. We should not hear so much about destitution and semi-starvation among farm tenants, farm laborers and some farm families as well if every farm owner would see to it that there was attached to each crop a patch of cow peas, one of sweet potatoes and a well kept garden of at least one quarter acre.

The Sweet Potato.

Although the sweet potato is universally known throughout this section and was a staple food of the aborigines I do not believe that the majority of our farmers fully appreciate its possibilities or utilize it as they should under our present distressed agricultural conditions. I have with me a report of the South Carolina sweet potato contest of last year and of the one hundred and seventy contestants who passed in completed records only two reported a net loss and

the highest yield was six hundred and seventy-two bushels. Do you realize that this is more than twenty tons of a palatable, nutritious and wholesome human food? It is not difficult to raise three hundred bushels of sweet potatoes per acre (which is nine tons) if the right sort of soil is selected and a good variety used and if proper spacing and fertilization are employed. It is not difficult to keep a crop of sweet potatoes if they are properly cured out as soon as dug and nearly every farmer in this section has a tobacco barn which can be used for curing and storing. Almost invariably there is a good winter and spring market for potatoes, especially in a manufacturing section. You need not fear over production for it is an excellent feed for all kinds of livestock, including chickens, and can be produced for less than 25 cents per bushel.

I could take the balance of my time in discussing the noble and succulent collard; the humble but valuable turnip and dozens of other health giving garden crops which should be grown on every farm.

Pellagra.

I cannot leave the subject of food crops, however, without calling your attention to the fact that this general section has the greatest list of valuable food crops of any section of the world; that most of them grow to perfection here but that nevertheless a large proportion of our farm population is poverty stricken and are subsisting on such a limited and ill balanced diet that thousands are afflicted with pellagra. Without knowing the facts I will venture to guess that you have several hundred cases of pellagra right here in Johnston county (there are only a few counties in North or South Carolina which have fewer than one hundred cases). Fresh meats, milk and vegetables, which every farmer could produce in abundance, will drive away this curse.

The Balance of Trade.

Although this country could exist without cotton and tobacco and large sections did not only exist but prospered a hundred years ago with only a limited production of either, we are forced to the necessity of producing these crops under present conditions in order to pay for automobiles, gasoline, radios, silk stockings and cigarettes besides the vast amount of food and feedstuffs which we insist on buying from other sections. The main reason that our agricultural sections are so poor today is that we have exported most of our liquid capital and then mortgaged our farms to pay for things we could have done without or could have raised at home. North and South Carolina have raised crop after crop which brought say two million dollars per year per county and have sent out for such items as I have mentioned say two and a half million dollars per year, thus piling up year by year an enormous adverse balance which is being largely carried on farm mortgages. We have got to restore a favorable balance of trade by the production and consumption at home of greater amounts of food, by the production and sale of crops which will bring us in more dollars and by refusing to buy things we can get along without and have not the cash to pay for.

Produce Acreage.

We now come to a discussion of ways and means to produce a better revenue from our money crops. First and foremost we must stop planting lands which are poor or in a poor state of cultivation. We have got to reduce our cotton acreage very materially if we are to receive a profit out of the next crop and we should also hold down tobacco acreage. The simplest way to do this is to cut out all lands which will not produce over one half bale of cotton or seven hundred pounds of tobacco per acre and plant it in soil improving and feed producing crops. The recent average production of cotton per acre in the whole South is considerably under one third bale per acre which means that about one-half of the cotton acreage produced from nothing up to one hundred and fifty pounds of lint. You need not try to find any expert to tell you how to produce cotton profitably with such yields as these. No farmer with any judgment will plant in cotton lands whose recent history indicate yields of less than one half bale and bankers and merchants who advance money to produce crops on such lands are simply throwing good money after bad. Planting such lands in cotton is not only foolish and economically unsound because cost of production cannot be realized but it is responsible for low prices and the general distress of Southern agriculture.

Essentials of Production.

After providing simple acreage for food and feedstuffs, including a large and fertile garden spot, the farmer should select as much (but no more) of his good land as he can properly fertilize, tend and manage for his other crops. For cotton the soil should be well prepared and laid off in rows about three feet wide. He should put down in furrow fifty to a hundred pounds of phosphoric acid (equivalent of three to six hundred pounds of acid phosphate); fifteen to twenty pounds of ammonia (equivalent of one hundred pounds nitrate of soda); seventy five pounds sulphate of ammonia or two hundred and fifty pounds cotton seed meal and twelve and a half to twenty-five pounds of potash (equivalent of one hundred to two hundred pounds kainit or twenty five pounds muriate or potash). The fertilizer requirements of different soils vary greatly according to the type of soil and its previous treatment and your county agent should be asked to advise you on this subject. Your fertilizer should be thoroughly stirred in the furrow with a small sweep or shovel before bedding. It is advisable to put fertilizer down ten days to three weeks before planting so that the beds may be settled by rains before planting. You should know that percent of germination of your planting seed and plant not less than one bushel of seed germinating eighty to ninety percent — more if the seed are sub-standard germination. A dray or light harrow should be run over the beds before planting and the seed put in one to two inches deep at a time when temperature and moisture conditions will insure prompt germination. It is advisable to firmly press soil upon the seed. Two to four stalks should be left on all but the very richest soils but never leave less than one stalk per foot on any soil. Cotton should be thinned when three to six inches tall and great care should be taken to leave a sufficient stand. Immediately after chopping, an application of fifty to seventy five pounds of nitrate of soda should be made and upon lands inclined to rust an equal amount of kainit or manure salts should be added. Two other applications totaling for the three applications one hundred and fifty to two hundred pounds nitrate of soda (and where necessary the same amount of kainit or manure salts) should be put down at intervals of ten days to two weeks. Cotton should be cultivated lightly as soon as practicable after every rain and up to the middle of June it is advisable to keep down open middles in the cotton by the use of shovel plows, for the purpose of drainage.

Cultivate Late.
The cultivation of cotton should be continued as long as a mule and plow can pass through the rows without serious damage to the cotton plant, but never plow deep after cotton begins to fruit.

Weevil Control.
We now come to the proposition of weevil control. I have devoted a large proportion of my time and thought during the past fifteen years to studying this problem and breeding varieties of cotton which will produce maximum yields under weevil conditions. I have come to a few very definite conclusions on weevil control. The most important single item in control is to destroy as many as possible of the old over-wintered weevils before they have an opportunity to lay eggs in the young squares. We find that the most useful method for this purpose to be the application of a mixture of calcium arsenate and water two to four times to the young cotton at intervals of five to seven days beginning when the first small squares appear. We mix one pound of calcium arsenate with one gallon of water, then add one gallon of cheap molasses. A piece of burlap wrapped around the end of a stick, eighteen inches to two feet long, and a two quart bucket are the only utensils required. The mop is dipped lightly into the bucket advanced forward two or three inches below the tops of the cotton plants, the operator then walks rapidly forward bending over the cotton plants and smearing the tops and under sides of the leaves thus getting some molasses on every plant. This is extremely important for the weevils do not move about very much as this season and an unopposed section of a row may harbor several live weevils and allow them to multiply the species. If this poison remains on the plant until the afternoon of the day following its application it will destroy practically every weevil in the field. As a rule seventy five to ninety per cent of the total over-wintered weevil population will be destroyed by the first application. However, some will come out later and most of these are killed by the latter applications of the sweetened poison. A few come out as late as the latter part of June or early July and we have not found the sweetened poison fully

effective after cotton begins blooming.

Late Poisoning.

The few weevils which will survive will begin their work three or four weeks late and their progeny will not do any serious damage to crops before early August. Where the early poison program is properly carried out, other methods of control are often unnecessary, as the early poisoned crops will frequently show very little infestation until the time of general migration from unpoisoned crops, which in our section usually takes place about the middle of August. After migration sets in it is very difficult or impossible to do effective poisoning of any kind.

Infestation and Dusting.

Every farmer should carefully keep up with boll weevil conditions in his cotton throughout the season. After squares appear counts should be made at least once a week in every field to determine percentages of punctured squares (your county agent will gladly instruct you as to methods of making these counts). If more than ten per cent of the squares are found to be punctured the cotton should be immediately dusted with dry calcium arsenate. We do not usually apply more than two or three dustings (sometimes none). It will often be found necessary, however, even with cotton which has been poisoned with molasses mixture in early season, to begin dusting in late July or early August. Our experience indicates that frequent dusting with large amounts of calcium arsenate should be avoided where possible as we have often had serious trouble with plant lice after dusting several times with calcium arsenate at intervals of three to five days. If you run into this trouble you should immediately consult your county agent, who will probably tell you to dust with a mixture of nicotine sulphate, calcium arsenate and lime, which he can instruct you how to prepare and apply.

Varieties and Lengths.

During the past few years several varieties of cotton have been developed which fruit heavily in early season and usually make heavy yields, even in bad boll weevil years if proper weevil control methods are used. These cottons, besides having fully demonstrated their ability to yield heavily, have a staple averaging from a full inch to an inch and one sixteenth, which lengths are greatly desired by North and South Carolina mills. Circular Number-42 of the Agronomy Department of your State College announces that in 1928 seventy-nine per cent of the cotton produced in North Carolina was seven-eighths inch or shorter and that during that year the mills of the state used only thirty per cent of these lengths. Only twenty per cent of the cotton produced in the state that year stapled fifteen sixteenths to one and three thirty seconds while the mills used sixty one per cent of these lengths, being forced to import these cottons from the western part of the belt at an average freight rate of seven dollars per bale. The production of cotton averaging from one to one and one thirty seconds in length affords a big opportunity to North and South Carolina farmers, especially as recent experiments in many places indicate that there are several varieties producing these lengths which are fully as productive as any of the shorter varieties.

Plant Breeding.

All of these new and desirable cottons have been produced by scientific plant breeding and will quickly revert into variable, non-descript types unless this breeding is kept up and reflected constantly into production by annual distributions of the most recent pedigreed strains.

The failure by most farmers to realize the importance of plant breeding as an aid to quality, yield, and money value in all farm crops has been one of the greatest handicaps to Southern agriculture. There is scarcely a high school boy in North Carolina who does not understand the basic principle of animal breeding. They all know that the progeny of all animals vary and that if you would make progress

in animal breeding the best of each generation must be selected for breeding purposes. Most of those engaged in plant production, however, have not realized that plant life varies just as much as animal life and that superior individual plants produce a superior progeny, just as is true with animals. The plant breeder, however, has a great advantage over the animal breeder in that he can test out thousands of plants each year where the animal breeder is testing out dozens. The plant breeder therefore has far more opportunity of discovering valuable new productive strains.

Plant Breeding Methods.

The scope of this paper will not allow me to go into the details of plant breeding methods, however, I will say that the seed of many hundreds of individual plants are tested out each year in separate rows, the seed of a group of the highest yielding rows are again tested out against each other the following year and several of these producing high quality and great yield during the two preceding years are again tested out the third year and the fourth year the one with the best record during the preceding three years is selected for final increase and distribution. This system with some variations is being applied to cotton, tobacco, corn the small grains and several other crops with significant results.

Every intelligent farmer should visit some plant breeder from time to time so that he may become familiar with this most important means of increasing farm profits. If you will visit us in May we will show you hundreds of new strains of oats, many of which will resist zero temperatures and many other strains which are absolutely immune to all forms of smut! In August or September we can show you thousands of rows of cotton of several varieties; each row planted from the seed of a separate plant and also variety tests in which will be found many promising new strains.

In July we can show you plant-to-row tests and variety tests of tobacco. Although we have been carrying on this work for but two years we have discovered tremendous variations in the value of different varieties and have also found in the best varieties, individual plants which produce much better yields and better quality than the average of the selected plants. In a plant-to-row test of the seed of different plants from one variety the highest yielding strain produced fifty five dollars and thirty four cents per acre more than the next highest strain.

Governor Gardner.

You are fortunate in North Carolina in having a governor who thoroughly understands the underlying principles of successful agriculture and who is exerting himself in seeing that these principles are applied as widely as possible. Your cooperative association is also extremely fortunate in having as its officers men who understand that net profit per acre is the goal which every farmer should strive for.



On Fifth Avenue

—riding, strolling, shopping—a panorama of beauty streams thru this famous street of fashion. Thru GOURAUD'S Oriental Cream, you can possess a skin and complexion that even the most attractive there, would be proud to have.



White, Pink, Hazel and Oriental Tan Shade. Send for Trial Size. Fred T. Hopkins & Son, New York City.

These men realize that standardized varieties of high production and maximum money value suitable for the use of Carolina spinners are necessary for the success of the cotton growers in this region. They also realize that with such varieties in general production and with girls all over the state that will turn out a smooth and uncut product, their problems of marketing will be greatly simplified.

Southern Deliveries Contract.

I must say before closing that I believe the present Southern Deliveries New York Contract, which went into effect last fall, is largely responsible for the almost continual decline in the cotton market since last summer. This contract lacks two of the four elements which all sound commodity contracts should contain and I believe that as long as it is in existence in its present form it will keep the market several cents below its legitimate level and will cost the Southern cotton growers many millions of dollars annually. It behooves all who are interested in growing or manufacturing cotton to carefully study this contract and exert their influence to having substituted for it one that is as fair to the buyer as to the seller.

In closing let me summarize the



WOODS SEEDS

Mailed free on request. Write for it. Illustrated and contains valuable information for the farmer & gardener. T.W. WOOD & SONS, Seedsmen Since 1879, 55-517 St. Richmond, Va.

Weather forecast broadcast daily at 6:58 P.M. station WVA, 270.1 meters



T. C. JORDAN OPTOMETRIST. Office in Jewelry Store. GLASSES FITTED. LENSES DUPLICATED. PRICES REASONABLE.

points I have tried to bring out in this paper.

First—the curtailment of acreage of money crops, planting only such lands as will make good yields.

Second—the production of more livestock and the growing as ample amounts of food and feed crops to supply the farm and town human and animal populations and thus curtail the terrific drain of money exported for

foods and feeds.

Third—the use of an up to date system of fertilization, cultivation and combating the boll weevil.

Fourth—the use and renewal at frequent intervals of the best strains of scientifically bred seed for all crops.

Fifth—the exercise of a degree of thrift and self control which will enable us to keep our expenditures inside our revenues.

A Message to Senator Simmons' Supporters

In order that we may promptly and efficiently organize the many friends and supporters of Senator Simmons in Johnston County, we desire an accurate mailing list of every man and woman in our County who expects to

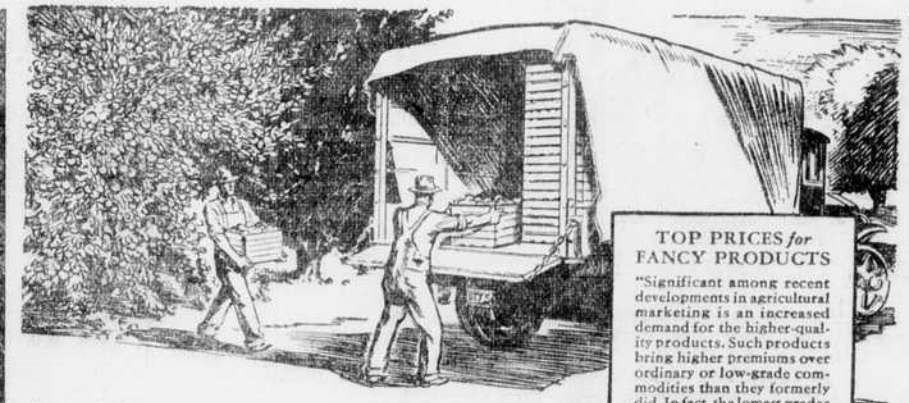
VOTE FOR SENATOR SIMMONS
IN THE JUNE PRIMARY

We shall thank every Simmons supporter—men and women—to mail us their name and address and the township in which they live. Please also send us the name and address of any of your relatives and neighbors who will VOTE FOR SENATOR SIMMONS.

We shall thank you to attend to this today so we may complete our township organizations without delay.

Mail your name and address to

Simmons Advisory Committee
P. O. Box 516
Smithfield, N. C.



TOP PRICES for FANCY PRODUCTS. Significant among recent developments in agricultural marketing is an increased demand for the higher-quality products. Such products bring higher premiums over ordinary or low-grade commodities than they formerly did. In fact, the lowest grades of some products are disappearing from the markets, as no longer worth handling. —U. S. Secretary of Agriculture

\$3.16 higher crop value FOR EVERY \$1.00 spent on fertilizer

REPORTS of results from fertilizer were gathered in 1929 from 48,000 farms in 800 counties of the principal agricultural states. Fruit and vegetable growers stated that for every \$1.00 spent for fertilizer they got \$3.16 higher crop value than they had ever averaged without fertilizer!

Nitrogen is the element in fertilizer that promotes growth. Orchardists and farmers who grow for the highly competitive markets, therefore, are quick to appreciate and apply the extra growth element that only a properly timed top-dressing can supply.

Every Spring, when the buds begin to swell, they fertilize the soil under the lower branches of each tree with Arcadian Sulphate of Ammonia.

ARCADIAN Sulphate of Ammonia NITROGEN is the GROWTH ELEMENT. As essential as sunshine to growing crops. Be sure your crops get plenty of nitrogen both in the complete fertilizer you use at planting time and as top-dressing during the growing season.

Auction Sale Of Personal Property!

Beautiful antiques and other valuable personal property of the late H. D. Ellington will be offered for sale on Thursday, March 20th, 1930 on the premises of the Oak City Damp Wash, South 4th St. Smithfield, N. C. FIRST-CITIZENS BANK & TRUST COMPANY, Administrator Smithfield, N. C.

Atlanta, Ga. Norfolk, Va. San Francisco, Calif. Memphis, Tenn. Cleveland, Ohio Toronto, Ont., Canada