

*Boys'*  
*Cotton Club Contest*  
*1924*

North Carolina  
CONDUCTED BY  
The Extension Service of the  
State

AND THE  
Eastern Carolina Chamber  
of Commerce  
Headquarters  
KINSTON, N. C.



**Ask Your County Agent  
About This Contest.**



For Further Information About  
This Contest, Write:

S. J. KIRBY,  
Assistant State Agent,  
State College Station  
Raleigh, N. C.

or

N. G. BARTLETT,  
Secretary,  
Kinston, N. C.

**See Your County Agent**

# COTTON CLUB CONTEST

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## GENERAL RULES.

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The cotton club work is conducted by the Agricultural Extension Service jointly with the Eastern Carolina Chamber of Commerce and will be handled by the county agent in each county having an agent in the same general way as all other club work. However, in cotton-growing counties, which do not have agents, interested boys will be given an equal opportunity to enter the work and compete in the contest as those in counties which do have agents, provided, someone can be located who will act as local leader in the county, take charge of the project and direct the work of the club members.

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## ORGANIZATION

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Where as many as six boys in a given community join the cotton club a community organization should be formed and the usual club officers elected. The cotton club members in a community which already has a boys' and girls' club may join their local boys' and girls' club, but in counties having this as their only club project the members should be either organized into local groups by communities or in a single county organization which can be called together in the office of the county agent or in some place designated by the local leader in charge for monthly meetings.

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## PURPOSE OF THE PROJECT

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The purpose of the project is to teach those who enroll in the cotton club the best methods and principles in cotton production under any condition and to demonstrate the value of these methods and principles in growing cotton under boll weevil conditions. Each cotton club plot will be a demonstration plot in which the best known methods, both indirect and direct, for boll weevil control will be put into actual practice.

## **SUGGESTED MINIMUM NUMBER OF CONTESTANTS.**

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It is suggested that each cotton county should have a minimum of ten club members entering this contest, however, this will not be made a requirement. A number of counties will have more than ten members each. The project to be worth while should have enough contestants in each county to justify the time and effort of the agent or leader in charge necessary to carry the work out successfully and to arouse community interest.

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## **NUMBER OF ACRES TO BE GROWN.**

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Each club member entering the contest will be required to grow either one, two or three acres of cotton. The area planted should be determined by the probable yield per acre and should be sufficiently large to produce a bale. Where one acre is capable of producing a bale, an acre is all that is necessary to plant.

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## **COUNTIES GROUPED INTO FOUR ZONES.**

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The cotton producing counties of the State are grouped into four zones, based upon the probable boll weevil damage anticipated during the year 1924. A club member in any given zone will be in competition with the other members in his zone but there will be no competition between club members in different zones. This arrangement makes it possible to give each club member an equal chance to successfully compete in the contest.

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## **ZONES.**

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The first zone is composed of Brunswick, Columbus, New Hanover, Pender, Onslow, Jones, Carteret, Craven, Pamlico, Beaufort, Hyde, Washington, Terrell and Dare counties.

The second zone is composed of Robeson, Scotland, Hoke, Bladen, Cumberland, Sampson, Duplin, Lenoir, Wayne, Greene, Pitt, Martin, Bertie, Chowan, Perquimans, Pasquotank, Camden and Currituck counties.

The third zone is composed of Richmond, An-

son, Union, Mecklenburg, Gaston, Lincoln, Cleveland, Cabarrus, Stanley, Montgomery, Moore, Harnett, Lee, Chatham, Johnston, Wake, Wilson, Nash, Franklin, Edgecombe, Halifax, Hertford, North Hampton and Gotes counties.

The fourth zone is comprized of all counties in which cotton is produced to the north and west of those named in the third zone.

### SCORE.

The basis given below will be used to determine the winners in each of the zones:

- |   |               |
|---|---------------|
| 1. Completeness of both direct and indirect methods used for weevil control ..... | 25 Per Cent.  |
| 2. Records - .....  | 35 Per Cent.  |
| 3. Story or written record of project - .....                                     | 15 Per Cent.  |
| 4. Yield of seed cotton.....  | 25 Per Cent.  |
| Total - .....   | 100 Per Cent. |

### FINANCES.

Arrangements are being made with the banks in each county by the Eastern Carolina Chamber of Commerce to secure loans for the club members in financing the project. The loan should be large enough in amount to buy the materials to fertilize the club plot, seed of a pure variety with which to plant it, the poison with which to combat the weevil should it become necessary to use poison, and a signboard with which to mark a demonstration plot. The county agent should ascertain the amount necessary to finance each of the club members in his county entering the contest, and from the Secretary of the Eastern Carolina Chamber of Commerce he can secure information as to which bank or banks will be willing to make the loans necessary for putting the project over in the county. After these arrangements and calculations have been made, the club members may be directed in making their application to the bank or banks designated to secure any necessary financial assistance in this work.

## **SUGGESTED PLAN.**

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The club member should make a note, endorsed by his parent or guardian, for the amount necessary to finance the project, and sign an agreement which is also to be endorsed by the parent or guardian agreeing to follow the instructions for doing all the work, to keep an accurate and itemized record and to report on the same and to co-operate with the other club members in the county in making the project of most value to the communities in which the demonstrations are conducted.

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## **FAIR EXHIBITS.**

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As a means of bringing this work before the public, each club member will be required to select a well-developed plant representative of the variety used, from which no bolls are to be picked, and to exhibit it at the local community and county fairs, and furthermore to exhibit it at the State Fair if requested to do so by the county agent or local leader in charge.

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## **CULTURAL OR DIRECT METHODS OF BOLL WEEVIL CONTROL.**

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### **SOIL.**

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The club plot of cotton should be planted on well-drained soil that is representative in type and fertility of the land generally planted to cotton in the community. This plot should be located so as to make it accessible for public inspection, preferably on a public road or highway. The area should be measured, 43,560 square feet to acre, and staked off at the beginning.

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### **PREPARATION OF SEED BED.**

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Disk and break land to a depth of 6 or 8 inches as early in the spring as moisture conditions will permit. After breaking, harrow frequently enough to keep crust from forming. This practice should be continued until planting time.

## VARIETIES TO USE.

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Use seed only of standard varieties recommended by your county agent. Provide at least six pecks of seed for the club acre. Be sure not to accept any seed from any source that is not recommended by your county agent. It is very important that all club acres be planted with pure-bred seed from absolutely reliable sources.

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## FERTILIZERS.

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It is more important to use the proper fertilizer mixtures in growing cotton now than ever before. This is due principally to the fact that fertilizers affect maturity more than any other factor in cotton culture. Early maturity is extremely important under boll weevil conditions. The use of the right kinds and amounts of ammoniates, phosphates and potash will insure quicker growth and earlier maturity, which improves the chances for producing cotton under weevil conditions.

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## KINDS TO USE.

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Nitrate of Soda and sulphate of ammonia are the best carriers for ammonia. High-grade acid phosphate should be used to supply the phosphates, and muriate of potash and **kanite** to furnish the potash.

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## FORMULAS.

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For the northern half of the Coastal Plain Section use the formula analyzing 10-5-3, and for the southern half 8-5-3.

In the Piedmont Section use on sandy-clay soils a 10-5-2 mixture, and on the heavier clay soils a 12-4-2.

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## AMOUNTS TO USE.

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From 600 to 800 pounds of mixtures made after the formulas given above should be used to each acre.

## TIME TO APPLY.

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All of the fertilizers should be applied in the drill at the time of planting, except on the light sandy soils in the Coastal Plain Section of the State where it is advisable to apply a portion of ammonia as a side-dressing at the first cultivation of the cotton given in connection with the first chopping.

## RATE OF PLANTING.

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Make rows three to four feet apart, the width of the row depending upon the size of the plant usually obtained in your section. Where cotton grows large, it is necessary to have the rows wider apart so as to admit sunlight.

## CHOPPING.

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Delay the chopping until all danger of cool weather is passed. If chopped too early, some of the plants may die after chopping, thus reducing the stand. Leave the cotton 8 inches apart in the drill and two plants to the hill. In order to compare the value of close and thin spacing, select a row somewhere near the center of the acre and chop to a distance of 18 inches apart in the drill with one stalk to the hill.

## CULTIVATION.

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The cultivation should be frequent and shallow. This will destroy weeds and grasses, maintain a dust mulch and tend to prevent an excessive loss of moisture, thus insuring a quicker growth of plants at all times. It is important to practice shallow cultivation, using caution not to injure the roots of the plant. Cultivation should be continued as late in the season as is practical, certainly until the first bolls begin to open.

## DIRECT METHODS OF BOLL WEEVIL CONTROL.

(Taken from Extension Folder No. 14, by Prof. Franklin Sherman, Division of Entomology.)

## EARLY SUMMER OPERATIONS. (June To July.)

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1. **Pre-square Poisoning.** (This recommendation, based on recommendations adopted by Association of Southern Agricultural Workers, at Birmingham, January 10, 1924.) If weevils are fairly abundant (20 or more per acre) when squares begin to form, a single application of poison may be profitable—this to be made just when squares begin to form. This may delay the heavy infestation which comes later.

For this single application either poisoned molasses or straight calcium arsenate dust may be used.

If molasses mixture is used, prepare at rate of 1 lb. calcium arsenate, 1 gal. molasses, 1 gal. water; or if infestation is very heavy, use 2 lbs. calcium arsenate, 1 gal. quality table syrup, 1 gal. water. These mixtures should be applied within 24 hours after mixing, at rate of about one gallon per acre, with mop, placing a few drops in tips of each plant.

If calcium arsenate dust is used, it may be shaken from a bag in tips of plants. The bag treatment is not effective for fruiting cotton.

2. **Gathering and Burning of Infested Squares.** This is suggested more especially where standard dust-poison will not be used later, or for small acreages. Covering fallen squares by cultivation is not effective. Gather them ahead of cultivation. Gather and burn fallen squares once a week until middle to end of July. This method cannot be depended upon for adequate protection under heavy infestation, as in a rainy season.

3. **Florida Method.** In this State our tests in 1923 have not sufficiently established the benefits of this method to warrant us in recommending it for general adoption. It is under study. We recognize its possibilities for future development.

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## MIDSUMMER OPERATIONS (July and August)

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4. **Standard Dust-Poison Method.** We regard this as the most dependable and profitable poisoning method yet proven for use under heavy infestation, such as often occurs in our Coastal Plain



and lower Piedmont. It should be studied and prepared for in advance. This method is strongly recommended for fruiting cotton in preference to any syrup mixture or other liquid poisons yet tested.

Dusting should begin when infestation reaches the point that 10 per cent. of the squares show weevil puncture, and at least three applications of 5 pounds per acre should be given with proper machinery at intervals of four days apart. Thereafter apply only as needed to keep infestation below 20 per cent. until a full crop of bolls has been set and become well grown.

In our two seasons of experience (1922 and 1923) the "dusting point" of 10 per cent. puncturing has been reached in a few fields in late June, in a few others as late as August 1 to 10, and the average time for starting dusting has been about July 20 to 25.

Dust when air is calm and leaves are moist, which often means at night, or late afternoon and early night, or late night and early morning, or sometimes through the daytime.

In tests known to us from three to seven dustings have been given, with general average cost of about \$6.00 per acre (more with hand guns, less with larger machines). In 31 such tests the average gain by dusting has been 242 pounds seed cotton per acre, as compared with un-dusted cotton alongside which was treated the same in all other respects. As a gain of 100 pounds per acre would more than cover the cost of treatment in either year (1922, 1923) the tests indicate a decided profit.

We advise this method more especially for our more productive farms where weevil is severe; and advise care to apply it when the need arrives, but not to apply it wastefully when infestation does not justify it. The gains from it are greatest when weevils are numerous.

Secure machines and poison early. Operator should know working of machine before actual operations begin. A number of merchants in this State are handling suitable machines and calcium arsenate. Information may be had from County Agent or by correspondence. Secure copy of Circular 137 of N. C. Agricultural Extension Service, "Dust-Poison Method for Control of Boll Weevil."

## AUTUMN OPERATIONS. (Mainly October and November.)

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5. **Destroying Stalks.** This checks late-season increase of weevils, hence helps against those for next spring. After prompt picking of crop, cut or chop the stalks **before they would be killed by frost, if possible.** We advise plowing the stalks under (and not burning). It serves less purpose to do this after the stalks are dead, and less purpose as the winter passes. This operation is also mentioned under the discussion of Cultural Practices.

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## WINTER OPERATIONS (December To March.)

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6. **Clean-Up.** (Of Minor importance.) A clean-up of rubbish and waste places, ditch-banks, briar and weed patches during winter stands some chance to reduce early infestation the following season, as well as to kill other insects; and it helps the looks of field and farm. We do **not advise,** and we do urge **against,** the general burning of woods and forest areas in this connection.

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## HARVESTING.

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It pays to keep cotton picked clean as it opens. Trashy weather-stained cotton brings from \$5.00 to \$10.00 per bale less than good, white cotton. It will be best to keep late pickings separate from the first pickings, for a small amount of trashy discolored cotton may spoil the sale of the entire bale. Weigh accurately the amount of seed cotton secured at each picking.

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## GINNING.

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Before ginning the cotton in the fall, each club member should consult his County Agent and make arrangements to have the cotton ginned free from mixtures. The County Agent will work out plans in advance of the date for the ginning to be followed by the club members for his county. Every caution should be taken to keep the seed pure for planting purposes.

## MARKETING.

Plans will be worked out for marketing the cotton from the club acres in each county in advance of the date for this part of the work.

## APPLICATION AND AGREEMENT.

I hereby make application for entry in the Cotton Club Contest, as conducted by the Agricultural Extension Service in co-operation with the Eastern Carolina Chamber of Commerce. I wish to plant.....acre--- and apply for a loan of \$..... to be used in purchasing the following supplies with which to carry out the demonstration:

### Fertilizers

-----lbs. acid phos. @ \$---- per ton \$-----  
-----lbs. nit. soda @ \$.... per ton \$-----  
-----lbs. sul. amona. @ \$---- per ton \$-----  
-----lbs. potash @ \$.... per ton \$-----  
-----lbs. ready mix. fert  
analyzing N-P-K per ton-----\$-----  
.....pcks. seed (6 to acre) @ \$.... per  
bushel -----\$-----  
-----For one signboard to mark plot--\$.-----  
-----lbs. cal. arsenate @ \$---- per lb. \$-----  
Total -----\$-----

Signed-----

Address-----

Date-----192-----

## AGREEMENT

In order to carry out the main purpose of the demonstration, I agree to follow the instructions and directions of my County Agent or local leader in preparing for and doing the work in growing the cotton, to co-operate with the other club members in my county in ginning, exhibiting and

marketing the cotton produced on the club plot and to keep an accurate and complete record of all labor, supplies and other items going into the cost of producing and preparing the cotton for market, together with the returns from the same.

I further agree to write a story of my work to be turned in with a complete report to my County Agent or local leader on or before November 1st. I agree to make a report whether my work is a success or not.

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**ENDORSEMENT.**

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As parent or guardian of the above applicant, I hereby approve his application and agree to let him have ----- acres of land, representative in type and fertility and well located, for carrying out this demonstration, and agree to lend my support and co-operation in doing the work and getting it fully reported to the County Agent or local leader.

Signed-----

Address-----

Date-----192---

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**OUTLINE FOR WRITTEN RECORD OR STORY OF THE DEMONSTRATION.**

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Fill in the blanks below as soon as each part of the work is completed. Also keep full and accurate account of all work as called for in the Crop Record Book. This data will be necessary in getting up a written record or story of the demonstration.

The story should be written on plain white paper. Use only one side of paper. Use simple words and let your story be a plain statement of facts. Your story should be original and long enough to cover each phase of the work and the results obtained.

Description of soil-----

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Breaking land: Date broken-----

Time required in hours----- Fertilizer  
 formula----- Materials used-----  
 Amount of fertilizer used under cotton-----  
 Amount and kind of fertilizer used for second ap-  
 plication - -----  
 -----  
 Date second application was made-----  
 Variety of cotton used-----  
 Date of planting-----  
 width of rows----- Date of chop-  
 ping - -----  
 Distance between hills-----Percentage stand-----  
 Date of first cultivation-----  
     Second----- Third-----  
     Fourth----- Fifth-----  
     Sixth----- Seventh-----  
     Eighth----- Ninth-----  
 When were boll weevils first seen on plants-----  
 -----  
 -----  
 Date of first poisoning----- No. of  
 applications of poison given-----  
 Date of first picking-----  
 Weight of seed cotton-----  
 Date of second picking-----  
 Weight of seed cotton-----  
 Date of third picking-----  
 Weight of seed cotton-----  
     Total weights seed cotton-----  
     Yield of line-----  
     Percentage of lint-----

Name - .....  
 Address - ..... R.F.D. ....  
 Parent's Name .....  
 Date - ..... 192.....

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**CO-OPERATION.**

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The Eastern Carolina Chamber of Commerce, with headquarters at Kinston, N. C., is giving active support and hearty co-operation in the Boys' Cotton Club Project. To stimulate interest in this work and to encourage the club members to do their best, this organization is offering the following prizes in each of the zones to the contestants making the highest scores: First \$100, Second \$50, Third \$25.

Through the co-operation with the banks in the several cotton counties, the Eastern Carolina Chamber of Commerce is arranging for club members to secure financial aid in carrying on the project. This organization is lending its offices to help make this work of the greatest value to the cotton-growing sections of North Carolina.

Where there is demand for financial aid in a county, the agent or local leader is asked to get in touch with Mr. N. G. Bartlett, Secretary of the Eastern Carolina Chamber of Commerce and to ascertain for his county which bank or banks have agreed to co-operate in making loans to the club members. Club members will not be required to secure loans with which to finance their demonstrations, but it is thought that, as a means of giving them experience with banks and bankers, they should be encouraged to accept such assistance where there is no objection on their part to doing it.

For further information, write S. J. Kirby, Assistant State Agent, Raleigh, N. C., or N. G. Bartlett, Secretary, Eastern Carolina Chamber of Commerce, Kinston, N. C.

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**SPECIAL OFFER**

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The Eastern Carolina Chamber of Commerce will give a Silver Loving Cup to the County Agent

that delivers the largest number of completed records to the committee from his county.

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### **PICTURE TO BE MADE.**

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Every boy and his cotton will be made into a picture, and cuts will be made therefrom and sent all over the country. It is certain to get into every agricultural magazine of any size in the country. "We want at least 1,000 boys with 1,000 bales of cotton in this picture," said the management recently.

SMITHFIELD OBSERVER  
SMITHFIELD N. C.