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UNITED STATES DEPARTMENT OF AGRICULTURE
WAR FOOD ADMINISTRATION
FOOD DISTRIBUTION ADMINISTRATION

COTTON AND FIBER BRANCH



HANDBOOK ON

COTTON IMPROVEMENT PLANTING SEED PROGRAM

(FISCAL YEAR 1944)

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HANDBOOK ON

#### COTTON IMPROVEMENT PLANTING SEED PROGRAM

(FISCAL YEAR 1944)

#### INTRODUCTION

The United States has large areas of farm land well adapted for cotton production and has produced for many years more cotton than any other country. In more recent years, however, certain foreign countries have increased cotton production tremendously and have become increasingly important as competitors of American cotton in foreign markets. These newer countries and certain of the older producing countries are practicing what amounts to one-variety cotton production and are using certain seed-improvement measures which are not generally followed in the United States. For producers in the United States to keep abreast of their competitors abroad, definite steps need to be taken in the direction of the producing of larger acreages of the best varieties available and of getting back more nearly to the normal production which prevailed when American cotton clearly dominated world markets. Although competition from foreign growths is at present not an important factor affecting the consumption of American cotton, it is certain that such competition will again be of prime importance when peace is restored.

The War Food Administrator, pursuant to Section 32, Public No. 320, 74th Congress, as amended, in order to "reestablish farmers' purchasing power by making payments in connection with the normal production of any agricultural commodity for domestic consumption" is authorized to make payments to state cotton grower associations in connection with the normal production of cotton for domestic consumption at the rates and subject to the conditions set forth in the "Offer of the War Food Administrator." Form SP-200.

The Cotton and Fiber Branch of the Food Distribution Administration is charged with the responsibility of administering the program. This agency however, will seek to enlist the active support and cooperation of the Extension Service, Experiment Stations, the Bureau of Plant Industry, Soils, and Agricultural Engineering, and other agencies interested in cotton improvement work.

The objectives of this program are to encourage the growth of a single improved variety of cotton by all growers in an area where growing conditions are uniform, in order to improve cotton quality, to increase yields per acre, and to standardize production by the elimination of a large number of inferior varieties. This will result in increased incomes for farmers and in the production of cotton that more nearly meets mill requirements.

For a number of years agronomists have advised against planting two or more varieties of cotton in the same community in order that cross-breeding in the field and mechanical mixing of the seed at the gins may be avoided. This has been sound advice since, in most cases, cotton deteriorates or "runs out" as a result of such practices.

A spinner problem, frequently overlooked, is that of mixed types of cotton within the same shipping lot. It has long been recognized by some spinners that so-called "hard-bodied" cottons are best for certain types of goods while the finer or softer cottons are more suitable for other types. Recent spinning studies have more defintely identified this quality factor which is referred to as character. The character of cotton fiber has to do with harshness, smoothness, fineness, strength, etc., and, until recently, was thought to be influences by growing conditions more than anything else. The spinning studies, however, show that character is rather closely identified with variety. A number of spinners have demonstrated a desire for pure lots of uniform character cotton by aggressively buying in localities known to be single variety areas. However, since character cannot be readily determined in the classification process spinners are reluctant to offer premiums in small areas of single variety production lest they attract and purchase all other varieties in the area on false representation by the seller.

It is obvious that we must have large areas of single-variety cotton production if we are to be in position to assemble large lots of the same character of cotton with which to meet the more exacting requirements of many of our spinners. The Cotton Improvement Planting Seed Program is designed to help accomplish this objective.

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In brief, this program contemplates that the cotton-producing portions of a participating State will be consolidated into as large single-variety producing areas as is found to be feasible. Such areas are referred to as zones. A Zone should include all of the cotton-producing portions of a state which are sufficiently uniform as to growing conditions, to permit the adoption and growth of a single variety of cotton. Not more than eight zones may be determined for any one State but most States will require less than eight zone. Obviously the next step is to name a single variety of cotton for each zone. If there is a portion of a zone which is irregular, and which very definitely needs an additional variety, a sub-zone, covering such portion, may be determined and an additional variety designated for such sub-zone. Not more than three sub-zones may be declared within a zone. The members of a local One Variety Cotton Improvement Association within a sub-zone should be limited to only one of the designated varieties.

When the zones and varieties for a state have been designated, the grower members of local One Variety Cotton Improvement Associations are eligible to receive payments on evidence of the receipt of approved seed of the variety designated for their zone. The administering agency will make the payments and otherwise deal with individual growers through a State association set up, or designated, for the purpose.

The initial steps to be taken in organizing a State for participation in this program are for a four-man State Board, composed of the Director of the Agricultural Extension Service, the Director of Experiment Stations, the Director of the One Variety Cotton Improvement Project of the Bureau of Plant Industry, Soils, and Agricultural Engineering, and the Chief of the Cotton and Fiber Division of the regional office, Food Distribution Administration, to set up a grower committee and a technical committee for the State. These two committees, in turn, will designate zones and varieties, name a State association, and perform other functions in connection with the program. The other functions are set forth in the Questions and Answers below.

It is hoped that this brief statement, together with the following Questions and Answers, will give a complete understanding of the objectives as well as the plan of operation of this program.

#### QUESTIONS AND ANSWERS

1. Question. What is the source of funds for this program?

Answer. The funds for this program are made available under Section 32 of the Soil Conservation and Domestic Allotment Act of 1937. This section provides that 30 percent of all customs receipts be set aside for certain agricultural purposes, including this and similar programs.

- 2. Q. How long will the program likely continue?
- A. Federal funds for the program are made on an annual basis and no guarantee can be made beyond I year. It is believed, however, that it will be continued for several years if progress is shown towards meeting the objectives. A State may continue the principles of the program after Federal funds are discontinued. Any necessary funds, of course, would have to be secured from some other source.
- 3. Q. What direct benefits, if any, will the individual grower receive in connection with the program?
- A. The grower will receive payments in connection with approved planting seed at the rates shown in the answer to question 14. They will also benefit from the standardization of cotton which it is expected will be brought about by the operation of this program.
- 4. Q. What agency will be responsible to the War Food Administrator for the administration of the program?
- A. The Cotton and Fiber Branch of the Food Distribution Administration.
  This agency, however, will need the cooperation of the State Extension Service,
  the State Experiment Stations, and the Bureau of Plant Industry, Soils and Agricultural Engineering in carrying out the details of the program.

- 5. Q. That organizational work is required in a State desiring to participate in the program?
- A. A four-man State Board composed of the Director of Agricultural Extention Service, the Director of Experiment Stations, the Director of the One Variety Cotton Improvement Project of the Bureau of Plant Industry, Soils, and Agricultural Engineering, and the Chief of the Cotton and Fiber Division of the Regional office, Food Distribution Administration will set up a State cotton planting seed committee and a technical cotton committee. These two committees will, besides other duties, set up, or designate, a state association for their state.
- 6. Q. Who will be eligible to become members of the STATE COTTON PLANTING SEED COLLITTEE and what are the functions of this committee?
- A. It is contemplated that this committee will be composed of from three to seven growers, or grower ginners or other persons interested in cotton production. The functions of the committee are as follows:

To designate zones, sub-zones, and varieties.

To determine the feasibility of payments on Class C seed.

To approve State association. (To set it up if necessary.)

(These functions to be performed jointly with the technical committee.)

- 7. Q. Tho will be eligible to become members of the TECHNICAL COTTON COMMITTEE and what are the functions of this committee?
- A. It is contemplated that this committee will be composed of from three to seven technically trained agronomists, and ginning or marketing specialists who are usually in the public service. The functions of this committee are as follows.

To designate zones, sub-zones, and varieties.

To determine the feasibility of payments on Class C seed.

To approve State association. (To set it up if necessary (Above functions to be performed jointly with the State committee)

To consider and approve key growers.

To consider and approve lots of all classes of seed to be delivered.

To recommend specifications for growing and handling seed.

To approve specifications for "treated" seed.

Individual members to certify necessity for replanting in certain cases.

8. Q. Will a majority vote of the members of the State board, the State cotton planting seed committee, and the technical cotton committee be sufficient in transacting official business?

A. Yes.

- 9. Q. Will members of either of the two committees receive compensation for their services?
- A. It is believed that members of the State cotton planting seed committee will serve without pay. Their expenses may be paid by the association. Some associations will not have available funds in the early stages of the program but may reimburse committee expenses later when funds are available. Members of the technical committee will probably be able to include services incident to this program as a part of their regular services for which they have expense accounts.

#### 10.Q. What will be the nature of the STATE ASSOCIATION?

- A. Its scope should be sufficient to cover all of the cotton producing areas of the State, it must have cotton improvement as one of its objectives and it should be incorporated for its own protection.
- 11.Q. What are the functions of the State association?
  - A. The functions of the State association are:

To apply for an allotment of funds.

To supervise growing, ginning, and testing, handling, and otherwise preparing seed for planting.

To assist in the delivery of seed to growers.

To make payment to growers.

To prepare and submit claims for payments.

## 12.Q. How will the State association be sustained financially?

- A. It will retain part of the payments made to it in connection with the program. However, it will need revolving funds in the beginning.
- 13.Q. Why will the State association need revolving funds and how will it get them?
- A. The payment due the grower must be made before the association is in position to make claim on the War Food Administrator for the over-all amount of the payment. Revolving funds may be had from private banks or other financial institutions or from the Regional Bank for Cooperatives.
- 14.Q. What payments are provided by the program and how are they divided?
- A. The following table gives the rates of payment per 100 pounds and the division of the payments for the several classes of seed:

Class of seed	Total rate of payment	Rate to grower	Rate to assn.
Class A treated	\$3.00	\$2.25	\$0.75
Class A untreated	2.65	2.00	0.65
Class B treated	1.70	1.25	0,45
Class B untreated	1.50	1.15	0.35
Class C treated	0.90	0.75	0.15
Class C untreated	0.75	0.65	0.10

- 15. Q. Are all cotton growers in a participating state eligible to receive payments under the program?
- A. Any grower may qualify to receive payments on Class B seed of the variety designated for his zone, but key growers only may receive payments on Class A seed of such variety. An eligible grower, though not a qualified key grower, may receive Class B payments on Class A seed provided the technical committee will file an approval of the particular lot of Class A seed as Class B seed.
- 16. Q. That grovers may receive payments on Class C seed?
- A. It is not intended that payments be made on Class C seed in all States but if recommended by the two State committees for a State and approved by a representative of the War Food Administrator payments may be made on Class C seed in that State. Under these conditions any grower may qualify himself to receive payments on Class C seed of the variety designated for his zone.
- 17. Q. What are the qualifications of a key grower?
- A. A key grower (1) must be a member of a One Väriety Cotton Improvement Association; (2) must have facilities or access to facilities for handling improved seed; (3) must be approved as a key grower by the technical committee; and (4) must agree to plant the minimum of Class A seed specified by the Technical committee.
- 18. Q. May is it necessary to restrict delivery of Class A seed to key grovers?
- A. There are only limited quantities of Class A seed available and it is felt that they should be placed in the hands of growers who can keep the resulting increase seed pure in the field, at the gin, and in storage in order that large supplies of Class B seed may be available the following year.
- 19. Q. Will a key grower be required to plant his entire cotton acreage to Class A seed?
- A. The technical committee will determine the policy with respect to this matter. It's policy should be to qualify as key growers only those growers who can keep the seed pure. In most cases this will require that all of the cotton on the farm, or on at least on one farm unit, be planted to Class A seed.
- 20. Q. Is there a limit on the number of key growers for a designated zone?
- A. No, the technical committee should approve key growers in such numbers and in such manner as to carry out the objectives of the program in the whole state to the best advantage.
- 21. Q. Does approval of a grower as a key grower automatically approve as Class B seed such increase seed as he may produce from Class A; seed?
- A. No. Any seed he may produce from Class A seed must be approved later if they are to be accepted as Class B seed.

- 22. Q. What are the qualifications of a grower?
- A. A grower must be a member of a One Variety Cotton Improvement Association and must agree to plant a minimum of 10 percent of his cotton planted acreage to the seed received.
- 23. Q. What is a One Variety Cotton Improvement Association?
- A. It is a group of cotton growers organized for the purpose of cotton improvement according to plans developed by the Bureau of Plant Industry, Soils and Agricultural Engineering, and the State Extension Service.
- 24. Q. What constitutes belonging to a One Variety Cotton Improvement Association: (1) the grower's name appearing on a membership list in the office of the local association; (2) a Smith-Doxey application having been submitted to an F.D.A. office for the classing and market news services; or (3) the grower declaring his desire to belong to a certain association?
- A. The grover needs to do more than to declare his desire to belong to a local association. He must place his name, or have it placed, on a membership list which is to be retained by the secretary or group representative of the local association. This means that he has agreed to abide by the rules and regulations of the local association.
- 25. Q. Will a One Variety Cotton Improvement Association need funds in connection with this program and, if so, how will it get them?
- A. It is assumed that most of these associations will have funds from membership fees and other sources for carrying on their usual activities. Some of them, however, may have expenses incident to the operation of the Cotton Improvement Planting Seed Program. In such cases the local association should ask the State association for an agreement on services to be performed and for an allowance of funds.
- 26. Q. That is the maximum number of zones and sub-zones for a State?
- A. Not more than eight zones may be determined for a State and not more than three sub-zones may be determined within one zone.
- 27. Q. Do zone or sub-zone lines have to conform to county lines?
  - A. No, but this will probably be desirable in most cases.
- 28. Q. Does a zone have to be a group of counties adjacent to each other?
- A. It is believed that the broad objectives of the program can be reached more completely by having all counties in a zone grouped together, but this is not required.
- 29. Q. May a sub-zone be identical to a zone?
- A. This should be avoided but it is permissible to have a sub-zone identical to a zone if conditions warrant the same two varieties for the whole zone.

- 30. Q. How many varieties is it possible to designate for a zone having three sub-zones?
- A. A single variety for the whole zone and one variety for each of the three sub-zones, making a total of four varieties.
- 31. Q. Must the variety designated for the zone be planted in each sub-zone?
  - A. No, this is not necessary.
- 32. Q. Can a grower plant both varieties on the same farm within a sub-zone?
- A. Each local improvement association should adopt one of the designated varieties and restrict its members to this one variety.
- 33. Q. Will the rates of payment be the same for the two varieties of seed within a sub-zone?
- A. The rates of payment for the same class of seed will be the same in all cases.
- 34. Q. Will the technical and planting seed committees have an opportunity to reconsider varieties designated for certain zones from season to season?
- A. Yes, these two committees may reconsider and change zones, sub-zones, and varieties as conditions warrant. It will probably be desirable to check growers' wishes closely before making changes.
- 35. Q. That is the difference between treated and untreated seed?
- A. Treated seed shall be seed which have been delinted. In addition to this treatment the technical committee may require that delinted seed be chemically treated for disease control. All other seed shall be considered as untreated seed.

Note - The principal reason for making a rate difference between treated and untreated seed was to avoid a penalty in the program payment due to the loss in weight of seed incident to delinting.

- 36. Q. What seed will qualify as Class A seed?
- A. Foundation breeder seed. The technical committee must approve each lot of such seed and assign a lot number. A foundation breeder is defined as follows:

"\*\*\*a foundation breeder shall be an individual, partnership, institution, corporation, or other business unit (1) which practices breeding or selection, in a manner which will tend to increase yields and improve lint quality, of cotton of the specific variety with which such person or concern is identified; (2) which produces, or which increases, in a manner which maintains purity, by step-up methods either on the farm or farms of such person or concern or, by agreement, on the farm or farms of other growers, the seed of such cotton for sale or distribution to cotton growers generally; and (3) which is generally recognized as being in the business of rendering the services recited

herein in connection with the specific variety of cotton with which such person or concern is identified."

### 37. Q. What seed will qualify as Class B seed?

- A. First year increase seed from foundation-breeder seed. Each lot of such seed must have been approved by the technical committee and assigned a lot number.
- 38. Q. That seed will qualify as Class C seed?
- A. In most cases Class C seed will be second year increase from foundation-breeder seed. However, in some cases first year increase seed not quite good enough for Class B seed may be approved as Class C seed. In all cases lots of such seed must be approved by the technical committee and assigned a lot number.
- 39. Q. Can a grower apply for payment on approved seed delivered to himself?
- A. A grower may apply for payment on Class B or Class C seed owned by and delivered to himself to the extent of 32 pounds for each acre he will plant. He must first certify the number of acres he will plant.
- 40. Q. If it becomes necessary to replant, can a grower apply for payments on a quantity of his own seed in excess of 32 pounds for each acre he will plant?
- A. Yes, he may apply for payment on an additional quantity of his own seed but not in excess of 32 pounds for each acre he will replant. In such case it will be necessary to obtain a certificate of necessity for replanting which must be signed by an officer of his local One Variety Cotton Improvement Association or by a member of the technical committee.
- 41. Q. Are foundation breeders approved by the technical committee?
- A. No, but the technical committee endorses a breeder with respect to a specific variety when it approves a lot of Class A seed of such variety.
- 42. Q. After a State has been zoned, is it necessary that all zones participate in the program?
  - A. No.
- 43. Q. Will all growers in a participating zone be required to participate?
- A. It is desirable that all growers in the zone plant the designated variety but this will not be required at present.
- 44. Q. That constitutes compliance on the part of a participating grower?
- A. A qualified grower must declare his intentions to plant, must acknowledge receipt of qualified seed, and must acknowledge receipt of the specified payment due him for the class of seed received.

- 45. Q. (a) Are forms available for the use of the committees to show the several actions they are required to take?
  - A. (a) Yes. Standard forms have been prepared and are available.
  - Q. (b) That is the number and description of these forms?
  - A. (b) There are 17 of these forms which are described as follows:
    - SP-21 Appointment of Members and Designation of Officers of the State Cotton Improvement Planting Seed Committee.
    - SP-22 Appointment of Members and Designation of Officers of the State Technical Cotton Committee.
    - SP-23 Intention-to-Plant Declaration.
    - SP-23a- Certificate of Necessity for Replanting
    - SP-24 Designation of Zones and Sub-zones.
    - SP-25 Designation of Varieties.
    - SP-26 Approval of State Association.
    - SP-27 Approval of Key Growers.
    - SP-28 Specifications for Growing and Handling Cotton Planting Seed.
    - SP-28a- Specifications for "Treated Seed."
    - SP-29 Recommendation for Payment in Connection with Class C Seed.
    - SP-A Approval of Class A Treated Seed.
    - SP-Al Approval of Class A Untreated Seed.
    - SP-B Approval of Class B. Treated Seed.
    - SP-Bl Approval of Class B Untreated Seed.
    - SP-C Approval of Class C Treated Seed.
    - SP-Cl Approval of Class C Untreated Seed.
- 46. Q. Should an association apply in one application, at the outset, for the maximum amount of funds for the year's operations?
- A. No. An association should apply for a moderate amount of funds in the first application and additional amounts may be requested in successive applications. If desirable an association may file several signed copies of the application and later request successive amounts of funds by letter or telegram. (A moderate amount may be the anticipated amount needed during the first 40 to 60 days of active operation. Application must be made on Form SP-201 which will be furnished.)
- \* 47. Q. Is it important that the State association submit to Washington a weekly report of seed delivered?
  - A. Yes, because a consolidated report of seed delivered in all states will be needed for administrative use all along as the season progresses. Forms for making these reports will be furnished.
  - 48. Q. How will a grower proceed to obtain seed from an approved lot?
  - A. He may obtain them direct from the producer-owner or he may get them through a seed distributor. In either case orders or individuals and of local associations may be pooled together to good advantage to all parties concerned.

- 49. Q. That will be the method of identifying lots of seed which have been approved by the technical committee?
  - A. Each lot will be assigned a number by the technical committee.
- 50. Q. Can a qualified grower in one zone or State purchase seed from a grower in another zone or State and receive benefit payments in connection with such seed?
- A. Yes, provided the seed have been approved by the technical committee and are of the variety designated for the zone in which the receiving grover's farm is located.
- 51. Q. How is evidence of compliance obtained if seed are ordered by mail and delivered by freight or express?
- A. The invoice and Bill of Lading showing purchase and delivery should be submitted to the State association which will prepare and submit the "Declaration of Delivery" form and the necessary instructions to the grower.
- 52. Q. How may any grower, although not a member of a One Variety Cotton Improvement Association, obtain a supply of seed under provisions of this program?
- A. He can make himself eligible, insofar as this provision is concerned, by qualifying as a member of his local association.
- 53. Q. Will it be necessary for a One Variety Cotton Improvement Association to apply for the Smith-Doxey services in order to participate in the Cotton Improvement Planting Seed Program?
- A. No. But the members will likely profit by receiving such services in connection with this program.
- 54. Q. How may member growers or nonmember growers make appeals?
- A. Appeals should be addressed to the secretary or manager of the State association. If this is not satisfactory, appeals may be addressed to the chairman of the State cotton planting seed committee.

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