

COOPERATIVE EXTENSION WORK IN AGRICULTURE
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IMPORTANT STEPS IN GROWING COTTON

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1. Terrace the land if it is subject to washing. In West Texas it pays to terrace the land which is practically level, as well as that which is sloping.
2. Prepare the land well by bedding and rebedding, or by flat breaking and bedding in East Texas, and by deep listing or flat breaking in West Texas.
3. Fertilize with commercial fertilizer, or manure, or with both on the sandy and sandy loam soils of East, North, Central, and South Texas. In West Texas, and on the black waxy land of Central and North Texas, commercial fertilizers have not proved profitable in most cases.
4. Plant good, well bred seed of a variety adapted to the locality, and still better, every farmer in a gin-community plant the same variety.
5. Plant at the usual time that cotton is planted in the locality. The soil should be warmed up sufficiently to insure rapid and uniform germination of the seed.
6. Plant one bushel of seed per acre, except in the western and northwestern parts of the State, where smaller amounts are usually planted. Maximum yields cannot be made without a good stand.
7. In East Texas, plant the cotton on a bed and in West Texas, plant in the lister furrow. Plant the seed from one to two inches deep, the depth depending upon the condition of the soil and the amount of moisture present.
8. Chop the cotton when it has from 4 to 6 leaves. A distance of about 12 inches between the plants gives good results.
9. Cultivate shallow, not over 2 to 3 inches deep, and frequently enough to destroy grass and weeds. Cultivating too deep injures the plants and often causes shedding. Do not cultivate too late in the season.
10. Poison for insects if necessary, especially leaf worm.
11. Harvest the cotton early because profits are often greatly reduced by allowing cotton to be exposed to the weather.
12. Sow a cover and grazing crop in early fall wherever adapted, consisting of (1) oats, rye, and hairy vetch, or Austrian winter peas; or (2) oats, barley, and hairy vetch, or winter peas, to be turned under in the spring for improving the soil fertility.

We recommend that commercial fertilizer for cotton be used at the rate of from 300 to 500 lbs. per acre, on average sandy and sandy loam soils of the Timbered Sections of East Texas, and from 200 to 300 lbs. per acre on the sandy land in the drier sections. The amount to use will depend upon the type of soil, and its physical condition, including the amount of organic matter and also upon the grade of fertilizer used. Proportionately smaller amounts of extra high analysis fertilizer should be used,

than with a low analysis fertilizer. On extra good types of soil that are drought-resistant, these amounts may be increased, whereas on the poor washed-off hillsides, less should be used, because on the latter the cotton cannot stand as much dry weather and hence large amounts of fertilizer will not be profitable.

Either factory-mixed or home-mixed fertilizer may be used. Some good formulas for cotton are, 4-8-4, or 6-12-6 which have a 1-2-1 ration of plant food; or 6-9-3, which has a 2-3-1 ratio; or 4-12-4, 6-18-6, etc., which have a 1-3-1 ratio of plant food. All of these are high grade mixtures.

If cotton rust is prevalent on sandy soils, fertilizers with high potash content, should be used.

The following combinations having approximately a 1-2-1 ratio of plant food, are suggested for home-mixed fertilizers:

- 200 lbs. of nitrate of soda.
1. 300 lbs. of 20% superphosphate.
50 lbs. of muriate of potash.
- 150 lbs. sulphate of ammonia.
2. 300 lbs. of 20% superphosphate.
50 lbs. of muriate of potash.
- 150 lbs. of cal-nitro.
3. 300 lbs. of 20% superphosphate.
50 lbs. of muriate of potash.

These mixtures are equivalent to 500 pounds of a 6-12-6 fertilizer, except that they contain a little less potash.

The mixture containing sulphate of ammonia, should be applied the same day it is made, as otherwise it will harden. The mixtures containing nitrate of soda, or cal-nitro, should also be applied as soon as possible after mixing, as they may absorb moisture which makes them harder to distribute.

We recommend for cotton, that all the fertilizer be applied before planting where the above amounts are used, with the exception that a side dressing of from 100 to 150 lbs. per acre of a good grade nitrogen fertilizer, should be made on deep sandy soils, which are subject to leaching and on sandy loam soils where insufficient nitrogen is used in the fertilizer applied under the cotton. The side dressing should be made 6 to 8 inches from the plants, either by hand or with a distributor immediately after the cotton has been chopped.

The usual method of applying fertilizer before planting, where the land has been bedded, is to apply it in the middles about a week or 10 days before planting and then re-bed on top of it. When ready to plant, the bed should be dragged down, so that the seed when planted, will be about two inches above the fertilizer.