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GEORGIA COASTAL PLAIN EXPERIMENT STATION  
Tifton, Georgia

Information based on results of practical experiments in  
agriculture for press release and distribution to farmers

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SUGGESTIONS FOR COMMERCIAL ONION PRODUCTION

1. Varieties: Yellow Bermuda is best adapted for commercial production in South Georgia. Crystal Wax is also used as an early maturing variety but has been less productive in Experiment Station trials.
2. Soils: Well drained, highly productive, sandy loam soils are preferable. Leguminous cover crops preceding onions are excellent both for enriching and conditioning the soil.
3. Preparation of Land: The land should be thoroughly broken and should be harrowed as many times as is necessary to prepare a well pulverized seed bed.
4. Fertilization: Twelve hundred to fifteen hundred pounds of a fertilizer containing 4% nitrogen, 8% phosphoric acid and 8% potash should give a good results. About half of the fertilizer should be applied ten days or two weeks previous to planting and the remaining amount during the first half of February. To avoid injury to plants the preplanting application should be mixed with the soil by running a scooter plow behind the distributor. If plants are not making satisfactory growth in early March it is considered advisable to use about 100 pounds of nitrate of soda, or some other quick acting nitrogen, as a side dressing.
5. Seed Treatment: Treating seed with Semesan dust is recommended. Use one-fourth teaspoonful of Semesan to each pound of onion seed. Place in tight container (fruit jar or syrup can) with desired amount of dust and shake well for four or five minutes to insure thorough coverage. After treating, screen off any excess dust before planting. Treated seed may be planted immediately or stored in loose, porous bags or open containers.
6. Plant Production (Beds): Drought at the time onion seed should be planted usually makes it difficult to obtain satisfactory germination. Consequently beds should be prepared in advance of the planting season so that full advantage may be taken of favorable moisture conditions - in the even rain occurs.

Better stands will be obtained if beds are located near a water supply so that some inexpensive type of irrigation may be used to supplement inadequate rainfall.

Broadcast and harrow into the soil 200 pounds of fertilizer (4-8-6) about two weeks before seeding the bed.

A bed 50 by 100 feet should furnish enough plants for one acre. The suggested row width (in beds) is 10 inches and the rate of seeding is 4 to 5 seed to the lineal inch or 50 to 60 to the foot in the row. Using this rate of seeding, 2 to 3 pounds should be adequate for the bed referred to above. Seed should be planted  $\frac{1}{2}$  inch to  $\frac{3}{4}$  inch deep.

If garden seeder is not used it is advisable to firm the soil by rolling the wheel of a garden plow or some other light roller over the rows.

Plant and cultivate on a level. Water often enough to maintain satisfactory moisture conditions.

7. Plant Production in (Field): Sowing seed in the open field is not recommended unless some type of irrigation is available, as rain at that season of the year usually is too light to insure satisfactory germination. Also there is little or no saving in labor as a result of field seeding as the cost of thinning is about the same as that of transplanting.

8. Date of Seeding: Seed should be planted in the beds during the first half of September if onions are to be transplanted to the field in November. Normally, 8 to 10 weeks are required from time of seeding to date of transplanting.

9. Date of Transplanting: Maximum yields are obtained from plants transplanted to the field the latter part of November.

10. Spacing: Onions normally are planted in the field in rows 2 to 2½ feet apart and 3 to 5 inches in the drill. The following table indicates the approximate number of plants required to plant an acre when different row and drill spacings are used:

	Drill Spacing in 2-Ft. Rows			Drill Spacing in 2½-Ft. Rows		
	3"	4"	5"	3"	4"	5"
Distance in Drill	3"	4"	5"	3"	4"	5"
Plants per Acre	87,000	66,000	52,000	70,000	52,500	41,000

11. Cultivation: Onions should be planted and cultivated on a level. During the growing period there is little weed growth but there should be enough cultivation to keep the soil loose and friable. In cultivating, soil should neither be thrown to nor taken away from the plants.

12. Insects: Onions normally are not attacked by insects during the growing season. Occasionally, however, thrips appear and cause considerable injury. In the event control measures seem advisable, contact your county agent or the Coastal Plain Experiment Station, Tifton, Georgia.

13. Diseases: Normally there are no diseases of any consequence that attack this crop in the field in southern Georgia.

14. Harvesting: Under average seasonal conditions onions mature the latter part of May. A customary practice among early onion growers is to break the tops by rolling them with a light barrel when about ½ of the plants have fallen. About three days after rolling, the entire crop should be pulled and placed in wind-rows in the field, being careful to cover bulbs with tops to prevent sun injury. Two to four sunny days normally allow sufficient time for drying. The tops and roots should then be clipped. In clipping tops, leave about ½ to 1 inch of the stem above the bulb.

15. Grading: Growers desiring information relative to grading may obtain same from commercial buyers or from the U. S. Department of Agriculture, Washington D. C.

16. Marketing: Place the crop on the market at once as the Bermuda is not a storage onion. Severe losses may be sustained if marketing is delayed. Open mesh bags containing 50 pounds each are standard. A more attractive package is obtained if red bags are used in marketing yellow onions and white bags in marketing white onions.