

# REPORT OF FIELD STATIONS IN McINTOSH COUNTY

Field stations are maintained on principal soil types to study truck crop production in the tide water section. For several years work has been done on lettuce and other truck crops on the delta soils (Altamaha clay) of Butler Island. During the last three years this work has been extended to include tests on the sandier soils outside of the delta as follows: Bladen Sandy Loam, Eulonia Fine Sandy Loam, Eulonia Fine Sand and Norfolk Fine Sand.

Tests at the field stations are in cooperation with land owners and include variety trials, planting dates, fertilizer formulas and rates of applying fertilizer. In the following discussion the locations on the different soil types will be designated as field stations A, B, C, D, and E.

## FIELD STATION A

### Soil Type: Bladen Sandy Loam.

Tests in progress on Bladen Sandy Loam soil are:

1. Vegetable—Variety Tests
2. Vegetable—Planting Dates
3. Onion—Fertilizer Formula Tests

**Vegetables—Variety Tests:** Several varieties of each vegetable are used to determine their commercial importance in the counties bordering the coast. Listed below are the varieties that are showing to best advantage.

### Winter Vegetables

#### Carrots:

Chantenay  
Oxheart

#### Rape:

Dwarf Essex

#### Kale:

Early Green Curled

#### Cauliflower:

Early Snowball  
Gilt Edge

#### Lettuce:

Imperial F  
Drumhead White Cabbage

#### Spinach

Bloomsdale  
Aragon  
New Zealand

#### Mustard:

Tendergreen  
Giant Green Curled

#### English Peas:

Improved American  
Thomas Laxton

#### Broccoli:

Green Sprouting

#### Rutabaga:

Improved American

#### Cabbage:

Copenhagen Market  
Charleston Wakefield

**Turnips:**

Purple Top  
Shogoin (best for summer  
use)  
White Egg

**Radish:**

Early Scarlet Globe

**Summer Vegetables****Beans (Lima):**

Henderson Bush  
Jackson Wonder

**Beans (Snap):**

Stringless Green Pod  
Bountiful

**Cucumber:**

White Spine

**Corn (Roasting Ear):**

Trucker's Favorite  
Golden Bantam  
Hastings' Early Market

**Okra:**

White Velvet

**Squash:**

Yellow Summer Crookneck

**Tomatoes:**

Marglobe  
Livingston Globe  
Gulf States Market

**Vegetable—Planting Dates:** Plantings of vegetable varieties are made at frequent intervals to determine the correct planting date for each in order to bring them to maturity at a time when market demands are best. Plantings are made on individual farms, and an effort is being made to show the importance of a continuous supply of fresh vegetables for home consumption as well as for market.

**Bermuda Onion—Fertilizer Formula Test:** This test was begun for the purpose of determining the correct proportion of phosphoric acid, ammonia and potash for an onion fertilizer on Bladen Sandy Loam soil. It has been conducted only one season and for that reason no fertilizer recommendation can yet be made and it is being continued for further study.

**FIELD STATION B****Soil Type: Eulonia Fine Sandy Loam.**

Studies in progress on Eulonia Fine Sandy Loam soil are:

1. Vegetable—Variety Tests.
2. Vegetable—Planting Dates
3. Lettuce—Fertilizer Formula Test
4. Onion—Variety Test
5. Brussels Sprouts—Variety Test

**Vegetable—Variety Tests and Planting Dates** at "Field Station B" are the same as those listed under "Field Station A."

**Lettuce—Fertilizer Formula Test:** This test is being conducted to determine the proportion of phosphoric acid, ammonia and pot-

ash best suited for lettuce production on the ridge lands of coastal Georgia. Five hundred pounds of fertilizer per acre of the various formulas was applied at time of seeding and an additional 500 pounds per acre of each formula was added as a side dressing just after thinning, which is normally about 60 days after planting.

The seed were treated in a bichloride of mercury solution (one ounce to 30 gallons of water) for 15 minutes, in an effort to prevent "damping off," which often destroys the young plants. As a result of unfavorable weather conditions just after this treatment, planting was delayed several days. Consequently only about 10 per cent of a stand was obtained and this did not furnish sufficient plants to transplant the entire area. Additional plants were obtained and transplanted to the area in January at which time the second application of 500 pounds of fertilizer was made. Continued heavy rains drowned out a large part of the planting, which occupied a rather low area, and "bottom rot" destroyed the remaining plants.

Little success has resulted from the attempt to produce lettuce under ordinary field conditions because it is impossible to control the moisture supply. Unless some method of irrigation is used this crop apparently holds little commercial promise on upland soils. An irrigation test being conducted on another area, is discussed later in this report.

**Onion—Variety Test:** The object of this test is to determine the onion varieties best suited to the ridge lands of coastal Georgia.

Varieties used are: Yellow Bermuda, Crystal Wax Bermuda, Hastings' Dark Red Globe, Prizetaker, Hastings' Yellow Globe, Australian Brown, and Riverside Sweet Spanish. This test has been underway only one season and no definite recommendations can be made. However, Prizetaker, Australian Brown and Yellow Bermuda produced the highest yields.

**Brussels Sprouts—Variety Test:** The following varieties of Brussels Sprouts were used: Long Island Improved, Oregon Special, Half Moon Bay, Mammoth Fancy, and Long Island Half Dwarf.

Seed were planted October 1 and plants were transplanted to the open field November 15. The early stages of development apparently were normal but none of the varieties produced marketable sprouts. The test will be continued using various dates of planting with the idea of ascertaining just when seedings should be made to produce the most desirable sprouts.

## FIELD STATION C

### Soil Type: Eulonia Fine Sand.

The tests underway on Eulonia Fine Sand are:

1. Vegetable—Variety Tests
2. Vegetable—Planting Dates
3. Lettuce—Rates of Applying Fertilizer

**Vegetable—Variety Tests and Planting Dates** are the same at "Field Station C" as those outlined under "Field Station A."

**Lettuce—Rates of Applying Fertilizer:** The object of this test is to determine the most economical rate of fertilizer application for lettuce on the upland soils of the coast.

Fertilizer was applied in varying amounts ranging from 500 to 2500 pounds per acre. The heavier rates were split so that not more than 1000 pounds were applied previous to planting. The remainder was applied at the first and second cultivations following thinning.

### FIELD STATION D

**Soil Type: Altamaha Clay.**

The following tests are being conducted on the Altamaha Clay delta soil of Butler Island:

1. Lettuce—Fertilizer Formula Test
2. Lettuce—Rates of Applying Fertilizer

**Lettuce—Fertilizer Formula Test:** The object of this test is to determine the proper proportion of phosphoric acid, ammonia and potash for lettuce fertilizer on the delta soils. A four-year average shows that 8 to 10 per cent phosphoric acid, 2 to 4 per cent ammonia, and 4 to 6 per cent potash is producing highest yields.

TABLE LXXIII  
**LETTUCE—FERTILIZER FORMULA TEST**

Soil Type: Altamaha Clay (Delta Soil)

Average Yield for Years 1932 to 1936, Inclusive

Fertilizer: 1600 Pounds per Acre

Average Date Planted: November 18

FERTILIZER FORMULA*	Total Yield in Heads Per Acre	Days Required to Mature	Days Bearing Period
<b>Phosphoric Acid Series:</b>			
6-4-6 .....	10351	132	14
8-4-6 .....	12180	132	14
10-4-6 .....	13381	132	14
Check (No Fertilizer).....	7322	132	14
<b>Ammonia Series:</b>			
8-2-6 .....	13212	132	14
8-4-6 .....	12346	132	14
8-6-6 .....	11109	132	14
Check (No Fertilizer).....	8597	132	14
<b>Potash Series:</b>			
8-4-4 .....	12162	132	14
8-4-6 .....	12968	132	14
8-4-8 .....	11377	132	14

\* Phosphoric acid, ammonia and potash in the order named.

NOTE: Varieties: Drumhead White Cabbage 1932 to 1934 inclusive, Imperial F. 1935.

