Because of a decrease in appropriation, all of the work on the delta soils on Butler Island has been discontinued except Fertilizer Formula Tests with lettuce and Rates of Applying Fertilizer with this same crop. However, additional work with vegetable crops on upland soils has been initiated which embraces variety trials, planting dates, fertilizer formula tests and rates of applying fertilizer. This work is being conducted on the outstanding soil types in the coastal area in cooperation with farm owners as listed below. The farms on which this work is located will be designated in this report as Field Stations.

FIELD STATION A

SOIL TYPE—BLADEN SANDY LOAM:

The tests that are being conducted at “Field Station A” are:
1. Vegetable— Variety Test
2. Vegetable— Planting Dates
3. Brussels Sprouts— Fertilizer Formula Test

VEGETABLE—VARIETY TEST: Several varieties of each vegetable, both winter and summer, have been used in this study with a view to determining the varieties of commercial importance. Since these plantings are made on individual farms, special attention also is given to succession plantings with the idea of having a continuous supply of fresh vegetables for home consumption. Listed below are the varieties that are showing to best advantage:

WINTER VEGETABLES

CARROTTs:
Chantenay
Oxheart

KALEE:
Early Green Curled

CAULIFLOWER
Early Snowball
Gilt Edge

RAPE:
Dwarf Essex
LETTUCE:
Imperial F.
Drumhead White Cabbage

RUTABAGA:
Improved American

SPINACH:
Bloomsdale
Aragon

CABBAGE:
Copenhagen Market
Charleston Wakefield

MUSTARD:
Tendergreen

TURNIPS:
Purple Top
Shogoin (best for summer use)

ENGLISH PEAS:
Improved Telephone
Thomas Laxton

White Egg

RADISH:
Early Scarlet Globe

BROCCOLI:
Green Sprouting

SUMMER VEGETABLES

BEANS (LIMA):
Henderson Bush
Jackson Wonder

OKRA:
White Velvet

BEANS (SNAP):
Stringless Green Pod
Bountiful

SQUASH:
Yellow Summer Crookneck

CUCUMBERS:
White Spine

TOMATOES:
Marglobe
Livingston Globe
Gulf States Market

CORN (ROASTING EAR):
Truckers Favorite
Golden Bantam
Hastings Early Market

VEGETABLE—PLANTING DATES: Plantings of vegetables are made at varying intervals to determine the correct date to plant in
order that commercial crops may reach maturity when market conditions are favorable. Also efforts are made to maintain a continuous supply of fresh vegetables for home consumption.

**BRUSSELS SPROUTS—FERTILIZER FORMULA TEST:** This test is being conducted to determine the most desirable combination of phosphoric acid, ammonia and potash for Brussels Sprouts. The various formulas were applied previous to planting, at the rate of five hundred pounds to the acre. A second application of 500 pounds was added as a side dressing on January 15. The plants grew off rapidly and produced sprouts of normal appearance. However, these sprouts failed to form hard, marketable heads. The project will be continued for further study.

**FIELD STATION B**

**SOIL TYPE—EULONIA FINE SANDY LOAM:**

The projects underway at "Field Station B" are:

1. Vegetable—Variety Test
2. Vegetable—Planting Dates
3. Lettuce—Fertilizer Formula Test
4. Onion—Variety Test

**VEGETABLE—VARIETY TEST 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 ascertain the combination of phosphoric acid, ammonia and potash best suited for lettuce production on the ridge lands along the coast. In this test the basic rate of application was 1,000 pounds per acre. An application of 500 pounds was made before planting and an additional 500 pounds was used as a side dressing after thinning, which is generally about sixty days after seeding.

Seed were sown in the drill on November 21. When plants were
about one inch high, the entire crop was destroyed by “damping off”. Additional plants were obtained and transplanted to the area in February at which time an extra 500 pound application of the various fertilizer formulas was made. The planting developed rapidly and heads began forming the first of April. However, as a result of frequent rains and unusually high temperatures, “tip-burn”, combined with premature seed stalk formation rendered the crop unfit for market. This test will be continued for further study.

Lettuce planted November 15, matures the highest number of marketable heads and finds a ready reception on Southern markets.

**ONION—VARIETY TEST**: Yellow Bermuda, Australian Brown and Prizetaker onions were tried with the idea of determining the variety or varieties best suited to the upland soils of the Coastal area. All of the varieties produced well and a ready market was found for the crop. Consequently, there was little preference among the varieties in test. The Bermuda variety is earliest, maturing the latter part of May and is followed about three weeks later by Prizetaker, while Australian Brown is not ready for market until early June. Due to the earliness of the Bermuda variety, it is believed that it holds more promise as a commercial onion in Coastal Georgia. This test is being continued with the idea of determining the merits of other varieties and of studying the commercial possibilities of onions in this section.

**FIELD STATION C**

**SOIL—EULONIA FINE SANDY LOAM**:

The tests underway at “Field Station C” are:

1. Vegetable-Variety Test
2. Vegetable-Planting Dates
3. Lettuce-Rates of Applying Fertilizer

**VEGETABLE—VARIETY TEST AND VEGETABLE—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 application of fertilizer for lettuce on the ridge lands along the coast.

In this test fertilizer was applied at various rates ranging from 500 pounds to 2500 pounds per acre. All fertilizer in excess of 1000 pounds per acre was applied as side-dressings at the second and third cultivations. Due to an usually early spring, this planting was severely damaged by “Tip-burn.”

FIELD STATION D

SOIL—ALTAMAHA CLAY

The following tests are in progress at “Field Station D”:

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

LETTUCE—FERTILIZER FORMULA TEST: The object of this test is to determine the combination of phosphoric acid, ammonia and potash that would be most profitable in lettuce production on the delta soils. A three-year average shows that a fertilizer combination consisting of 8 to 10 per cent phosphoric acid, 4 to 6 per cent ammonia, and 6 to 8 per cent potash is giving the highest yield. Under commercial production an 8-4-6 (PNK) is giving satisfactory results.

LETTUCE—RATES OF APPLYING FERTILIZER: This test is being continued to determine the amount of fertilizer that should be used under lettuce on the delta soils. A three-year average indicates that an application ranging from 1200 to 1600 pounds of fertilizer per acre is the most practical rate of application.