

VEGETARIAN

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TO: COUNTY AGENTS, ASSOCIATES AND ASSISTANTS

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1. ANNOUNCING - TOMATO GROWERS' INSTITUTE

The date, time and place for the "Third Annual Tomato Growers' Institute" have been selected. The program will cover timely topics such as varieties, fertilization, nematodes, diseases, insects, labor and market competition. This is an opportunity to get some of the latest information on tomato production.

County Agents in central and south Florida should urge their growers to attend. Put this information on your calendar right now!

WHAT: South Florida Tomato Growers' Institute

WHEN: 9:15 A.M., Thursday, September 10, 1964

WHERE: Fort Pierce, Florida (Meeting to be held at Port St. Lucie Country Club just a few miles south of Fort Pierce)

2. LOWERING SOIL SURFACE TEMPERATURES

Each summer vegetable growers struggle to obtain good germination and seedling growth on a number of vegetable crops. Large seeded crops such as beans and sweet corn which are seeded rather deeply, may die-off in the seedling stage even though germination is satisfactory. "Damping-off" is the usual diagnosis but, it may not necessarily be so.

Temperature of a loose, dry surface soil may register between 120° to 135° F. between midday and 3 p.m. on a summer day in July or August. Such temperatures are capable of actually killing germinating seedlings of many crops even though the root-system may be in an area of adequate soil moisture.

One of the simplest devices for lowering soil-surface temperature is shade. This may not be feasible except in transplant beds. However, irrigation is available for a large portion of Florida's vegetable acreage. By maintaining the soil surface moist at all times, temperatures in that zone can be reduced sufficiently in many cases to permit satisfactory germination and early growth.

3. TRUENESS TO ORIGINAL TYPE IN CHARLESTON GRAY

For the past three or four watermelon seasons, we have noted an increasing number of criticisms of the Charleston Gray variety of watermelons. Growers, Extension workers and buyers have voiced the complaint that Charleston Gray has changed over the years to a shorter, blockier fruit type making it less desirable than the original (as they remembered it) Charleston Gray.

To determine if these allegations were true or not, Dr. V. F. Nettles at Gainesville resurrected some long-stored seed with the original code number of 51-27 from Dr. J. M. Crall at Leesburg. It was planted for comparison with present-day seed of Charleston Gray from several large, reputable seed companies.

The results of these tests were quite revealing. Charleston Gray had not changed as many of us might have thought. Watermelon produced from the old and most of the new seed did not differ significantly in size, shape, skin color and internal qualities. In other words, Charleston Gray is still as good today as it was when introduced more than ten years ago. Note - There were some differences between sources of the new seeds. In his test plots over the years, Dr. Crall has made observations which concur with Dr. Nettles' results.

4. CABBAGE BACTERIAL SPOT CONTROL

Following the discovery that a bacterium was responsible for the specking disease in cabbage and other leafy crops, Dr. Wehlburg at Belle Glade initiated tests to try to find a practical control. The most promising treatment was a combination of basic copper + Maneb + Plyac (4 lbs. + 1½ lbs. + 4 oz.) applied twice a week during the growing.

Previously, we had suggested use of basic copper for this disease. Based on Dr. Wehlburg's preliminary results, we now suggest a basic copper and maneb combination. This combination will not give complete control but will reduce severity of the disease.

5. DIMETHOATE (CYGON) ON POTATOES

Recent work on dimethoate confirms previous results on the effectiveness of this material for control of aphids and leafminers on potatoes. In a test conducted by Dr. Wolfenbarger at Homestead, dimethoate outperformed all other approved material in the control of these pests of potatoes.

Circular 193D gives the proper rates, time, interval, etc., on the use of dimethoate on potatoes as well as watermelons and tomatoes. See discussion under "New Pesticide Approval" for use of dimethoate on peppers.

6. ONION SPACING AND CULTURE

A recent study concluded by Mr. Hayslip and associates at Fort Pierce should convince skeptics that Florida can grow onions. The test included a unique method of fertilizer placement in that the majority of the fertilizer was placed in a band about one inch deep in the center of the two-row bed of onions and covered with a 12-inch strip of plastic.

The largest yield of graded onions (Texas Grano 502 Variety) was obtained with a one-inch spacing in staggered rows (two rows 1 3/4" apart with onions in each row 2" apart). As the spacing increased, yields were decreased but the onions were larger and less slab-sides than in close spacing. Highest yield of graded onions was 37,900 pounds or approximately 738 bushels.

The limiting factor in some seasons is curing. Dr. Gull at Gainesville has shown in preliminary work that onions can be cured artificially in 48 hours at temperatures not exceeding 110° F. provided there is good circulation of air. Field curing when possible is still the most economical method of curing onions.

7. NEMATODE CONTROL IN SWEET CORN

Sweet corn grown on sandy soils infected with stubby-root nematodes responded to fumigation in tests conducted at Sanford by Dr. Rhoades. Sweet corn yields were increased significantly by fumigation with D-D and EDB on a broadcast basis. D-D was superior in degree of control.

The test served also to demonstrate how fast stubby-root nematodes "bounce back" after treatment. At harvest time, the largest population of stubby-root nematodes was found in D-D and EDB plots which produced the high yields of corn.

8. NEW PESTICIDE APPROVALS FOR VEGETABLES

a - Phosphamidon on Eggplants

This material was recently approved for use on eggplants at rates of 1/2 pound per acre with an interval of three days between last application and harvest.

b - Dimethoate on Peppers

Approved for use on pepper at 1/3 pound active per acre with a time interval of 14 days between last application and harvest.

c - Zinc Ion - Maneb Complex (Dithane M-45) on Tomatoes and Peppers

This fungicide was mentioned in the last Vegetarian as having approval for use on potatoes only. It is now approved for use on tomatoes (at 1.5 lbs. actual per acre) and peppers (at 1.8 lbs. actual per acre) with a limitation that it cannot be applied after fruits begin to form. A combination of Dithane M-45 (1.5 lbs.) + tribasic copper sulfate (4.0 lbs.) was the best of seven treatments tested by Dr. Stall at Fort Pierce last season on tomatoes for bacterial spot control. After fruit begins to form use regular Maneb and basic copper sulfate for bacterial spot control.

NOTE! - The use of trade names in this publication is solely for the purpose of providing specific information. It is not a guarantee or warranty of the products named and does not signify that they are approved to the exclusion of others of suitable composition.

Sincerely,

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