



Vegetable Crops Department
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TO: COUNTY AGENTS, ASSOCIATES AND ASSISTANTS

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1. Onion Classification

There are always questions and some confusion concerning onion types and their response to day length and the latitudes where they are best adapted. The following list compiled by Dr. V. F. Nettles gives some of the varieties and their adaptation.

Day Length	Color	Variety	
Short Day	Red	Burgandy	Lord Howe Island
		Red Creole	Red Granex *
		Tropicanna *	
	White	Crystal Wax	Robust *
		Eclipse	White Alamo *
		Brilliance *	White Granex *
	Yellow	Excel	Early Premium *
		Texas Grano 502	Dessex *
		Granex *	Granex 33 *
		Henry's Special *	
Brown	Australian Brown 100		
Medium Day	White	White Grano	
	Yellow	San Joaquin	Tule *
		Asgrow Y 50K *	Early Gold *
		San Felipe *	Y 28 *
Long Day	Brown	Australian Brown	Brown Beauty *
		Apache *	Cherokee *
	Red	Ruby	Red Wethersfield
		Southport Red Globe	

Day Length	Color	Variety	
Long Day (Cont'd.)	White	Southport White Globe	White Ebenezer
		White Lisbon	White Portugal
		White Sweet Spanish	White Granite *
	Yellow	Brigham Yellow Globe	Downing Yellow Globe
		Early Yellow Globe	Ebenezer
		Yellow Sweet Spanish	Abundance *
		Aristocrat *	Autumn Spice *
		Autumn Splendor *	Brown Beauty *
		Early Harvest *	Elite *
		Encore *	Fiesta *
		Grandee *	Hickory *
		Nugget *	Ontario *
		Premier *	Pronto *
		Spartan *	Spartan Era *
		Treasure *	Span Pak A *
		Spano *	
		Trapp's No. 2 *	

* Hybrid

Short Day--Adapted for use in areas lying between latitudes 24° and 28°.

Medium Day--Adapted for use in areas lying between latitudes 32° and 40°.

Long Day --Adapted to the main onion growing areas north of 36° latitude.

2. Field Day Notes

a. Central Florida Experiment Station Field Day

Dr. J. F. Darby with Dr. J. C. Walker from Wisconsin spending his winter vacation helping him, is evaluating some 83 cabbage varieties and hybrids for resistance to bacterial spot and black speck. These tests should show some differences. Dr. Darby says to avoid black speck plant Marion Market Early Glory, Globe, or King Cole and harvest as early as possible.

Dr. J. D. Wilson got near perfect control of cabbage looper with nine insecticides and poor control with three. Several were numbered compounds, however, the following ones are labeled for cabbage: Thuricide 90TS, Phosdrin, Thiodan + Sevin, DDT + Toxaphene, Parathion + Thiodan, Parathion + Toxaphene.

b. Nematode Control Work at Sanford by Dr. Harlan Rhodes indicates that highest yields of cabbage followed *Crotalaria spectabilis* plus treatment before planting with DD at 25 gal. per acre. Lowest yields were with sesbania cover crop and no chemical treatment. *Crotalaria* is poisonous to animals and

poultry and should not be used where feed crops may be grown and it should be plowed under before it seeds. The combination of chemicals plus cultural practices is usually a good recommendation.

Dr. Rhodes increased green bunching onion yields nearly three fold - from 3.4 lbs. per plot to 13.3 lbs. per plot by the application of DD at 30 gallons per acre pre plant.

Dr. W. T. Scudder presented results of weed control trials with several chemicals alone and in combination both pre- and post-emergence to the crop, on the surface and incorporated in the soil. The crops were cabbage, cucumbers, onions, peppers, potatoes, tomatoes, and sweet corn. The chemicals and treatments are too numerous to list here, however, the results of these trials will be used to prepare new recommendations for weed control in vegetable crops. Extension Circular 196A, "Commercial Vegetable Weed Control Guide," is in the process of being revised and will be available soon.

Dr. R. B. Forbes' work with carrots has resulted in much new information on varieties and nutrition. Among 36 varieties and strains of both fresh market and processing carrots, several have been outstanding. These include Royal Chanteray No. 13. for processing and Pioneer for fresh market.

3. Potato Cover Crops in Dade Co.

Drs. Baranowski, Averre, Campbell, and Orth at the Sub-Tropical Experiment Station presented the following results from two years work on various summer cultural practices between winter potato crops on the marl soils.

These plots were on a commercial potato farm and each plot was 200 x 200 ft. replicated four times and a 12 foot roadway was maintained between each plot. The treatments were:

1. Fallow - disked five times to keep down all growth.
2. Sodbuster - planted in late May; mowed 8 weeks after planting.
3. Sesbania - planted in late May.
4. Amax Hybrid Sorghum - planted in late May.

All cover crop plots received Diazinon at 3 lbs. active in 85 gal. of water per acre broadcast and disked in prior to planting. Potatoes were planted in late November or early December. All cover crops were mowed in September and plowed under.

Chemical Treatments: In the fall of 1964, the test area was treated with 2 lbs. active parathion per acre, broadcast, prior to planting. Phorate was applied at 3 lbs. active at planting.

In the fall of 1965, the amount of parathion was increased to 3 lbs. active per acre. Phorate was again used at 3 lbs. active.

Wireworms: Fallow plots had the lowest number of wireworms and lowest tuber injury. Of the wireworms recovered from the samples taken in 1964, 56% were Melanotus communis and 44% Conoderus sp. In 1965, 55% were Melanotus communis and 45% Conoderus sp. A total of 110 wireworms were recovered in 1964 and 218 in 1965.

Diseases: Potatoes were examined both years for scab-like lesions. No differences were evident in either year.

Both spiral and ring nematodes are considered injurious to crops, but very little is known about the ring nematode. Although fewer nematodes were recovered from the fallow plots, the differences are not statistically significant. Potatoes were examined both years for root-knot galls. None were found.

Weeds: The highest weed counts were in sesbania plots except for Bermuda grass and the lowest counts in sorghum plots. It should be pointed out that most of the weeds found in the fallow plots were small seedlings. The fact that bermuda grass was found only in the fallow plots may indicate that it could develop into a problem in fields not disked often enough and kept fallow for several summers.

Treatment	Yields in 50 pound bags per acre						Avg. Plant Weight 1/19	Weight 2/1
	1965	% increase of fallow over covercrop plots	1966	% increase of fallow over covercrop plots	% Decrease of 1966 from 1965			
1 Fallow	347.2	--	325.7	--	6	9.32	10.9	
2 Sodbuster	319.6	8	280.3	16	12	6.62	9.4	
3 Sesbania	217.4	9	278.3	17	12	7.64	8.5	
4 Sorghum	311.7	11	266.6	22	14	6.16	9.5	

Although there were differences ranging from 27-35 bags per acre in the 64-65 season, the differences were not statistically significant. However, in the 65-66 season the differences ranged from 45-59 bags per acre and were statistically significant. In both years the yields from the various treatments held the same order. The yield decrease in the fallow plots last year was only 6% of the preceding year whereas the decrease in the covercrop plots ranged from 12-14%. We have no explanation for this difference.

SUMMATION

1. Wireworm populations were decreased in plots kept fallow during the summer.
2. Less wireworm damage to potatoes was evident in plots kept fallow.
3. Nematode populations are known to be reduced by keeping fields fallow. The evidence from this test indicated that the populations were being reduced.
4. In general the underground portion of the plants from the fallow plots had fewer disease lesions.
5. The above ground portion of the plants was larger in the fallow plots.
6. There was no evidence that would indicate an excessive weed problem on land disked 4-5 times during the summer.
7. There was no evidence of any increase in clods or dirt clumps during digging operations in the fallow plots.
8. There was no change in the appearance of the potatoes.
9. Finally, yields were higher from the fallow plots.

It is the concensus of those involved in this study that the evidence, at present, indicates that there are no problems associated with keeping the marl soils fallow for 2 years. The advantages, in terms of better yields and better quality from the standpoint of less wireworm damage, indicate that a fallow summer program should be considered by potato growers in Dade County.

4. Publications

Here is a list of publications that should be of interest to you.

- (a) Halo Blight - Bulletin 444, Idaho Agric. Ext. Service - Moscow.
- (b) Growing Tomatoes for Mechanical Harvesting, Univ. of Calif. AXT 150, Davis.
- (c) Demand and Competitive Relationship for Florida and Greenhouse-grown Tomatoes, Univ. of Fla., Agric. Exp. Sta. Bul. 703.
- (d) Nematode Control Guide for Vegetable Production in Florida, Exp. Sta. Bul. 707.
- (e) Strawberry Production Guide, Univ. of Fla. Agric. Ext. Serv., Ext. Circ. 142C.
- (f) Precision Planter and Fertilizer Applicator for Use on Experimental Plots. U.S.D.A. Misc. Pub. 962.
- (g) Precision Vacuum-Type Planter Head, U.S.D.A., A.R.S. 115.

5. Southern Peas An Expanding Crop

Use of Southern Peas for human food has increased in the last few years, however, most of us have not been aware of just how much this has increased. Here are some figures compiled by Dr. W. H. Brittingham at the Virginia Truck Experiment Station.

Southern Pea Frozen Pack in Pounds and
Canned Pack in No. 303 Cans (net con-
tents given as one pound), United States,
1949-1964.

Year	Frozen Pounds million	Canned No. 303s million
1949	.57	33.27
1952	4.15	45.12
1955	10.23	55.76
1958	13.01	57.11
1961	18.68	54.33
1964	23.45	42.25

Sources: National Association of Frozen Food
Packers, National Canners Association.

In 1964, the frozen pack of Southern peas was (among frozen packs) 7.0% of green peas, 18.3% of lima beans, and 12.5% of green beans. Also in 1964, the canned pack of Southern peas was (among canned packs) 5.8% of green peas, 79.5% of lima beans, and 4.8% of green beans. In other words: For every 15 servings of frozen green peas (the leading frozen vegetable) in the United States in 1964, and for every 8 servings of frozen lima beans (the second largest), and for every 6 servings of frozen lima beans, there was a serving of blackeye peas (or a related type).

Sincerely,

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