



FLORIDA AGRICULTURAL EXTENSION SERVICE  
UNIVERSITY OF FLORIDA  
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

Vegetable Crops Department  
**VEGETARIAN**

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TO: COUNTY AGRICULTURAL AGENTS

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1. New Seed Potato Regulation

The following has been recommended and will probably be in effect for seed potatoes shipped into Florida beginning in the fall of 1969. This has become necessary because of low quality seed being sold in Florida for many years. This regulation will be administered by the Florida State Department of Agriculture.

Chapter 7B-33

SEED POTATO PESTS

7B-33.01 Purpose.--This regulation is deemed necessary in order to prevent the introduction and spread of destructive pests of seed potatoes, to insure potato growers of a source of high quality planting stock, and to promote the general welfare of the public.

7B-33.02 Sale of seed potatoes restricted.--It shall be unlawful for any person, firm, association or corporation to offer or expose for sale, or ship into this state, any potatoes or parts thereof intended for propagation, except as prescribed herein, unless specifically authorized by the Commissioner of Agriculture.

7B-33.03 Requirements for sale.--

(1) All potatoes to be sold for propagation in Florida must meet U. S. No. 1, or U. S. No. 1, Size B, requirements except that the tolerance for shatter bruising may be that designated for U. S. No. 2.

(2) All potatoes to be sold for seed in Florida must have been grown under a seed potato certification program of the state

or country of origin, and each bag must be accompanied by a certificate issued by the agency administering the seed potato certification program.

(3) The Department shall have the authority to open any shipment of seed potatoes for inspection, and to draw a reasonable sample from any bag of seed potatoes for laboratory examination or for planting for field observation.

(4) Seed potatoes offered for sale in Florida must not exceed the tolerances indicated for the following plant pests:

Golden nematode	0%
Potato rot nematode	0%
Potato wart	0%
Stem and bulb nematode	0%
Ring rot	0%
Spindle tuber	1%
Black leg	1%
Fusarium wilt	1%
Net necrosis	1%
Late blight	1%
Any other dangerous pest of potatoes not listed	0%
Scab and Rhizoctonia	same as U. S. No. 1 tolerance

7B-33.04 Exemptions.--Nothing in this regulation shall prohibit the sale for propagation by a grower to another grower, potatoes or parts thereof grown in Florida or imported under the provisions of this regulation, provided that the buyer has personal knowledge of the condition of the potatoes at the time of sale with regard to grade or plant pests for which there is a tolerance.

7B-33.05 Disposition of seed potatoes not meeting above requirements.--Seed potatoes not meeting the requirements for propagation as specified in this regulation must be disposed of in a manner approved by the Commissioner of Agriculture. He may order them destroyed, treated, regraded to comply with this regulation, sold for food, or removed from the State.

7B-33.06 Seed Potato Advisory Committee.--

(1) The Commissioner of Agriculture shall appoint a Seed Potato Advisory Committee composed of five members--three from the Florida Potato Council (two of which must be growers), one from the Institute of Food and Agricultural Sciences, University of Florida, and one from the Division of Plant Industry.

(2) The Committee shall meet on call of the chairman, to be elected by the Committee. It shall be the responsibility of

the Committee to make recommendations to the vegetable industry representative of the Plant Industry Technical Committee, Florida Department of Agriculture, concerning legislation affecting the Florida potato industry, and to the director of the Division of Plant Industry concerning the administration of the seed potato regulations.

EXPLANATION: The potato growers requested a regulation to help protect them from low quality seed potatoes being shipped into Florida because no specific plant pest standards existed for this crop. The standards established by this regulation are those prescribed by most good seed potato certification programs and should assure high quality seed for our growers.

## 2. Table Stock Potatoes Used for Seed

In the fall and winter of the 1968-69 growing season there has been two instances where growers have used table stock potatoes for seed to plant several hundred acres with disastrous results. One was planted in the fall on organic soils and another in mid-winter on sandy soil; potatoes were from different areas of the country and of different varieties. These potatoes had been treated with a sprout inhibitor, probably chloro-IPC, before storage. This is a normal practice in the fall harvest areas of the north. These potatoes failed to germinate properly and those that did were weak and plants did not grow off normal. Many plants actually had leaf marginal burn and terminal bud injury. This is a reminder to potato growers to never use potatoes for seed that have been treated with a sprout inhibitor, been stored in a place where sprout inhibitor was used on previously stored potatoes or in bags previously used for treated potatoes.

## 3. Cucurbit Seed Treatment for Rodent Control

For many years we have used here in Florida a seed treatment on watermelons and other cucurbits that contained Endrin. With the removal of Endrin from use on most vegetables because of the detection of residues by Food and Drug Administration analysis, we were reluctant to continue to recommend this seed treatment containing Endrin. The following information makes it appear to be allowable. In addition, an effective substitute has been found.

Mr. Harold G. Alford, Assistant Director for Registration of USDA, ARS Pesticides Regulation Division, Washington, D. C. has this to say in a letter to Jim Brogdon, Extension Entomologist.

"It was my understanding that you wish to recommend the use of 0.8 ounces of 50 percent wettable powder in treating 5 pounds of watermelon seed.

"From what we can learn about the seeding rates, we would conclude that this use would result in less than 0.1 ounces of actual endrin per acre. We do not believe that watermelons grown from such treated seed could reasonably be expected to contain residues resulting from misuse. I have discussed this with Mr. Frank McFarland and he concurs with this position."

In work done by C. A. Thomas at Clemson University with Substitution of Aldrin for Endrin in the Watermelon Seed Treatment Kit, the following results were reported.

"In all cases the Aldrin seemed to work as well as the Endrin. No farmers reported damage where they used the Aldrin Kit. In one field in Hampton County where no seed treatment was used, mice caused severe damage. In Allendale County, County Agent Funchess reported that he does not know of any watermelon growers who do not use the kit. In a cantaloupe field in this county, no treatment was used and mice caused severe damage.

"We also compared fields where the old Endrin Kit had been used and no difference was noticed between this and the Aldrin Kit. No strychnine treatments were used. All dealers contacted said it was too much trouble to handle this and consequently all used the Aldrin Kit.

"From these observations I think that I could safely say the Aldrin Kit for Watermelon Seed Treatment does a good job and should be recommended for the next season."

#### 4. New Herbicide Labels for Vegetables

##### 1. Prometryne (Caparol)

- A. Celery seedbeds at 2 to 5 true leaf stage and weeds less than 2 inches high (0.8 lbs./acre).
- B. Celery field - (3.2 lbs./acre) Postemergence to transplants within 2 to 6 weeks after transplanting. Maximum is 2 treatments per crop.
- C. Sweet corn - Preemergence (3.0 lbs./acre). Do not follow with susceptible crop for a year.

2. 2,4-dichlorophenyl p-nitrophenyl ether (TOK)

- Broccoli- Preemerge, postemerge (1 week after emergence) or posttransplant (1 week after emergence).
- Cabbage- Same as broccoli.
- Carrots- Same as broccoli.
- Cauliflower- Same as broccoli.
- Celery- Preemerge or postemerge (2 weeks after emergence).
- Parsley- Same as celery.

3. Bensulide (PREFAR)

- A. Lettuce- Preplant incorporate (5 to 6 lbs./acre) once a year. Do not plant to any crop for 18 months after treatment except those specified on the label.
- B. Cukes- Preplant incorporate (5 to 6 lbs./acre) once per year. Do not plant to any crop for 18 months after treatment except those specified on the label.
  - Squash- Same as cukes.
  - Watermelons- Same as cukes.
  - Cantaloupes- Same as cukes.

4. Trifluralin

- Snap beans- Preplant incorporate.
- Broccoli- Preplant incorporate or pretransplant incorporate.
- Cabbage- Same as broccoli.
- Cantaloupe- Postemerge incorporate; spray when crop is in the 3 to 4 leaf stage.
- Carrots- Preplant incorporate.
- Collards- Preplant incorporate.
- Cauliflower- Preplant incorporate or pretransplant incorporate.
- Celery- Same as cauliflower.
- Cukes- Postemerge incorporate; spray when crop is in 3 to 4 leaf stage.
- Lima Beans- Preplant incorporate.
- Mustard Greens- Preplant incorporate.
- Kale- Preplant incorporate.
- Okra- Preplant incorporate.
- Pepper- Pretransplant incorporate.
- Potato- Preemerge incorporate up to and just after dragoff.
- Southern Peas- Preplant incorporate.

Tomato-	Pretransplant incorporate or postemerge incorporate in direct seeded crop at time of blocking. Direct spray to soil between rows.
Turnip Greens- Watermelons-	Postemerge incorporate when in 3 to 4 leaf stage.

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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