

STATE OF WASHINGTON  
DEPARTMENT OF AGRICULTURE  
Olympia

ORDER NO. 950  
(Supersedes Order No. 812)

EFFECTIVE June 18, 1964

RULES AND STANDARDS FOR CERTIFICATION OF SEED POTATOES

I, Joe Dwyer, Director of Agriculture of the State of Washington, by virtue of the authority vested in me under Chapter 15.14, Revised Code of Washington, after due notice and public hearing held in Lynden, Washington on November 14, 1963, pursuant to Chapters 42.32 and 34.04 RCW, do establish the following rules and standards for certification of seed potatoes.

Regulation 1 FEES

- (a) The application fee is \$2.50 per acre, or fraction thereof.
- (b) The total certification fee, which includes the application fee, is \$5.50 per acre, or fraction thereof.

REFUNDS of the application fee will be made only upon receipt of a written notice to the Department withdrawing the field from certification before the first field inspection is made.

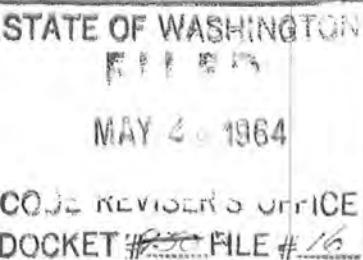
The final fees shall be due and payable upon completion of the last inspection, field or greenhouse.

- (c) Greenhouse testing fee for special lots or lines is \$5.00 for each lot of up to 410 tubers. No sample will be tested unless accompanied by the required fee.
- (d) Shipping point inspection fees will be the same as those established by the Department for commercial potatoes.
- (e) Application for certification must reach the State Department of Agriculture, Olympia, Washington, not later than June 15. This must be accompanied by the application fee and tags, certificates or other evidence of eligibility. A separate application must be made for each lot of each variety.
- (f) No application will be accepted after July 1. No application from any grower owing the Department for previous fees will be considered.
- (g) A penalty of \$5.00 per application will be charged for applications received between June 15 and July 1.

Regulation 2 REQUIREMENTS FOR PRODUCTION OF FOUNDATION  
AND/OR CERTIFIED STOCK

(a) Land Requirements:

1. Land that produced commercial potatoes of any variety or seed potatoes of a different variety the previous year is not eligible for the production of certified seed potatoes.
2. Land which has grown iris bulbs or which is otherwise infested with nematode, will not be eligible for the production of certified seed potatoes.



(b) Isolation Requirements:

1. Fields intended for certification must be isolated by at least 300 feet from fields planted to commercial potatoes or fields carrying more than the tolerance of tuber borne diseases.
2. A distinct mark of separation must be used to identify different lots or varieties grown in the same field.

(c) Miscellaneous Requirements:

1. From the time the plants are of proper size for disease expression, constant roguing is necessary. Diseased and off-type plants including seed piece and newly formed tubers, shall be taken from the field.
2. Excessive weeds, which prevent proper inspection of the field, will be cause for rejection.

(d) Planting Stock: Eligible planting stock must consist of foundation or certified seed potatoes.

1. Foundation seed is tubers that have met field and test plot standards for foundation seed.
2. Certified seed is tubers that have met field standards for certified seed unless HELD for greenhouse test, in such case must meet greenhouse requirements.
3. Desirable planting stock of known history and varietal purity may be accepted. This stock must have been produced the preceding year under the special observation of the Department, Washington State University, or the United States Department of Agriculture.
4. Planting stock from other states and Canada is eligible for certification only if these states or provinces have standards at least as high as the State of Washington. Information as to the eligibility of seed from other states or provinces may be obtained from the State Department of Agriculture, Olympia, Washington.

(e) Test Plot Records: Each lot of seed entered for certification must have a record of the previous years plot or greenhouse test. When a field entered does not have an official plot-test record, it will be necessary to withhold final certification until a sample is taken from the harvested lot and greenhouse tested.

(f) Field Inspection: Fields will be subjected to three inspections - - - the first at about 6-8 weeks after planting. Additional inspections will be made when deemed necessary. The field will be traversed sufficiently to accurately evaluate the factors to be considered.

Regulation 3 FIELD STANDARDS

- (a) The Unit of Certification: Will be the entire field standing at the time of inspection.
- (b) Specific Requirements:

1. <u>VIRUS DISEASES</u>	<u>Foundation</u>		<u>Certified</u>	
	1st	2nd & 3rd	1st	2nd & 3rd
Total virus diseases	1/2%	1/4%	3%	2%
Virus diseases seriously affecting yields	1/4%	trace*	1%**	1%**
* Trace is 0.1% or less				
** Tuber borne or current season rugose mosaic or leaf roll each . . 1/2%				
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2. <u>OTHER DISEASES</u>				
Blackleg	1/2%	1/4%	2%	1%
Wilts	1%	1%	2%	2%
Others	1/2%	3/4%	1%	1%
Total including above singly or in combination	2%	2%	5%	4%
Bacterial Ring Rot	0%	0%	0%	0%
Late Blight Fields	Damage by late blight to the extent where a proper inspection cannot be made will be considered disqualified or as provided in item No. 6 below			
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3. <u>OTHER FACTORS</u>				
Variety Mixture	0%	0%	1/4%	trace
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4. Fields not meeting tolerance requirements at the first inspection will be withheld from certification until a greenhouse test is made.				
5. Fields not meeting field tolerance requirements at the second or third inspection will be rejected except as authorized in Regulation 4, item 4 "Test Plots".				
6. Any field condition making inspection evaluation impossible will be cause for rejecting or placing a HOLD for greenhouse test on a lot or field.				

Regulation 4 TEST PLOTS

- (a) Sampling for Testing, Test Plots: The Department will set up two sets of test plots each year - - - one in the field and one in the greenhouse.

Spring Test Plot in the Field:

1. Before May 1, growers are required to furnish the Department with a representative sample of each lot of seed, that is to be planted for certification. This sample will consist of 310 tubers. Single Drop grade is desirable.

Fall Test Plot in the Greenhouse:

2. Before November 15, at the grower's option he may submit representative samples of variety lots to the Department for testing.

A sample for the greenhouse tests consists of 410 tubers for each certified lot of 20 acres or less, or 820 tubers for each lot over 20 acres. Tubers, 3 to 6 ounces are desirable.

To be eligible for replanting for certification in the State of Washington, lots must be represented in the greenhouse tests.

3. "Foundation" may be placed on the Department's official certified tag when a lot has passed the required field tolerances and the greenhouse test. The Department will publish a list of the ratings following the completion of the greenhouse tests.
4. When a field has been rejected for virus diseases, the grower may request the Department to supervise his selection of a sample five times larger than a regular sample, but not to exceed 2000 tubers for greenhouse testing. If this sample meets greenhouse tolerances, the crop will then be eligible for certified seed potatoes, but not eligible for recertification in the State of Washington.
5. Stock not represented in the spring test plots must pass greenhouse test requirements before being eligible for tagging and shipping as certified seed potatoes.

Regulation 5 TEST PLOT TOLERANCES

(a) Specific Requirements: Fall Greenhouse Plots

<u>VIRUS DISEASES</u>	<u>Foundation</u>	<u>Certified</u>
Total virus diseases	1-1/2%	5%
Virus diseases seriously affecting yield	1/2%	2%

(b) Specific Requirements: Spring Field Plots

<u>VIRUS DISEASES</u>	<u>EXCESSIVE</u>
Total virus diseases	
Virus diseases seriously affecting yields	

OTHER DISEASESEXCESSIVE

Blackleg  
 Wilts  
 Others  
 Total including above singly or in combination  
 Bacterial Ring Rot

## Regulation 6 TUBER INSPECTION-DISEASES AND GRADES

- (a) U. S. Standards for Potatoes: Shall be the official guide for applying and interpreting all definitions and terms used in the Washington certified seed grades below.

<u>1. Disease</u>	<u>Foundation</u>	<u>Certified</u>
Bacterial Ring Rot, Powder Scab, Blackwart, Tuber Moth, Nematode	0%	0%
Net Necroses - associated with Leafroll	1/4%	1%
Wilts	1%	3%
Rhizoctonia	Infection sufficient to seriously affect the general appearance of the lot shall disqualify	
Scab (deep pitted)	1%	3%
	General infection of light scab affecting 10% or more of the tubers by weight will disqualify	
New diseases	Any lot showing symptoms new to Washington may be disqualified or may have certification delayed until a plot test can be made	

2. Condition: Any lot of potatoes may be denied certification if a condition develops which seriously affects the seed value.

3. Variety Mixture: 0% 1/4%

4. Grades:

(a) Washington No. 1 Certified Seed Potatoes (Blue Tag Stock) shall consist of potatoes of one variety which are not badly misshapen (1), free from recognizable spindle tuber, deep scab, late blight, freezing injury, and soft rot or wet breakdown (2), and from damage (3), caused by dirt, or other foreign matter (3a) second growth (3b), growth cracks (3c), sprouting (3d), shriveling (3e), surface scab (3f), rhizoctonia (3g), stem end discoloration (3h), dry rot disease, insects, mechanical or other means.

The size of Washington No. 1 Certified Seed Potatoes shall be not less than two ounces or more than fourteen ounces in weight. (see tolerances)

(b) Washington No. 2 Certified Seed Potatoes (Red Tag Stock) shall consist of potatoes of one variety which are free from recognizable spindle tuber, freezing injury, late blight, soft rot, or wet breakdown and from serious damage caused by dirt or other foreign matter (4a), second growth (4b), growth cracks, cuts and bruises (4c), shriveling (4d), scab (4e), dry rot, disease insects or mechanical or other means.

The size of Washington No. 2 Certified Seed Potatoes shall be not less than two ounces or more than eighteen ounces in weight. (see tolerances)

(c) Washington Single Drop Certified Seed Potatoes (White Tag Stock) shall consist of potatoes which meet all requirements of Washington No. 2 Certified Seed Grade except the size shall be not less than one or more than three ounces in weight.

(d) Washington Buff Certified Seed Potatoes (Buff Tag Stock) shall consist of potatoes of one variety which are free from recognizable spindle tuber, freezing injury, soft rot, late blight and from serious damage caused by dirt or other foreign matter or dry rot.

The size of Washington Buff Certified Seed Potatoes is not regulated except as to agreement between buyer and seller.

5. Tolerances: In order to allow for variations other than size, and internal discoloration, incident to proper grading and handling, not more than a total of 6 percent of the potatoes in any lot may fail to meet the requirements of the grade; but not more than 1/6th of this amount, or 1 percent, shall be allowed for potatoes affected by late blight, potatoes which are frozen, or affected by soft rot or wet breakdown. In addition not more than 5% of the potatoes may be damaged by internal discoloration, or more than 3% may be below the minimum sizes or more than 6% above maximum sizes specified in the grades.

The tolerances specified shall be placed on a container basis. However, any lot of seed potatoes shall be considered as meeting the requirements of the grade, if upon inspection, no sample from a single container in any lot is found to exceed the tolerances specified by more than double the amount allowed, provided that the entire lot shall average within the tolerances specified.

All percentages shall be calculated on the basis of weight.

(b) Definition of Terms: As used in these grades.

1. "Not badly misshapen" means potatoes are not excessively pointed, or elongated, dumb-bell shaped, or otherwise ill formed.
2. "Soft rot or wet breakdown" means any soft, mushy or leaky condition of the tissue, such as slimy soft rot, wet fusarium, or wet breakdown following freezing injury or sun scald.
3. "Damage" means any injury or defect which materially affects the appearance or which materially injures the potato for seed purposes. Any one of the following defects or any combination of defects, the seriousness of which exceeds the maximum allowed for any one defect shall be considered as damage:

- (a) Dirt or foreign matter which materially affects the general appearance of the lot; a potato having an appreciable amount of caked dirt shall also be considered as damaged.

- (b) Second growth which has developed to such an extent as to noticeably affect the appearance of the potato.
- (c) Growth cracks which are not shallow or not well healed.
- (d) Sprouting, when the sprouts are over 3/4 inch long on 10 percent of the tubers.
- (e) Shriveling, when the tuber is more than slightly shriveled.
- (f) Surface scab which covers more than 10 percent of the surface of the potato in the aggregate, on 10 percent of the tuber.
- (g) Rhizoctonia which covers more than 5 percent of the surface of the potato in the aggregate, on 25 percent of the tubers.
- (h) Stem end discoloration which extends over 1/2 inch into the flesh of the potato.

4. "Serious" damage means any injury or defect which seriously injures the appearance of the individual potato or the general appearance of the potatoes in the container, or which causes a loss of more than 10 percent of the total weight of the potato for seed purposes. Any one of the following defects or any combination of defects the seriousness of which exceeds the maximum allowed for any one defect shall be considered as serious damage.

- (a) Dirt or foreign matter when the general appearance of the potatoes in the containers is seriously affected by tubers badly caked with dirt or other foreign matter which seriously affects the appearance of the potatoes.
- (b) Second growth when more than one well attached knob is over 10 percent of the total weight of the tuber, or when the knob is broken.
- (c) Growth cracks, cuts, and deep bruises which seriously affect the potato for seed purposes.
- (d) Shriveling when the potato is excessively shriveled, spongy, or flabby.
- (e) Surface scab which covers an area of more than 20 percent of the surface of the potato in the aggregate, on more than 25 percent of the tubers.

Regulation 7 DIGGING, STORAGE, AND PRE-MARKETING

(a) Specific Requirements:


1. Dug and stored so as to maintain vitality of seed.
2. Stored so as to maintain each lot identity.
3. Seed potatoes that are stored in used sacks, are to be stored only in sacks that are known not to have been used for commercial potatoes.
4. Graded according to State of Washington seedpotato grade rules.

5. Placed in new sacks when tagging is requested and identified with the official Washington tag which MUST show the grower's name, address, and lot number.
6. Bulk lots, properly identified, may be moved under certification.

Regulation 8

- (a) Only lots of seed potatoes meeting all the provisions of this Order will be identified by appropriate tags issued by the Department.
- (b) Warranty clause: The Department of Agriculture assumes no responsibility for any undesirable condition not readily discernible by inspection methods used by the Department nor as to conditions subsequent to inspection by the Department.

I hereby certify that the foregoing is a true and correct copy of the regulation promulgated by the Department of Agriculture.

  
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Joe Dwyer  
Director of Agriculture  
State of Washington

Signed at Olympia, Washington

Date: May 20, 1964