

WEST VIRGINIA ADMINISTRATIVE REGULATIONS
STATE DEPARTMENT OF AGRICULTURE

Chapter 19-2
Series ~~488~~ VIII C
1965

Subject: FRUITS AND VEGETABLES
Certification of Potatoes for Seeding Purposes

Section 1 -GENERAL

1.01 Scope. These regulations establish general operating rules and procedures in the Fruits and Vegetables Division.

1.02 Authority. These regulations are issued under authority of Chapter 19, Article 16, Code of West Virginia.

1.03 Effective Date. These regulations are promulgated on March 28, 1946 and become effective on April 15, 1946.

1.04 Filing Date. These regulations were filed in the Office of the Secretary of State on

1.05 Certification. These regulations are certified authentic by the Secretary of State by certification number

Section 2 -CERTIFICATION TAG.

2.01 Irish potatoes produced in a field meeting all the requirements for the Certification of Potatoes for Seeding Purposes will be certified by the Commissioner as fit for sale for seeding purposes and may be sold in compliance with Article 16 of the Official Code of West Virginia, which prohibits the sale of potatoes for seeding purposes unless a Certification Tag, issued by an authorized State Official, is attached thereto.

Section 3 - ELIGIBILITY OF GROWER.

3.01 Any citizen of the State of West Virginia may make application to the Commissioner for the certification for seeding purposes of the potatoes produced in a field or fields under his directions. Provided, for the present, the field is planted to one of the following varieties:

- (1) White or Smooth Rurals
- (2) Russet Rural
- (3) Sebago
- (4) Green Mountain
- (5) Sequoia
- (6) Irish Cobbler

That, the field or fields are favorably located as to altitude (not under 1500 feet) and environment; is in a sufficiently productive condition; and the grower is experienced and has demonstrated he is thoroughly capable of carrying out the requirements for the certification of potatoes for seeding purposes. No more than 6 applications can be handled in 1946; 12 in 1947; and 25 in 1948. The Commissioner may refuse to accept the application of the grower for reasons, other than those enumerated above, if, in his belief, the applicant would be unable to meet the requirements.

Section 4 - APPLICATIONS.

4.01 The preliminary application for certification must be filed with the Commissioner by the 1st of February, except for 1946 by the last of May. The grower will be required to give notice of the time of digging approximately 5 days in advance. To apply for Certification seals and tags, and to request

the final grade inspection, 5 days in advance of the time the potatoes will be sacked. The proper forms for making application for services will be furnished by the Commissioner.

Section 5 - FEES.

5.01 A grower who has had two preliminary applications for the Certification of a field of potatoes accepted by the Commissioner must, with the third application, pay the required fees for the acreage grown. An application fee of \$5.00 for the first 5 acres and \$1.00 for each additional acre up to 15 acres will be collected. Half of this amount will be due with the original application and the remaining half before the second inspection is made. Applications refused or revoked before the first field inspection will have the fees refunded.

5.02 The grower will be required to deposit a fee of 5 cents per 100 sacks for the first 500 sacks and $2\frac{1}{2}$ cents per 100 sacks for each sack over 500 at the final inspection just prior to and in conjunction with sacking and sealing for market.

5.03 Where the potatoes are to be sold direct from the farm to the grower under conditions mutually agreed upon by both parties with final inspection fee to be deposited with the Commissioner with the final application for bin and grade inspection shall be 2 cents per 100 lb. sack up to 500 sacks; and $\frac{1}{2}$ cent per 100 sacks for each sack over 500 sacks.

Section 6 - GENERAL PROCEDURE.

6.01 The purpose of the certifying of a field of potatoes for seeding purposes is to insure the purchaser that the heredity of the potatoes has

been such as to insure reasonably good quality seed. This is brought about by sufficient inspection at critical times in order that the history of the potatoes produced in the field will be known. The Commissioner will supervise the kind of seed that is planted in the field to be certified and will require such seed be treated with standard treatments of corrosive sublimate, hot formaldehyde, or organic mercury compounds if the previous history of the seed, or an inspection, shows such treatments to be necessary.

6.02 Two field inspections to determine the amount of visible disease present in the field will be made by the Commissioner or his assistants. The first of these will be about the time the potatoes are 8 inches high or before the blossoming period has passed. Subsequent field inspections may be made at any time prior to the time the vines have matured past a point where the disease symptoms can no longer be seen.

6.03 During the growing season the grower must rogue the field and remove all plants showing symptoms of visible diseases. All parts, including tubers larger than 1 inch in diameter, of such plants must be carefully dug, placed in a sack, and removed from the field. Three complete roguing will be required and, of these, one must follow the first inspection and one after the second inspection.

6.04 The potatoes will be dug under the supervision of the inspector and moved to storage in such a manner that no question of the identity of the potatoes can arise. The first inspection of the tubers will be made at this time. The bin, in which these potatoes are stored, must be marked

with a description of the location of the field, number of acres, and number of bushels harvested. If they are placed in a common storage or warehouse, the management must furnish the Commissioner with a copy of the warehouse receipt, giving the location in the warehouse in addition to the facts required to be placed on the bin, as stated above.

6.05 Ten days from time of digging the potatoes may be graded, sacked, sealed, and sold. The grade will be determined by an assistant of the Commissioner and the sacks sealed under his direction. This final sealing should not take place unless it is known the potatoes are to be moved in a few days. It will be necessary for this final inspection to be made, if the potatoes are to be sold as certified seed or if they are to be used as a seed source for certified seed.

6.06 The potatoes shall be so placed that it will be convenient for the inspector to make his examination. The grower, under the directions of the inspector, shall be responsible for the placing of the wire and seals on the sack in such manner that the sacks cannot be emptied and refilled. The sacks must be clean and hold 100 lbs. of potatoes when sealed.

Section 7 -GENERAL REQUIREMENTS.

7.01 Fields should be at least 400 feet from all potatoes not being grown for certification. Should the field be within 400 feet and such field or fields show more than 10% virus diseases or 5% leaf roll, all portions of the field within 400 feet will be rejected.

7.02 The field must not have been in potatoes for at least three years.

7.03 The fertility and care of the soil must be reasonably in accordance with the best established practices. The methods employed in handling the seed must be of a recognized high standard. The field must be kept in good culture, free from weeds, and sprayed with recommended materials and by approved methods. Should aphids be abundant it will be necessary to add nicotine sulphate to the sprays until they are under control. The digging and storing of the potatoes must not unduly injure the tubers and be accomplished by standard approved methods. The place and method of storage must be acceptable to the Commissioner.

7.04 The grower must agree to supply 105 tubers from the seed stock to be planted to the Commissioner for testing purposes. This sample of seed will be planted by the Commissioner or by a grower designated by him. The applicant must also agree to furnish 210 tubers from the field at digging time or at the time of the bin inspection. These two samples will be selected by the inspector or under his directions. Samples from multiplication plots will be selected the previous fall in a similar manner as the selection of the sample from the certified fields.

7.05 The seed used to plant a field to be certified must be approved by the Commissioner.

7.06 Produced by the grower the previous year under conditions established and promulgated by the Commissioner for multiplication plots.

7.07 Foundation stock purchased from growers in other states or Canada. For the first two years and applicant has grown or attempted to grow certified seed, the Commissioner will approve the best seed stocks

available but, the third year and years thereafter, the field must be planted with Foundation stock of a high character either produced by the grower or purchased.

7.08 At the present time it appears West Virginia growers will have to grow their own Foundation stock in multiplication plots. For this reason an application for certifying a field of potatoes will not be acceptable unless the grower agrees to plant and maintain a multiplication plot.

7.09 Growers must realize their chances for having their fields approved are slim unless good seed stock is used to plant the field.

Section 8 -CAUSES FOR REJECTION OF FIELD.

8.01 The causes for field rejection will be as follows:

(1) The failure of the grower to comply with the general conditions as given above.

(2) If, at any inspection prior to July 15, the test row or rows produced from the sample of the seed potatoes furnished by the grower, and planted by the Commissioner in a test plot along side samples from other applicants, shows virus diseases in excess of: mosaic 9%; leaf roll 5%; yellow dwarf 5%; spindle tuber 5%; or all virus diseases 9%; the field will be rejected without further inspections.

(3) Fields damaged by tip burn, leafhopper injury, or other diseases or conditions so as to prevent the detection of all diseases normally visible.

(4) The field must not exceed the following minimum percent of visible diseases at each inspection as set forth in the following table for each inspection.

	<u>1st %</u>	<u>2nd %</u>
Leaf roll	3.00	1.00
Mosaic	3.00	1.00
Spindle tuber	3.00	2.00
Yellow dwarf	3.00	1.00
Total Viruses	5.00	3.00
Fusarium wilt*	2.00	1.00
Total all diseases	7.00	4.00
Giant hill	1.00	1.00
Weak hills	3.00	2.00
Varietal mixture	1.00	0.50
Purple top		10.00

*Fusarium solani var esmaritii

(5) The prevalence to a serious extent of any disease, serious insect damage, poor stand, poor cultural conditions, or other conditions that impair the value of the potatoes for seeding purposes, not mentioned herein, may cause the rejection of the field.

(6) At the time of digging or shortly thereafter the potatoes produced in the field to be certified must be within the following requirements:

Total stem discoloration	4.00%
Late blight (any degree)	1.00%
Spindle tuber	1.00%
Varietal mixture	0.50%
Total all defects, including sprouting, wilting, sunscald, frost injury	6.00%
Ring rot	None

(7) Before the sacks are sealed and the certification tags attached, they must be graded to conform to U.S. No. 1 grade or better but not more than 5% of the tubers can be above 12 ounces. Seed sold at the farm directly to another grower and to be planted by him may be graded as mutually agreed and need not be sealed but the sack fee, as indicated above, must be paid.

8.02 The potatoes produced in a field to be certified must be in storage at least 10 days before graded and placed in wired and sealed sacks just prior to being sold for retail sale.

NOTE: U.S. No. 1 allows a tolerance of:

5% for surface scab
5% for pitted scab
1% for hollow heart
rhizoctonia not so serious as to injure appearance
6% total all defects

8.03 The grading will be on a container basis but one container shall not exceed by more than twice the tolerances allowed.

Section 9 -DEFINITIONS.

9.01 Field. The entire area planted to one variety of potatoes and covered by one application for inspection.

9.02 Multiplication plot. An area planted with hill selected seed, tuber indexed seed, or northern-grown certified seed approved by the Commissioner and planted in tuber units.

9.03 Planting Stock. Seed potatoes produced in multiplication plots or obtained from an approved northern source for use in planting the field to be certified.

9.04 Revising the Field. Going over the field and removing all plants showing symptoms of any recognizable disease.

Section 10 -COMMISSIONER NOT RESPONSIBLE.

10.01 The Commissioner will not be responsible for potatoes sold as Certified Seed that are not in official wired and sealed sacks and contrary to law, nor for results obtained from Certified Seed.

WEST VIRGINIA LEGISLATIVE REGULATIONS
STATE DEPARTMENT OF AGRICULTURE
Chapter 19-16

GENERAL INDEX
FOR
SERIES VIIIc

TITLE: Fruits and Vegetables: Certification of Potatoes for Seeding Purposes

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- Section 3. Eligibility of Grower
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- Section 6. General Procedure
- Section 7. General Requirements
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- Section 10. Commissioner Not Responsible.

FILED IN THE OFFICE OF
THE SECRETARY OF STATE
THIS DATE March 28, 1946
ADMINISTRATIVE LAW DIVISION

Title 61

~~WEST VIRGINIA LEGISLATIVE REGULATIONS~~ (Rule)
STATE DEPARTMENT OF AGRICULTURE
~~Chapter 19-16~~
SERIES VIII *e 8c*

TITLE: Fruits and Vegetables: Certification of Potatoes for Seeding Purposes

Section 1. General

1.1 Scope - These Legislative Regulations establish general operating rules and procedures in the Fruit and Vegetable Division.

1.2 Authority - W. Va. Code 19-16

1.3 Filing Date - March 28, 1946.

1.4 Effective Date - April 15, 1946

Section 2. Certification Tag

2.1 Irish potatoes produced in a field meeting all the requirements for the Certification of Potatoes for Seeding Purposes will be certified by the Commissioner as fit for sale for seeding purposes and may be sold in compliance with Article 16 of the Official Code of West Virginia, which prohibits the sale of potatoes for seeding purposes unless a Certification Tag, issued by an authorized State Official, is attached thereto.

Section 3. Eligibility of Grower

3.1 Any citizen of the State of West Virginia may make application to the Commissioner for the certification for seeding purposes of the potatoes produced in a field or fields under his direction. Provided, for the present, the field is planted to one of the following varieties:

- 3.1.1 White or Smooth Rurals
- 3.1.2 Russet Rural
- 3.1.3 Sebago
- 3.1.4 Green Mountain
- 3.1.5 Sequoia
- 3.1.6 Irish Cobbler

That, the field or fields are favorably located as to altitude (not under 1500 feet) and environment; is in a sufficiently productive condition; and the grower is experienced and has demonstrated he is thoroughly capable of carrying out the requirements for the certification of potatoes for seeding purposes. No more than 6 applications can be handled in 1946; 12 in 1947; and 25 in 1948. The Commissioner may refuse to accept the application of the grower for reasons, other than those enumerated above, if, in his belief, the applicant would be unable to meet the requirements.

Section 4. Applications

4.1 The preliminary application for certification must be filed with the

Commissioner by the 1st of February, except for 1946 by the last of May. The grower will be required to give notice of the time of digging approximately 5 days in advance. To apply for Certification seals and tags, and to request the final grade inspection, 5 days in advance of the time the potatoes will be sacked. The proper forms for making application for services will be furnished by the Commissioner.

Section 5. Fees

5.1 A grower who has had two preliminary applications for the Certification of a field of potatoes accepted by the Commissioner must, with the third application, pay the required fees for the acreage grown. An application fee of \$5.00 for the first 5 acres and \$1.00 for each additional acre up to 15 acres will be collected. Half of this amount will be due with the original application and the remaining half before the second inspection is made. Applications refused or revoked before the first field inspection will have the fees refunded.

5.2 The grower will be required to deposit a fee of 5 cents per 100 sacks for the first 500 sacks and 2½ cents per 100 sacks for each sack over 500 at the final inspection just prior to and in conjunction with sacking and sealing for market.

5.3 Where the potatoes are to be sold direct from the farm to the grower under conditions mutually agreed upon by both parties with final inspection fee to be deposited with the Commissioner with the final application for bin and grade inspection shall be 2 cents per 100 lb. sack up to 500 sacks; and ¼ cent per 100 sacks for each sack over 500 sacks.

Section 6. General Procedure

6.1 The purpose of the certifying of a field of potatoes for seeding purposes is to insure the purchaser that the heredity of the potatoes has been such as to insure reasonably good quality seed. This is brought about by sufficient inspection at critical times in order that the history of the potatoes produced in the field will be known. The Commissioner will supervise the kind of seed that is planted in the field to be certified and will require such seed be treated with standard treatments of corrosive sublimate, hot formaldehyde, or organic mercury compounds if the previous history of the seed, or an inspection, shows such treatments to be necessary.

6.2 Two field inspections to determine the amount of visible disease present in the field will be made by the Commissioner or his assistants. The first of these will be about the time the potatoes are 8 inches high or before the blossoming period has passed. Subsequent field inspections may be made at any time prior to the time the vines have matured past a point where the disease symptoms can no longer be seen.

6.3 During the growing season the grower must rogue the field and remove all plants showing symptoms of visible diseases. All parts, including tubers larger than 1 inch in diameter, of such plants must be carefully dug, placed in a sack, and removed from the field. Three complete roguings will be required and, of these, one must follow the first inspection and one after the second inspection.

6.4 The potatoes will be dug under the supervision of the Inspector and moved to storage in such a manner that no question of the identity of the potatoes can arise. The first inspection of the tubers will be made at this time. The bin, in which these potatoes are stored, must be marked with a description of the location of the field, number of acres, and number of bushels harvested. If they are placed in a common storage or warehouse, the management must furnish the Commissioner with a copy of the warehouse receipt, giving the location in the warehouse in addition to the facts required to be placed on the bin, as stated above.

6.5 Ten days from time of digging the potatoes may be graded, sacked, sealed and sold. The grade will be determined by an assistant of the Commissioner and the sacks sealed under his direction. This final sealing should not take place unless it is known the potatoes are to be moved in a few days. It will be necessary for this final inspection to be made, if the potatoes are to be sold as certified seed or if they are to be used as a seed source for certified seed.

6.6 The potatoes shall be so placed that it will be convenient for the inspector to make his examination. The grower, under the directions of the inspector, shall be responsible for the placing of the wire and seals on the sack in such manner that the sacks cannot be emptied and refilled. The sacks must be clean and hold 100 lbs. of potatoes when sealed.

Section 7. General Requirements

7.1 Fields should be at least 400 feet from all potatoes not being grown for certification. Should the field be within 400 feet and such field or fields shows more than 10% virus diseases or 5% leaf roll, all portions of the field within 400 feet will be rejected.

7.2 The field must not have been in potatoes for at least three years.

7.3 The fertility and care of the soil must be reasonably in accordance with the best established practices. The methods employed in handling the seed must be of a recognized high standard. The field must be kept in good culture, free from weeds, and sprayed with recommended material and by approved methods. Should aphids be abundant it will be necessary to add nicotine sulphate to the sprays until they are under control. The digging and storing of the potatoes must not unduly injure the tubers and be accomplished by standard approved methods. The place and method of storage must be acceptable to the Commissioner.

7.4 The grower must agree to supply 105 tubers from the seed stock to be planted to the Commissioner for testing purposes. This sample of seed will be planted by the Commissioner or by a grower designated by him. The applicant must also agree to furnish 210 tubers from the field at digging time or at the time of the bin inspection. These two samples will be selected by the inspector or under his directions. Samples from multiplication plots will be selected the previous fall in a similar manner as the selection of the sample from the certified fields.

7.5 The seed used to plant a field to be certified must be approved by the Commissioner.

7.6 Produced by the grower the previous year under conditions established

and promulgated by the Commissioner for multiplication plots.

7.7 Foundation stock purchased from growers in other states or Canada. For the first two years an applicant has grown or attempted to grow certified seed, the Commissioner will approve the best seed stocks available but, the third year and years thereafter the field must be planted with Foundation stock of a high character either produced by the grower or purchased.

7.8 At the present time it appears West Virginia growers will have to grow their own Foundation stock in multiplication plots. For this reason, an application for certifying a field of potatoes will not be accepted unless the grower agrees to plant and maintain a multiplication plot.

7.9 Growers must realize their chances for having their fields approved are slim unless good seed stock is used to plant the field.

Section 8. Causes For Rejection Of Field

8.1 The causes for field rejection will be as follows:

8.1.1 The failure of the grower to comply with the general conditions as given above.

8.1.2 If, at any inspection prior to July 15, the test row or rows produced from the sample of the seed potatoes furnished by the grower, and planted by the Commissioner in a test plot along side samples from other applicants, shows virus disease in excess of: mosaic 9%; leaf roll 5%; yellow dwarf 5%; spindle tuber 5%; or all virus diseases 9%; the field will be rejected without further inspections.

8.1.3 Fields damaged by tip burn, leafhopper injury, or other diseases or conditions so as to prevent the detection of all diseases normally visible.

8.1.4 The field must not exceed the following minimum percent of visible disease at each inspection as set forth in the following table for each inspection.

	<u>1st %</u>	<u>2nd%</u>
Leaf roll	3.00	1.00
Mosaic	3.00	1.00
Spindle tuber	3.00	2.00
Yellow dwarf	3.00	1.00
Total viruses	5.00	3.00
Fusarium wilt*	2.00	1.00
Total all diseases	7.00	4.00
Giant hill	1.00	1.00
Weak hills	3.00	2.00
Varietal mixture	1.00	0.50
Purple top		10.00

*Fusarium solani var eumartii

8.1.5 The prevalence to a serious extent of any disease, serious insect

damage, poor stand, poor cultural conditions, or other conditions that impair the value of the potatoes for seeding purposes, not mentioned herein, may cause the rejection of the field.

8.1.6 At the time of digging or shortly thereafter the potatoes produced in the field to be certified must be within the following requirements:

Total stem discoloration	4.00%
Late blight (any degree)	1.00%
Spindle tuber	1.00%
Varietal mixture	0.50%
Total all defects, including sprouting, wilting, sunscald, frost injury	6.00%
Ring rot	None

8.1.7 Before the sacks are sealed and the certification tags attached, they must be graded to conform to U. S. No. 1 grade or better but not more than 5% of the tubers can be above 12 ounces. Seed sold at the farm directly to another grower and to be planted by him may be graded as mutually agreed and need not be sealed by the sack fee, as indicated above, must be paid.

8.2 The potatoes produced in a field to be certified must be in storage at least 10 days before graded and placed in wired and sealed sacks just prior to being sold for retail sale.

NOTE: U. S. No. 1 allows a tolerance of:

5% for surface scab;
5% for pitted scab;
1% for hollow heart;
rhizoctonia not so serious as to injure appearance;
6% total all defects.

8.3 The grading will be on a container basis but one container shall not exceed by more than twice the tolerances allowed.

Section 9. Definitions

9.1 Field - The entire area planted to one variety of potatoes and covered by one application for inspection.

9.2 Multiplication plot - An area planted with hill selected seed, tuber indexed seed, or northern-grown certified seed approved by the Commissioner and planted in tuber units.

9.3 Planting stock - Seed potatoes produced in multiplication plots or obtained from an approved northern source for use in planting the field to be certified.

9.4 Roguing the field - Going over the field and removing all plants showing symptoms of any recognizable disease.

Dept. of Agri.
Leg. Regs., 19-16
SERIES VIIIc, Sec. 10

Section 10. Commissioner Not Responsible

10.1 The Commissioner will not be responsible for potatoes sold as Certified seed that are not in official wired and sealed sacks and contrary to law, nor for results obtained from Certified Seed.