

9-17-81

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[REVISOR ] ALB/MR ARO010

3 MCAR 1

1 Rules as Adopted

2 3 MCAR S 1.0127 Purpose and authority. Rules 3 MCAR SS  
3 1.0127-1.0135 provide standards for the inspection,  
4 certification, production, and marketing of certified seed  
5 potatoes in the State of Minnesota. The authority to adopt  
6 these rules is contained in Minn. Stat. S 21.118 (~~1980~~).

7 3 MCAR S 1.0128 Definitions. As used in 3 MCAR SS  
8 1.0127-1.0135, the following definitions apply unless the  
9 context clearly indicates otherwise.

10 A. "Commissioner" means the Commissioner of Agriculture or  
11 the commissioner's authorized representative.

12 B. "Department" means the Department of Agriculture.

13 C. "Seed potato certification inspector" means an employee  
14 of the department authorized by the commissioner to inspect seed  
15 potato plants and tubers entered for certification.

16 D. "Inspected" has the meaning given it in Minn. Stat. S  
17 21.111, subd. 2 (~~1980~~).

18 E. "Seed potatoes" has the meaning given it in Minn. Stat. S  
19 21.111, subd. 5 (~~1980~~).

20 F. "Certified" has the meaning given it in Minn. Stat. S  
21 21.111, subd. 3 (~~1980~~).

22 G. "Certified seed potatoes" means potatoes which have been  
23 produced, graded, sacked or placed in bulk, and inspected and

1 certified in accordance with 3 MCAR SS 1.0127-1.0135.

2 H. "Farm" means a seed potato enterprise. It includes all  
3 land, equipment, storage facilities, and laborers used to  
4 produce certified seed potatoes.

5 I. "Field" means a plot of land on a farm on which potatoes  
6 are grown for certification. The potatoes shall be of one  
7 variety from one certified seed potato grower and shall be grown  
8 in physical separation from other fields.

9 J. "Lot" means a group of seed potatoes entered for  
10 certification that have passed the field inspection  
11 requirements. For the purposes of 3 MCAR SS 1.0127-1.0135, a  
12 lot of potatoes also means that the group is of one variety,  
13 from one or more fields, grown on the same farm, and stored in  
14 physical separation from other lots.

15 K. "Crop" means all lots produced on a farm in one year.

16 L. "Tolerance" means a specified allowance for variation  
17 from the standards provided for diseases and physical defects,  
18 as provided in 3 MCAR SS 1.0127-1.0135.

19 M. "Rejected" means that a field or lot fails to meet the  
20 standards provided for in 3 MCAR SS 1.0127-1.0135.

21 3 MCAR S 1.0129 General guidance. The provisions of this  
22 section govern the production of potatoes for use as certified  
23 seed potatoes.

24 A. Seed potato certification. In order to produce certified  
25 seed potatoes, a grower must comply with the following  
26 procedures:

27 1. Potatoes entered for certification shall be inspected  
28 while growing in the field and again after harvest at the time  
29 of shipment. Certification shall be based upon visual  
30 inspection by the commissioner of sample plants and tubers from  
31 each field and lot. Certificates shall be issued to show the  
32 varietal purity, freedom from disease, ~~and/or~~ and physical  
33 defects of the potatoes at the time of inspection.

34 2. Participation in the certified seed potato program  
35 shall be voluntary. The applicant may withdraw at any time.

1 Farming and sanitation practices are the responsibility of the  
2 applicant. Certification and inspection under 3 MCAR SS  
3 1.0127-1.0135 shall be conducted by the commissioner. Failure  
4 of the applicant to comply with the requirements of 3 MCAR SS.  
5 1.0127-1.0135 shall be cause for rejection of any field or lot.  
6 Potatoes from rejected fields or lots cannot be sold as  
7 certified seed potatoes.

8 B. Winter testing. In order to detect certain virus  
9 diseases, samples from all Foundation certified and Approved  
10 certified seed potato lots shall be winter-tested. In the event  
11 of serious malfunctions of the winter test, classification of  
12 lots as Foundation certified or Approved certified shall be  
13 based on the previous summer field readings.

14 C. Certified seed potato classes. There are three classes  
15 of Minnesota certified seed potatoes, differentiated by their  
16 tolerances for virus diseases.

17 1. The first class, Foundation certified seed potatoes,  
18 has stricter tolerances for virus diseases than do the other  
19 classes. This class shall be winter-tested.

20 2. The Approved certified seed potato class is the second  
21 class. Virus disease tolerances for these seed potatoes are  
22 less strict than those for Foundation certified seed potatoes.  
23 Approved certified seed potatoes shall also be winter-tested.

24 3. The third class, the Certified seed potato class, is  
25 not winter-tested.

26 D. Certified seed potato grades. Grades of certified seed  
27 potatoes are established according to the physical defects of  
28 the tubers. There are three grades used for shipping Minnesota  
29 certified seed potatoes.

30 1. The blue tag certified seed potato grade, the first  
31 grade, has tolerances for physical defects of the tubers  
32 stricter than the other grades. This grade may be used by  
33 growers of Foundation certified, Approved certified, and  
34 Certified seed potatoes. The blue tag grade may be used for  
35 intrastate and interstate shipments of certified seed potatoes.

36 2. The red tag certified seed potato grade is the second

1 grade. This grade allows more physical defects of the tubers  
2 than the blue tag certified seed potato grade. It may be used  
3 by growers of Foundation certified, Approved certified, and  
4 Certified seed potato growers potatoes. The red tag grade may  
5 also be used for intrastate and interstate shipments of  
6 certified seed potatoes.

7 3. The white tag certified seed potato grade is the third  
8 grade. The tolerances for physical defects of the tubers are  
9 determined by agreement between purchaser and seller of the  
10 certified seed potatoes. This grade may only be used by growers  
11 of Foundation certified and Approved certified seed potatoes.  
12 It may only be used for intrastate shipments of certified seed  
13 potatoes.

14 E. Zero tolerance for bacterial ring rot. Certification  
15 rules make provisions to allow the presence of certain diseases  
16 at levels sufficiently low as to preclude significant effects on  
17 certified seed potato value. For bacterial ring rot, there is a  
18 zero tolerance and the discovery of a single plant in the field  
19 or a tuber in storage infected with bacterial ring rot shall  
20 cause the rejection of the field or lot. The absence of a  
21 finding shall not be construed to mean that the field or lot  
22 inspected is free from the disease.

23 F. Warranty. A certification does not represent a warranty  
24 of any kind, express or implied, including merchantability, as  
25 to the quality of the crop produced from the certified seed  
26 potatoes. A certification represents only that the seed  
27 potatoes were produced, graded, sacked or placed in bulk, and  
28 inspected in accordance with 3 MCAR SS 1.0127-1.0135.

29 3 MCAR S 1.0130 Application and eligibility for inspection and  
30 certification. The following procedures shall govern:

31 A. Application for inspection.

32 1. All potatoes planted on a farm shall be eligible and  
33 shall be entered for certification.

34 2. Application for inspection shall be made before June  
35 16 each year on forms furnished by the commissioner or a seed

1 potato certification inspector. Applications postmarked after  
 2 June 15 but before July 1 shall be charged a fifty cents per  
 3 acre late registration fee. No applications shall be accepted  
 4 that are postmarked later than June 30. The commissioner may  
 5 extend the deadline due to special circumstances affecting, such  
 6 as natural disasters, which make it impractical or impossible  
 7 for planting to be completed by the deadline and which affect an  
 8 area or large number of growers.

9 3. An application for the inspection of a field planted  
 10 with purchased certified seed potatoes shall include a copy of  
 11 the shipping point certificates or bulk seed certificates for  
 12 the total amount of purchased certified seed potatoes planted.

13 4. A separate application shall be completed for each  
 14 field planted.

15 5. No application for inspection shall be accepted from a  
 16 grower in any community or county in which there is not  
 17 sufficient acreage to warrant the expense of an inspection for  
 18 the total inspection fee charges to cover the cost of wages and  
 19 expenses of the inspectors providing the inspection service.  
 20 Determination of sufficient acreage shall be made by the  
 21 commissioner.

22 B. Seed potatoes eligible for Minnesota certification  
 23 planting. A field shall not be inspected for certification  
 24 unless both the seed potato variety and the particular lot  
 25 planted have the authorization of the commissioner. Any well  
 26 established, named, commercial variety shall be considered for  
 27 certification if the variety has been described as to vine and  
 28 tuber characteristics in a journal recognized by the  
 29 commissioner and in accordance with the recommendations of the  
 30 Potato Association of America In considering seed potato  
 31 varieties for authorization for certification planting, the  
 32 commissioner shall consider scientific evidence and expert  
 33 opinion. To be eligible for certification planting, seed  
 34 potatoes shall be one of the following:

- 35 1. From Minnesota growers:
- 36 a. Foundation certified seed potatoes;

1           b. Approved certified seed potatoes; or  
2           c. Certified seed potatoes. A grower may replant his  
3 own certified seed potatoes. The commissioner may authorize the  
4 planting of purchased certified seed potatoes if there is no  
5 source of Foundation certified or Approved certified seed  
6 potatoes available to the grower.

7           2. From non-Minnesota growers: Seed potatoes approved  
8 for certification planting by the certifying agency in another  
9 state or a Canadian province may be planted if tolerances for  
10 certification meet Minnesota tolerances for Approved or  
11 Foundation certified seed potatoes.

12           3. Seedling or numbered selections may be accepted for  
13 entrance into the certification system by special authorization  
14 of the commissioner. The applicant shall submit a written  
15 statement from the breeder or originator that the applicant has  
16 full and unrestricted rights to introduce the seedling or  
17 numbered selection into the commercial market, and that the  
18 seedling or numbered selection shall be named within a period of  
19 not more than three years from acceptance of application. If  
20 the seedling or numbered selection is not named at the end of  
21 three years from acceptance of the application, a two year  
22 waiting period shall pass before reentry into the certification  
23 program.

24 3 MCAR S 1.0131 Requirements for certified seed potato  
25 production. The following standards shall be met before  
26 potatoes may be classified as certified seed potatoes.

27           A. Field inspection. Certification shall be based upon  
28 information regarding the following: stand, general vigor,  
29 varietal purity, disease tolerances, and factors affecting field  
30 inspection. At least two field inspections shall be made of  
31 each field during the growing season. Additional inspections  
32 may be made if deemed necessary by the commissioner.

33           1. Stand. A field shall be rejected if there are a large  
34 number of plants missing due to disease.

35           2. General vigor. A field shall be rejected if it

1 contains a large number of weak plants.

2 3. Varietal purity. A field shall be rejected if it  
3 contains any varietal mixture at the time of inspection, unless  
4 all varietal mixtures are removed by the grower before the next  
5 inspection.

6 4. Disease tolerances (percentage of infected plants). A  
7 field shall be rejected if it contains percentages of diseased  
8 plants in excess of those listed in the following table. The  
9 disease percentages listed are based on symptoms which are  
10 visible in the sample being inspected.

11 Maximum Disease Tolerance Levels

12		First	Second and
13	Diseases	Inspection	Subsequent Inspections
14	Severe mosaic (rugose,		
15	crinkle and leafrolling)	0.5%	0.3%
16	Spindle tuber	0.1%	0.1%
17	Leafroll	0.5%	0.3%
18	Total of above diseases	1.0%	0.5%
19	Yellow dwarf	0.5%	0.5%
20	Calico	0.5%	0.5%
21	Haywire	0.5%	0.5%
22	Witches broom	0.5%	0.5%
23	Total of above 4 diseases	0.5%	0.5%
24	Mild mosaic	2.0%	1.0%
25	Bacterial ring rot, field		
26	rejected if found	0.0%	0.0%

27 5. Factors affecting field inspection.

28 a. A field shall be rejected if any of the following  
29 are present to such an extent that satisfactory inspection for  
30 diseases cannot be made:

- 31 (1) Early or late blight;
- 32 (2) Blackleg or wilt of any kind;
- 33 (3) Weeds;
- 34 (4) Insect injury;
- 35 (5) Chemical damage.

36 b. A field shall be rejected if any other conditions

1 are present to such an extent that satisfactory inspection for  
2 diseases cannot be made.

3 B. Roguing. If any of the diseases listed in A. 4. of this  
4 rule are present in a field in amounts less than the maximum  
5 disease tolerance level, the infected plants shall be removed  
6 before the final inspection. If roguing is done after tubers  
7 form, the tubers from the rogued plants shall also be removed  
8 and destroyed.

9 C. Storage.

10 1. Lots shall not be stored in any warehouse where other  
11 potatoes are stored, nor shall they be stored under conditions  
12 of possible disease contamination. If more than one grower  
13 stores lots in the same warehouse, each grower's lots shall be  
14 properly identified by labeling the bin with the grower's name,  
15 address, variety, and amount in the bin. If the lots are to be  
16 stored in a public warehouse or storage unit not directly under  
17 the control of the grower, a complete record giving location of  
18 the storage unit, number of the bin, variety, and the quantity  
19 stored shall be sent to the commissioner when the lots are put  
20 into storage. If it is available, a copy of the warehouse  
21 receipt shall also be sent to the commissioner.

22 2. Equipment used for grading and handling lots shall not  
23 be used for any other potatoes. If any equipment is used on  
24 other potatoes, the lots shall be rejected.

25 3. Any firm handling lots on contract shall label all  
26 bins containing lots with the name of the grower whose lots are  
27 being stored. Responsibility for proper labeling and subsequent  
28 handling rests with the firm. No certification tags or bulk  
29 certificates shall be issued until this is done.

30 4. Each grower shall submit a completed storage and yield  
31 report on each lot on forms furnished by the commissioner.  
32 Certification tags shall not be issued to growers who have not  
33 submitted the report.

34 D. Tags, bulk certificates, seals.

35 1. Official blue, red, or white tags, bearing the  
36 grower's name and address, variety, and the crop year, shall be



1 issued when the potatoes meet the certification requirements  
2 described in 3 MCAR S 1.0130 and 3 MCAR S 1.0131 A-C.

3 2. Tags shall be fastened onto sacks with a metal seal so  
4 as to constitute a seal at the time the lots are prepared for  
5 shipment. No metal seal is required when a tag is machine sewn  
6 onto the sack. A special seal shall be placed on the conveyance  
7 doors in case of bulk shipments identified by a bulk certificate.

8 3. Tags shall be issued only to growers, except when lots  
9 are stored in a public warehouse or in a storage unit not under  
10 direct control of the grower. They shall be issued to the owner  
11 or manager of the storage unit upon receipt of written  
12 authorization from the grower.

13 4. Responsibility for ordering tags shall rest entirely  
14 with each grower.

15 E. Grading. All lots shall be inspected at the loading  
16 point whenever possible. If inspection at the loading point is  
17 impossible, request for grading inspection in transit shall be  
18 made. Every bagged lot or shipment offered for sale and bearing  
19 official certification tags shall be in new even-weight sacks.  
20 Bulk shipments shall be identified with a bulk certificate.  
21 Both bagged and bulk lots or shipments must meet grade standards  
22 specified in 3 MCAR S 1.0135.

23 1. Lots or shipments that fail to meet grade standards  
24 when inspected shall be reconditioned or;

25 a. If the lot or shipment is in sacks, the tags shall  
26 be removed under the supervision of a state or federal/state  
27 inspector before the lot or shipment is allowed to proceed to  
28 its destination.

29 b. If the shipment is in bulk, no bulk certificate  
30 shall be issued.

31 2. All costs of reconditioning to meet grade shall be  
32 borne by the shipper.

33 3 MCAR S 1.0132 Requirements for Foundation certified seed  
34 potato production. Foundation certified seed potatoes shall  
35 consist of potatoes which meet all the requirements of 3 MCAR S

1 1.0130 and 3 MCAR S 1.0131 as well as the following additional  
2 requirements.

3 A. A lot grown as and intended to be Foundation certified  
4 seed potatoes must remain under direct control of the grower for  
5 three years prior to being certified as Foundation certified  
6 seed potatoes.

7 B. Foundation certified seed potatoes shall be the only  
8 potatoes grown on the farm. They shall be grown from potatoes  
9 produced on a tuber unit seed plot.

10 C. Not more than two-tenths percent of any or all virus  
11 diseases shall be allowed on any field inspection. No spindle  
12 tuber is allowed.

13 D. A lot shall be kept under direct control of the grower.  
14 Such lots shall not be stored in any warehouse in which other  
15 potatoes are stored, unless authorization is granted by the  
16 commissioner.

17 E. A sample of each lot meeting the requirements of this  
18 rule shall be submitted for winter testing. Seed potato lots  
19 with winter test readings more than one-half percent of any or  
20 all virus diseases shall be removed from the Foundation  
21 certified seed potato class. Presence of spindle tuber,  
22 bacterial ring rot, or chemical damage shall also remove the lot  
23 from the Foundation certified seed potato class.

24 F. If bacterial ring rot is found in any field or lot, the  
25 crop is not eligible for certification planting the following  
26 year. Potatoes from other fields or lots may be eligible for  
27 certification planting if the equipment used in the production  
28 of the crop was thoroughly disinfected after it was used on each  
29 field or lot. Proof of disinfection must be filed with the  
30 commissioner. Authorization for certification planting the  
31 following year shall then be granted only to the grower himself  
32 and only if the lots meet all other requirements for planting.

33 G. Blue, red, or white tags with the word "Foundation"  
34 stamped across the front of the tag shall be issued only after  
35 all requirements of 3 MCAR S 1.0132 are met. In addition, the  
36 crop shall be at least the third crop grown following the year

1 in which bacterial ring rot was found before becoming eligible  
2 to be tagged with Foundation tags.

3 3 MCAR S 1.0133 Requirements for Approved certified seed potato  
4 production. Approved certified seed potatoes shall consist of  
5 potatoes which meet all the requirements of 3 MCAR S 1.0130 and  
6 3 MCAR S 1.0131 as well as the following additional requirements:

7 A. Not more than three-tenths percent of any or all virus  
8 diseases shall be allowed on the final field inspection, except  
9 that no spindle tuber is allowed and up to five-tenths percent  
10 is allowed for mild mosaic.

11 B. A sample of the lot must meet the same winter test  
12 requirements as prescribed for Foundation certified seed  
13 potatoes in 3 MCAR S 1.0132 E.

14 1. In selecting lots for winter testing, the commissioner  
15 shall consider factors such as lots more than two years removed  
16 from the Foundation certified seed potato class, amount of  
17 disease found during field inspections, amount of varietal  
18 mixture rogued, proximity to fields having excessive amounts of  
19 disease, and other conditions which may jeopardize the value of  
20 the lots for certification planting.

21 2. If bacterial ring rot is found on the farm, before  
22 becoming eligible to submit a sample from future crops for  
23 winter testing, the grower shall either:

24 a. Dispose of the crop from the year bacterial ring  
25 rot was found and purchase all new Foundation certified or  
26 Approved certified seed potatoes; or

27 b. Produce at least two crops free from bacterial ring  
28 rot.

29 3 MCAR S 1.0134 Fees.

30 A. Fees shall be set by the commissioner in amounts  
31 necessary to carry out the seed potato certification service.  
32 Fees shall be reviewed annually and notice of the current fee  
33 schedule sent to growers from time-to-time.

34 B. Field inspection fees shall be paid at time of  
35 application for entry into the certification program.

1 C. Winter testing fees shall be paid before results are sent  
2 to the grower.

3 D. Fees for other disease testing shall be paid before  
4 results are listed in the Minnesota Seed Potato Certification  
5 Directory.

6 3 MCAR S 1.0135 Minnesota certified seed potato grades and  
7 tolerances.

8 A. Minnesota certified seed potato grades. Before becoming  
9 eligible for grading as certified seed potatoes, the  
10 requirements of 3 MCAR SS 1.0130 and 1.0131 shall be met. In  
11 addition, Foundation certified seed potatoes shall meet the  
12 requirements of 3 MCAR S 1.0132. Approved certified seed  
13 potatoes shall meet the requirements of 3 MCAR S 1.0133.  
14 Grading and tagging or issuance of a bulk certificate are the  
15 final steps in the certification process.

16 1. Minnesota blue tag certified seed potato grade. To be  
17 graded as Minnesota blue tag certified seed potatoes, the  
18 potatoes shall meet the following requirements:

19 a. The potatoes shall be, at time of final inspection,  
20 one variety; fairly well-shaped; free from bacterial ring rot,  
21 powdery scab, freezing, black heart, and soft rot or wet  
22 breakdown; and free from injury by surface or pitted scab, and  
23 from damage caused by dirt or other foreign matter, second  
24 growth, growth cracks, air cracks, cuts, shriveling, sprouts,  
25 pitted scab, surface scab, russet scab, dry rot, other diseases,  
26 insects or worms, external discoloration caused from loss of  
27 skin, mechanical or other means, and from serious damage caused  
28 by sunburn, hollow heart, or internal discoloration (other than  
29 hollow heart).

30 b. Size. For round or intermediate shaped varieties,  
31 the maximum size shall be not more than 12 ounces and, unless  
32 otherwise specified, the minimum size shall be not less than  
33 1-7/8 inches in diameter. For long varieties, the maximum size  
34 shall be not more than 14 ounces and, unless otherwise  
35 specified, the minimum size shall be not less than 1-3/4 inches

1 in diameter. For all varieties, size "B", the minimum diameter  
 2 shall be not less than 1-1/2 inches and the maximum size shall  
 3 be not more than 2-1/4 inches in diameter.

4 c. Lot tolerances. In order to allow for variations  
 5 incident to proper grading and handling, the following  
 6 tolerances, by weight, are provided:

7 (1) For defects:

8 (a) 10% for potatoes seriously damaged by hollow  
 9 heart;

10 (b) 10% for potatoes seriously damaged by sunburn;

11 (c) 5% for potatoes seriously damaged by internal  
 12 discoloration (other than hollow heart);

13 (d) 8% for potatoes injured by (slight) scab;

14 (e) 10% for potatoes damaged by dirt or other  
 15 foreign matter;

16 (f) 10% for potatoes damaged by sprouts; and

17 (g) 6% for potatoes which fail to meet the  
 18 remaining requirements of the grade provided, that included in  
 19 this amount not more than the following percentages shall be  
 20 allowed for the following defects:

21	(i) Soft rot, frozen, or wet breakdown	0.5%
22	(ii) Damage by surface or pitted scab	2.0%
23	(iii) Damage by dry <del>sets</del> rot	2.0%
24	(iv) Late blight tuber rot	2.0%
25	(v) Bacterial ring rot	0.0%
26	(vi) Powdery scab	0.0%

27

28 (2) For offsize:

29 (a) 5% for potatoes which fail to meet the  
 30 required or specified minimum size,

31 (b) 10% for potatoes which fail to meet the  
 32 required maximum size.

33 2. Minnesota red tag certified seed potato grade. To be  
 34 graded as Minnesota red tag certified seed potatoes, the  
 35 potatoes must meet the following requirements.

36 a. The potatoes shall be, at time of final inspection,

1 of one variety; fairly well-shaped; and free from bacterial ring  
2 rot, powdery scab, freezing, black heart, and soft rot or wet  
3 breakdown, and from damage caused by second growth, growth  
4 cracks, air cracks, cuts, shriveling, sprouts, pitted scab,  
5 surface scab, dry rot, other diseases, insects or worms,  
6 external discoloration caused from loss of skin, mechanical or  
7 other means, and from serious damage caused by dirt or other  
8 foreign matter, russet scab, sunburn, hollow heart, or internal  
9 discoloration (other than hollow heart).

10           b. Size. For all varieties, the maximum size shall be  
11 not more than 14 ounces and unless otherwise specified, the  
12 minimum size shall be not less than 1-7/8 inches in diameter for  
13 round or intermediate shaped varieties and not less than 1-3/4  
14 inches in diameter for long varieties. For all varieties, size  
15 "B", the minimum diameter shall be not less than 1-1/2 inches,  
16 and the maximum size shall be not more than 2-1/4 inches in  
17 diameter.

18           c. Lot tolerances. In order to allow for variations  
19 incident to proper grading and handling the following  
20 tolerances, by weight, are provided:

21                 (1) For defects:

22                         (a) 10% for potatoes seriously damaged by hollow  
23 heart;

24                         (b) 10% for potatoes seriously damaged by sunburn;

25                         (c) 5% for potatoes seriously damaged by internal  
26 discoloration (other than hollow heart);

27                         (d) 20% for potatoes damaged by sprouts; and

28                         (e) 20% for potatoes which fail to meet the  
29 remaining requirements of the grade provided, that included in  
30 this amount not more than the following percentages shall be  
31 allowed:

32                                 (i) 5% damage by surface or pitted scab

33                                 (ii) 2% damage by dry rot

34                                 (iii) 6% serious damage for other defects

35 other than sunburn, hollow heart, internal discoloration (other  
36 than hollow heart) provided, that of this six percent not more

1 than the following percentages shall be allowed for the  
2 following defects:

3	(aa) Late blight tuber rot	2%
4	(bb) Soft rot, frozen, or wet breakdown	0.5%
5	(cc) Bacterial ring rot	0.0%
6	(dd) Powdery scab	0.0%

7 (2) For offsize:

8 (a) 5% for potatoes which fail to meet the  
9 required or specified minimum size;

10 (b) 10% for potatoes which fail to meet the  
11 required maximum size.

12 3. Minnesota white tag certified seed potato grade.

13 a. Minnesota white tag certified seed potato grade  
14 shall consist of Foundation certified or Approved certified seed  
15 potatoes which are graded according to agreement between seller  
16 and purchaser as to size and defects, except that not more than  
17 one-half percent of soft rot, frozen, or wet breakdown and two  
18 percent dry rot shall be allowed.

19 b. The use of the white tag certified seed potato  
20 grade shall be restricted to intrastate shipments.

21 B. Application of tolerance. The contents of individual  
22 containers, other than bulk conveyances, in the lot are subject  
23 to the following limitations provided that the averages for the  
24 entire lot are within the tolerances specified for the grade.  
25 An individual container in any lot may contain not more than  
26 double the tolerance specified except for sprouts and that at  
27 least one defective specimen, other than bacterial ring rot or  
28 powdery scab, and one offsize specimen may be permitted in any  
29 container.

30 C. Condition after transit. Deterioration developing in  
31 transit shall be considered as affecting condition and not grade.

32 D. Definitions. For the purpose of this rule, the following  
33 terms have the meanings given them unless the context clearly  
34 indicates otherwise:

35 1. "Mature" means that the outer skin (epidermis) does  
36 not loosen or "feather" readily during the ordinary methods of

1 handling.

2 2. "Well-shaped" means the normal shape for the variety.

3 3. "Fairly well-shaped" means that the individual potato  
4 is not materially pointed, dumbbell-shaped, or otherwise  
5 ill-formed.

6 4. "Fairly clean" means that the individual potato is  
7 reasonably free from dirt, staining, or other foreign matter.

8 5. "Slightly dirty" means that the appearance of the  
9 individual potato is not materially affected by dirt, staining,  
10 or other foreign matter.

11 6. "Diameter" means the greatest dimension at right  
12 angles to the longitudinal axis. The long axis shall be used  
13 without regard to the position of the stem (rhizome).

14 7. "Soft rot or wet breakdown" means any soft, mushy, or  
15 leaky condition of the tissues.

16 8. "Surface" or "pitted scab", individually or in  
17 combination, which cover an area of more than two percent of the  
18 surface of the potato in the aggregate, or which cannot be  
19 removed without a loss of more than two percent of the total  
20 weight of the potato including the peel covering the defective  
21 area shall be considered injury.

22 9. "Damage" means any defect or combination of defects  
23 which materially affects the appearance of the individual potato  
24 or which cannot be removed without a loss of more than five  
25 percent of the total weight of the potato including the peel  
26 covering the defective area. Any one of the following defects  
27 or any combination of defects, the seriousness of which exceeds  
28 the maximum allowed for any one defect, shall be considered as  
29 damage:

30 a. Russet scab when it materially detracts from the  
31 appearance of the individual potato;

32 b. Second growth or growth cracks which have developed  
33 to such an extent as to materially affect the appearance of the  
34 individual potato;

35 c. Air cracks which are deep, or shallow air cracks  
36 which materially affect the appearance of the individual potato;



1 d. Shriveling when the potato is more than moderately  
2 shriveled, spongy, or flabby;

3 e. Sprouting when the individual potato has sprouts  
4 over one inch in length;

5 f. Surface or pitted scab, individually or in  
6 combination, which covers an area of more than five percent of  
7 the surface of the potato in the aggregate, or causes a loss of  
8 more than five percent of the total weight of the potato  
9 including peel covering defective area;

10 g. Dirt if the individual potato has more than 50  
11 percent of its surface affected by lightly caked dirt which is  
12 scattered, or more than 15 percent of its surface badly caked  
13 with dirt.

14 10. "Serious damage" means any defect or combination of  
15 defects which seriously affects the appearance of the individual  
16 potato or which cannot be removed without a loss of more than  
17 ten percent of the total weight of the potato including the peel  
18 covering the defective area. Any one of the following defects  
19 or any combination of defects, the seriousness of which exceeds  
20 the maximum allowed for any one defect shall be considered as  
21 serious damage:

22 a. Russet scab when it seriously detracts from the  
23 appearance of the potato;

24 b. Dirt when the appearance of the individual potato  
25 is seriously affected by caked or smeared dirt or other foreign  
26 matter;

27 c. Cuts when both ends are clipped or when more than  
28 an estimated one-fourth of the potato is cut away from one end  
29 or when the remaining portion of the clipped potato weighs less  
30 than six ounces;

31 d. Other cuts which seriously affect the appearance of  
32 the individual potato or which cannot be removed without a loss  
33 of more than ten percent of the total weight of the potato  
34 including peel covering defective area;

35 e. Shriveling when the potato is excessively  
36 shriveled, spongy, or flabby;

1           f. Surface or pitted scab, individually or in  
2 combination, which covers an area of more than twenty-five  
3 percent of the surface of the potato in the aggregate, or causes  
4 a loss of more than ten percent of the total weight of the  
5 potato including peel covering defective area.

6 Agr. 121-126 are repealed.