

## Chapter ATCP 156

### CERTIFIED SEED POTATOES

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**Note:** Chapter Ag 91 was renumbered chapter ATCP 156 under s. 13.93 (2m) (b) 1., Stats., Register, April, 1993, No. 448. Chapter ATCP 156 was renumbered sections ATCP 157.01 to 157.08, Register, February, 1996, No. 482.

#### ATCP 156.01 Definitions. As used in this chapter:

(1) "Department" means the state of Wisconsin department of agriculture, trade and consumer protection.

(2) "Certified seed potatoes" means seed potatoes which have been inspected and certified by the college as having been produced under and meeting field and bin inspection standards and requirements under this chapter and which have been graded and certified by the department as being of a grade specified in this chapter.

(3) "College" means the college of agricultural and life sciences of the university of Wisconsin.

(4) "Damage" means any defect, except sunburn, greening and hollow heart, or any combination of defects which materially detracts from the internal or external appearance of the potato, or any defect which cannot be removed without a loss of more than 5% of the total weight of the potato. "Damage" may include one or more of the internal or external defects specified in s. ATCP 156.04 (5) (a) and (b).

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

(6) "External defect" means any defect under s. ATCP 156.04 (5) (a) which can be detected by inspection of the outer surface of a seed potato, except that cutting may be required to determine the extent of internal injury related to the external defect.

(7) "Fairly well shaped" means that the appearance of the individual potato or the general appearance of the potatoes in the container is not materially injured by pointed, dumbbell-shaped or otherwise ill-formed potatoes.

(8) "Foundation seed" means seed potatoes which have been certified as Badger State Brand Foundation seed potatoes, Yellow Tag Grade Foundation seed potatoes or Elite Foundation seed potatoes.

(9) "Internal defect" means any defect under s. ATCP 156.04 (5) (b) which cannot be detected without cutting the potato.

(10) "Internal discoloration" means discoloration such as is caused by net necrosis or any other type of necrosis, stem-end browning, internal brown spot, or other similar types of discoloration.

(11) "Nematode or tuber moth injury" means the presence of, or any evidence of prior activity by, nematode or tuber moth.

(12) "Person" means an individual, partnership, corporation, association or other business organization or entity.

(13) "Seed certification agency" means the department in cooperation with the college.

(14) "Serious damage" means any defect or combination of defects under s. ATCP 156.04 (5), except sunburn or greening, which seriously detracts from the internal or external appearance of the potato, or any defect which cannot be removed without a loss of more than 10% of the total weight of the potato.

(15) "Soft rot or wet breakdown" means any soft, mushy, or leaky condition of the tissue of seed potatoes.

**History:** 1-2-56; am. (1), (2), (3), (5), (7), (8), (9), Register, September, 1957, No. 21, eff. 10-1-57; cr. (h), Register, January, 1961, No. 61, eff. 2-1-61; am. (3), Register, August, 1962, No. 80, eff. 9-1-62; am. (1) and (2), renum. (3) to (9) to be (6) to (12), cr. (3), (4) and (5), Register, January, 1976, No. 241, eff. 2-1-76; am. (1), Register, April, 1978, No. 268, eff. 5-1-78; renum. (6) to be Ag 26.04 (1), renum. (2) to (5), (7), (9) to (12) to be (3), (10), (2), (9), (12), (5), (6), (4) and (11) respectively, am. (2) and (9), cr. (7), Register, October, 1981, No. 310, eff. 11-1-81; renum. (6) to (10), (11) (intro.) and (12) to be (7), (8), (10), (12) to (15) and am. (10), (12), (14) and (15), cr. (intro.), (6), (9) and (11), am. (4) (intro.), r. (4) (a) to (g) and (11) (a) to (h), Register, September, 1986, No. 369, eff. 10-1-86; renum. from ATCP 26.01 and am. (4), (6), (9) and (14), Register, February, 1996, No. 482, eff. 3-1-96.

**ATCP 156.02 Inspection and certification. (1) FIELD AND BIN INSPECTION; GRADING INSPECTION.** (a) No potatoes may be sold or represented as certified seed potatoes unless they have been officially inspected by the seed certification agency and inspection certificates or reports have been issued showing that they have been produced under and met field and bin inspection standards and requirements, and conform to all other certification standards and requirements as provided in this chapter, including grade standards for the grade under which the seed is to be sold.

(b) Field and bin inspections shall be made by the college and grading inspections by the department. No grading inspection shall be made or grading certificates issued by the department until both a field inspection and separate bin inspection certificate or report have first been issued by the college.

(2) **ISSUANCE OF CERTIFICATES.** Field and bin and grading inspections and certifications or reports shall be based upon visual inspections of fields, bins, plants and tubers in accordance with standards, procedures, and tolerances specified in ss. ATCP 156.03 and 156.04. In the issuance of inspection certificates or reports, neither the department nor the college make any express or implied warranties or representations as to freedom from disease or quality of the certified seed, but certifies only that at the time of inspection the sample plants and tubers of each lot inspected conform to standards and tolerances for certified seed or certified seed of a particular grade under this chapter.

(3) **PROHIBITIONS AND EXCEPTIONS.** (a) No person may sell, offer for sale, have in possession with intent to sell, advertise, label or otherwise represent any potatoes as certified seed or as being of a grade prescribed in this chapter; or use in connection with the sale of seed potatoes any word, phrase or designation which suggests that they have been inspected, certified, or graded unless they have been inspected, graded and certified under this chapter, and conform to grades as specified in the grading certificate.

(b) This chapter shall not apply to potatoes originating from another state which have been officially inspected and certified as to quality by an authorized certification agency of the state of origin as evidenced by an official certification label of the state of origin and which are otherwise accurately labeled and not misrepresented as being certified seed or seed of a particular grade or quality.

**History:** 1-2-56; am. Register, September, 1957, No. 21, eff. 10-1-57; renum. Ag 26.02 to be Ag 26.02 (1) and cr. (2), Register, January, 1961, No. 61, eff. 2-1-61; am. (1), Register, January, 1976, No. 241, eff. 2-1-76; r. and recr., Register, October, 1981, No. 310, eff. 11-1-81; renum. from ATCP 26.02 and am. (2), Register, February, 1996, No. 482, eff. 3-1-96.

**ATCP 156.03 Field and bin inspections. (1) APPLICATION; GENERAL REQUIREMENTS.** Persons desiring to qualify a seed lot as certified seed shall make application to the department of plant pathology of the college for the required field and bin inspections. The applicant shall voluntarily agree to pay and be liable for the expenses of inspection on a reasonable unit cost basis as determined by the college. All potatoes grown on farms on which certified seed is to be produced shall be entered for certification and subject to field and bin inspections for variety, field standards, disease tolerances, cultural standards, bin standards, and other inspectional standards and requirements provided in this section.

**(2) INSPECTION PROCEDURES.** (a) Field and bin inspections shall be conducted on basis of a visual observation of sample plants and tubers under growing conditions and during storage.

(b) A minimum of 2 field inspections shall be made during the growing season with a visual examination being made of a minimum of 100 plants for each planted acre. Inspections of bins and storage areas shall include a visual inspection of at least 100 stored tubers for each harvested acre.

(c) Certification shall not extend to diseases which cannot be observed on basis of a visual inspection of plants and tubers.

**(3) FIELD STANDARDS.** (a) All seed lots entered for certification shall be planted with foundation class seed of the grower's own production. Foundation class seed not produced by the grower may be used only with the approval of the college.

(b) Each separate variety of foundation class seed plantings, including seed of the same variety originating from different sources and grown in the same field, shall be separated by at least one planting row.

(c) No variety of potatoes may be certified if grown within 100 feet of other potato crops affected with virus in excess of viral disease tolerances permitted in sub. (5) (a). A distance of less than 100 feet may be permitted if the seed field is protected against vectors of viral diseases by an adequate barrier or other condition affording protection to the seed field against vectors of viral disease.

**(4) LIMITED GENERATION.** (a) All certified seed shall be produced in a limited generation production scheme. Seed lots are limited to a maximum of 5 generations of propagation designated as follows:

| <u>CLASS</u> | <u>GENERATION</u> |
|--------------|-------------------|
| Foundation   | G1                |
| Foundation   | G2                |
| Foundation   | G3                |
| Foundation   | G4                |
| Certified    | G5                |

(b) Generation numbers increase with years of production from the original seed source. Foundation class seed shall be downgraded automatically one generation each year. The generation year for foundation class seed shall be printed on tags by the college upon request of the seller or buyer of certified seed potatoes. When disease tolerances for a seed class or generation are exceeded, seed lots shall be lowered to the next acceptable seed classification or be rejected for certification. Certified class seed shall not be designated by generation on tags, nor be reentered for certification.

(c) Foundation class seed lots shall be entered for certification as foundation-G1 if seed lots are purchased from the college or from an equivalent source which participates in a limited generation seed certification program and is responsible for generating the original seed lot. All plants or tubers which constituted the original seed lot shall have been tested and found free from viruses X and Y, leafroll virus, spindle tuber viroid, and *Coryne bacterium sepedonicum*. Seed lots obtained from a source other than the originator of the seed lot shall meet foundation class standards and

shall be downgraded one generation for each year of propagation, as provided in par. (a). If seed lots, including numbered selections and new varieties from breeding programs, are obtained from sources that are not in a limited generation program, the seed lot is eligible for foundation-G3 class certification the first year and is subject to all other provisions relating to seed classes and generations thereafter.

(d) Foundation class seed lots may be renewed as foundation-G3 by tuber-unit planting (100% tuber-united). Foundation class seed lots may be renewed as foundation-G1 by tuber-unit planting and by testing all plants or tubers as being free from viruses X and Y, leafroll virus, spindle tuber viroid, and *Corynebacterium sepedonicum*.

**(5) CERTIFIED CLASS DISEASE TOLERANCES.** (a) No fields of potatoes may be certified which on first and subsequent inspections by the college are found to be infected with diseases or to contain variety mixtures in excess of respective percentage tolerances for variety mixture or various types of diseases as specified below:

| <u>Disease And Variety Mixture</u> | <u>1st Inspection</u> | <u>2nd Or Subsequent Inspections</u> |
|------------------------------------|-----------------------|--------------------------------------|
| Leafroll                           | 1.5%                  | 1.0%                                 |
| Mosaics                            | 2.0%                  | 1.0%                                 |
| Spindle tuber                      | <u>1.0%</u>           | <u>1.0%</u>                          |
| <b>TOTAL VIRUS ALLOWED</b>         | 3.0%                  | 3.0%                                 |
| Bacterial ring rot                 | 0.0%                  | 0.0%                                 |
| Variety mixture                    | 1.0%                  | 0.1%                                 |

**Note:** Although individual tolerances on first inspection for leafroll, mosaics, and spindle tuber are shown as 1.5%, 2.0%, and 1.0% respectively, the total combined tolerances for these diseases on first inspection shall not exceed 3.0%. The 0.0% tolerance for ring rot does not mean the lot of potatoes is free of the disease, but means that the samples inspected were observed not to have the disease.

(b) In addition to the rejection of potatoes for failing to meet tolerance standards under par. (a), the college shall reject for certification any lot of potatoes because of the presence of any other disease to a damaging extent or serious insect damage, or any other condition that adversely affects or impairs the growth, quality, or value of the potatoes.

**(6) CULTURAL STANDARDS.** Uneven or slowly emerging plants or an excessive number of missing hills due to disease, poor seed or other cultural conditions shall be cause for rejection of any lot of potatoes for certification. Potatoes may also be rejected for certification because of the presence of weeds or existence of any other environmental or cultural factors or conditions contributing to the unsatisfactory growth or development of the potatoes or interfering with the ability of the college to conduct full and complete field inspections.

**(7) FOUNDATION SEED STANDARDS.** In addition to meeting all requirements for certified seed, foundation seed shall meet the following additional requirements:

(a) Production of foundation class seed shall be limited to those farms which have satisfied disease tolerances for ring rot under this chapter for 2 successive growing seasons. If bacterial ring rot is found in a seed lot during summer or winter field inspections or bin inspections, all seed lots on that farm shall be replaced and may not be entered for certification the following crop year. If bacterial ring rot is not found in the replacement stocks the following season, they may be reentered for certification. If bacterial ring rot is found on or traceable to a seed farm in more than one seed lot in the same year or in 2 of 3 consecutive years, all seed lots on that farm shall be rejected for certification and all seed lots shall be replaced and may not be entered for certification the following crop year.

(b) No fields of potatoes may be certified as foundation class seed if, on first or subsequent inspections by the college, they are

found to be infected with diseases or to contain variety mixtures in excess of respective tolerances for variety mixture or various types of diseases as specified below:

| DISEASE AND VARIETY MIXTURE | FOUNDATION  |                      | FOUNDATION           |                  |
|-----------------------------|-------------|----------------------|----------------------|------------------|
|                             | -G1         | -G2                  | -G3                  | -G4              |
| Leafroll                    | 0.1%        | 0.1%                 | 0.25%                | 0.25%            |
| Mosaics                     | 0.1%        | 0.1%                 | 0.25%                | 0.25%            |
| Spindle tuber               | <u>0.1%</u> | <u>0.1%</u>          | <u>0.10%</u>         | <u>0.10%</u>     |
| <b>TOTAL VIRUS ALLOWED</b>  | 0.1%        | 0.1%                 | 0.25%                | 0.25%            |
| Bacterial ring rot          | 0.0%        | 0.0%                 | 0.0%                 | 0.0%             |
| Variety mixture             | 0.0%        | 1 plant per 20 acres | 1 plant per 10 acres | 1 plant per acre |

(c) The inspection records on seed lots certified by out-of-state agencies as meeting foundation class or better, shall be submitted to the college before being approved for foundation planting in this state. A grower purchasing foundation seed originating from out-of-state sources shall make a thorough investigation of the out-of-state producer's operation to assure that an adequate sanitation program has been followed to protect the seed potatoes from contamination by bacterial ring rot and other diseases.

**(8) WINTER FIELD TESTS; STANDARDS AND REQUIREMENTS.** (a) A follow-up winter field test, at a site chosen by the college, shall be conducted on all seed lots certified by the college on basis of summer field and bin inspections. A sample of 400 to 425 tubers, 1-3/4 to 2-1/4 inches in diameter and not to exceed 2 1/2 inches in length, shall be submitted to the college for winter test purposes for every 50 acres planted of each lot of seed potatoes the grower intends to sell or use as certified seed potatoes.

(b) Certification by the college based on summer field and bin inspections shall be revoked if the potatoes fail to meet winter test standards and tolerances for diseases and variety mixture. Winter test standard and tolerances for diseases and variety mixture for foundation and other certified seed potatoes are as follows:

| DISEASE AND VARIETY MIXTURE | FOUNDATION SEED | OTHER CERTIFIED SEED |
|-----------------------------|-----------------|----------------------|
| Leafroll                    | 0.5%            | 5.0%                 |
| Mosaics                     | 0.5%            | 5.0%                 |
| Spindle tuber               | <u>0.5%</u>     | <u>2.0%</u>          |
| <b>TOTAL VIRUS ALLOWED</b>  | 0.5%            | 5.0%                 |
| Bacterial ring rot          | 0.0%            | 0.0%                 |
| Variety mixture             | 0.0%            | 2.0%                 |

**Note:** Although individual tolerances for leafroll, mosaics, and spindle tuber for foundation seed are .5% and for other certified seed are 5.0%, 5.0% and 2.0% respectively, the total combined tolerance for foundation seed is .5% and certified seed is 5%. The 0.0% tolerance for ring rot does not mean the lot of potatoes is free of the disease, but means the samples inspected were observed not to have the disease.

(c) No seed potatoes certified by the college on basis of summer field and bin inspections may be sold or offered for sale as foundation seed potatoes until after the winter test has been completed and the lot of seed potatoes has been further certified by the college as having met the requirements of the winter test. This does not prohibit the sale of other seed potatoes which have been graded and certified by the department as being Yellow Tag Grade or Badger State Brand certified seed potatoes following completion of the summer field and bin inspections and prior to completion of the winter test.

(d) If lot samples are destroyed through natural causes such as flooding or the winter test cannot be satisfactorily completed for any other reason, certification by the college shall be based only on summer field and bin inspections conducted by the college.

**(9) BIN STANDARDS.** (a) All storage areas or bins shall, prior to use for the storage of newly harvested lots of seed potatoes for certification, be cleaned and disinfected with a disinfectant approved by the college. Disinfection shall be verified by the col-

lege and evidenced by posting on storage areas or bins a sign dated and signed by an inspector of the college certifying that storage areas or bins have been properly cleaned and disinfected.

(b) Bins of seed potatoes shall be clearly labeled with the name of the grower, variety, foundation seed source, and bin measurements. Potatoes showing severe defects, such as frost, late blight, soft rot or any other condition that may adversely affect the quality or value of the potatoes may be rejected for certification.

(c) All potatoes stored in a warehouse in which certified seed is stored shall be from fields entered for certification.

(d) If bacterial ring rot is found during summer field inspections, the seed lot shall be rejected from certification and may not be stored in a certified seed potato warehouse.

**History:** 1-2-56; am. Register, September, 1957, No. 21, eff. 10-1-57; am. (2), Register, January, 1961, No. 61, eff. 2-1-61; am. (1), Register, January, 1976, No. 241, eff. 2-1-76; am. (1) (a), r. (1) (f) 1., renum. (1) (f) 2. to 7. to be 1 to 6, Register, March, 1977, No. 255, eff. 4-1-77; r. and recr. Register, October, 1981, No. 310, eff. 11-1-81; am. (3), renum. (4) to (8) to be (5) to (9) and am. (7), (8) (a) and (9) (c), cr. (4) and (9) (d), Register, September, 1986, No. 369, eff. 10-1-86; renum. from ATCP 26.03, Register, February, 1996, No. 482, eff. 3-1-96.

**ATCP 156.04 Grades and grade inspection.**

**(1) GRADES.** The grades of Wisconsin certified seed potatoes are: Badger State Brand, also known as Blue Tag Grade, Yellow Tag Grade, Badger State Brand Foundation, and Yellow Tag Grade Foundation. Seed potatoes which do not meet foundation or certification class standards may not be eligible for grade inspection.

**(2) APPLICATION; COSTS.** Persons desiring to sell or offer for sale potatoes as Wisconsin certified seed of a grade prescribed in this section shall make application to the department for the required grade inspection. The applicant shall agree to pay and be liable for the expense of grade inspections on a reasonable unit cost basis as determined by the department.

**(3) GRADE INSPECTIONS.** (a) Grades shall be determined on the basis of visual examination of individual samples of each lot for quality and condition in accordance with standards and tolerances for each specific grade as established in these rules. Individual samples used for grading and grade inspections shall consist of at least 20 pounds of potatoes drawn from each lot to be graded. The number of individual samples to be taken from each lot will vary with the size of the lot.

(b) Tolerances for size and defects for the various grades specified in these rules shall be calculated on basis of weight. Tolerances specified for each grade shall apply to both bulk and package lots of certified seed potatoes.

**(4) APPLICATION OF TOLERANCES.** The contents of individual samples drawn from each lot to be graded, other than bulk conveyances, are subject to the following tolerance limitations provided that the averages for the entire lot are within the tolerances specified for the grade:

(a) When the tolerance specified is more than 10%, individual samples may contain not more than one and one-half times the tolerances specified, for the grade.

(b) When the specified tolerance is 10% or less, individual samples may contain not more than double the tolerance specified. This does not apply to potatoes damaged by sprouts. One defective and one off-size specimen are permitted in any sample. One-tenth of the samples inspected enroute or at destination may contain 3 times the tolerance permitted for potatoes affected by freezing, soft rot, or wet breakdown.

**(5) DEFECTS CONSTITUTING DAMAGE OR SERIOUS DAMAGE.** (a) *External defects.* The following external defects may individually or collectively constitute damage or serious damage as defined under s. ATCP 156.01 (4) and (14), respectively:

1. Deep air cracks which penetrate beyond the vascular ring or shallow air cracks which materially detract from the appearance of the individual potato.

2. Second growth or growth cracks which have developed to an extent which materially detracts from the appearance of the individual potato.

3. External discoloration with brown or darker in color skinned areas which materially detract from the appearance of the individual potato.

4. Shriveling, when the potato is more than moderately shriveled, spongy or flabby.

5. Sprouting, when an individual potato has any sprout over one inch in length.

6. Surface scab which covers an area of more than 5% of the surface of the potato in the aggregate.

7. Pitted scab which affects the appearance of the potato to a greater extent than the amount of surface scab permitted or causes a loss of more than 5% of the total weight of the potato.

8. Rhizoctonia, when materially detracting from the appearance of the individual potato.

9. Wireworm or grass damage, when any hole in a potato of 2½ inches in diameter or 6 ounces in weight is more than ¾ inch long, or when the aggregate length of all holes is more than 1¼ inches, or when correspondingly shorter or longer holes occur in smaller or larger potatoes.

10. Dirt or other foreign matter, when the individual potato is more than slightly dirty or slightly stained, or when more than a moderate amount of loose dirt or other foreign matter is present in the sample.

(b) *Internal defects.* The following internal defects may individually or collectively constitute damage or serious damage as defined under s. ATCP 156.01 (4) and (14), respectively.

1. Ingrown sprouts, if removal causes a loss of more than 5% of the total weight of the potato.

2. Internal discoloration occurring entirely within the vascular ring, if more than the equivalent of 3 scattered light brown spots ⅛ inch in diameter are present in a potato 2½ inches in diameter or 6 ounces in weight, or if a correspondingly lesser or greater number of spots are present in smaller or larger potatoes.

3. Internal discoloration outside of or not entirely confined within the vascular ring, if removal causes a loss of more than 5% of the total weight of the potato.

(c) *Defects constituting serious damage.* The following defects constitute serious damage:

1. Dirt, when the individual potato has caked dirt on more than one-half of the surface.

2. External discoloration with brown or darker in color skinned areas which seriously detract from the appearance of the individual potato.

3. Shriveling, when the potato is excessively shriveled, spongy or flabby.

4. Surface scab which covers an area of more than 50% of the surface of the potato in the aggregate.

5. Pitted scab which affects the appearance of the potato to a greater extent than the amount of surface scab permitted or causes a loss of more than 10% of the total weight of the potato.

6. Wireworm or grass damage, when any hole in a potato of 2½ inches in diameter or 6 ounces in weight is more than 1¼ inches long, or when the aggregate length of all holes is more than 2 inches or correspondingly shorter or longer holes in smaller or larger potatoes.

7. Ingrown sprouts, when removal causes a loss of more than 10% of the total weight of the potato.

8. Internal discoloration occurring entirely within the vascular ring, when more than the equivalent of 6 scattered light brown spots of 1 inch diameter, in a potato 2½ inches in diameter or 6 ounces in weight, or a correspondingly lesser or greater number of spots in smaller or larger potatoes.

9. Internal discoloration outside of or not entirely confined within the vascular ring, when removal causes a loss of more than 10% of the total weight of the potato.

**History:** 1-2-56; am. (1) and (3), Register, September, 1957, No. 21, eff. 10-1-57; am. (1) and (2), Register, January, 1976, No. 241, eff. 2-1-76; renum. (1)

to (3) to be (2) to (4) and am. (2), (3), (4) (intro.) and (b), (1) renum. from Ag 26.01 (6) and am., Register, October, 1981, No. 310, eff. 11-1-81; am. (1) and (4) (a), r. and recr. (4) (intro.) and (b), cr. (5), Register, September, 1986, No. 369, eff. 10-1-86; renum. from ATCP 26.04 and am. (5) (a) (intro.) and (b) (intro.), Register, February, 1996, No. 482, eff. 3-1-96.

**ATCP 156.05 Badger state brand. (1) GRADE REQUIREMENTS.** Badger State Brand certified seed potatoes shall consist of potatoes of one variety certified by the college, which are:

- (a) Fairly well shaped and not frozen and
- (b) Free from;

- 1. Freezing injury,
- 2. Blackheart,
- 3. Late blight,
- 4. Bacterial ring rot,
- 5. Nematode or tuber moth injury,
- 6. Soft rot or wet breakdown,

7. Damage as defined in s. ATCP 156.01 (4), including damage arising from external or internal defects under s. ATCP 156.04 (5) (a) and (b), and

- 8. Serious damage as defined in s. ATCP 156.01 (14).

**(2) SIZE.** Unless a different minimum or maximum size is clearly stated on the official tag, the minimum size of each potato shall not be less than 1½ inches in diameter and the maximum size shall not exceed 12 ounces in weight.

**(3) TOLERANCE FOR SIZE.** (a) In order to allow for variations incident to proper sizing, not more than 3% of the potatoes in any lot may be below the required or specified minimum size except that a 5% tolerance shall be allowed when the minimum size specified is 2¼ inches or more in diameter or 5 ounces or more in weight.

(b) Not more than 10% of the potatoes in any lot may exceed the required or specified maximum size.

**(4) TOLERANCES FOR DEFECTS.** In order to allow for variations incident to proper grading and handling, the following tolerances are provided:

- (a) 10% for potatoes seriously damaged by hollow heart,
- (b) 10% for potatoes damaged by sprouts,

(c) 5% for potatoes which fail to meet the remaining requirements of the grade because of internal defects, and

(d) 5% for potatoes which fail to meet the remaining requirements of the grade because of external defects, provided that the following tolerances are not exceeded for the following defects:

- 1. 0.25% for varietal mixture,
- 2. 1.00% for late blight tuber rot,
- 3. 2.00% for serious damage by dry or moist type fusarium tuber rot,
- 4. 0.00% for bacterial ring rot,
- 5. 0.00% for nematode or tuber moth injury,
- 6. 0.50% for potatoes damaged by freezing, soft rot or wet breakdown, provided that an additional 0.50% tolerance for these forms of damage is allowed for potatoes which are inspected enroute or at destination.

**(5) SALE AND DISTRIBUTION.** (a) *Bagged potatoes.* Bagged potatoes of the Badger State Brand may be sold, distributed or transported for sale as certified seed potatoes only in new clean bags. The bags shall bear a net weight statement and be conspicuously and prominently imprinted with the words "Badger State Brand," or the brand of the grower or an organization through which the seed potatoes are marketed and bear an official blue tag issued by the college. The bags shall bear no other grade or brand designation unless approved by the department. The official blue tag shall be securely attached to each bag and be prominently and conspicuously imprinted with the words "Wisconsin Certified Seed Potatoes Badger State Brand". In addition, the blue tag shall show the variety of the potatoes, season during which grown, and name and address of the grower. An official metal seal furnished

by the department shall also be affixed to the string on all hand sewn bags to seal the contents of the bag. Official metal seals are not required on machine sewn bags where the stitching acts as an effective seal for the contents of the bag.

(b) *Bulk potatoes.* Potatoes of the Badger State Brand grade may be sold, distributed or transported for sale in bulk quantities, only in containers or carriers which have been thoroughly cleaned and disinfected immediately before the potatoes are placed in the containers or carriers and which can be sealed and opened only by the breaking of a seal. Each container or carrier of potatoes shall be identified with an official blue tag issued by the college and bearing information required under par. (a). The blue tag shall be attached to each container or carrier with an official metal seal, furnished by the department, in such a manner that the contents of the container or carrier cannot be removed without the breaking of the seal.

(c) *Transportation.* All vehicles, containers or other conveyance equipment shall be cleaned and sanitized prior to use or loading of seed potatoes. The college may withhold tags from any shipment which does not meet this requirement. Seed potatoes shipped without tags may not be certified.

**History:** 1-2-56; am. Register, September, 1957, No. 21, eff. 10-1-57; am. (4), Register, January, 1961, No. 61, eff. 2-1-61; am. (5), Register, January, 1961, No. 61, eff. 8-1-61; am. (5), Register, August, 1962, No. 80, eff. 9-1-62; am. (5), Register, January, 1976, No. 241, eff. 2-1-76; am. (5) (a), Register, April, 1978, No. 268, eff. 5-1-78; am. (1), (4) and (5), Register, October, 1981, No. 310, eff. 11-1-81; am. (1) (b) 4., (3) (a) and (5) (a), renum. (1) (b) 5. to 7. to be 6. to 8. and am. 7. and 8., cr. (1) (b) 5. and (5) (c), r. and recr. (3) (b) and (4), Register, September, 1986, No. 369, eff. 10-1-86; renum. from ATCP 26.05 and am. (1) (b) 7. and 8., Register, February, 1996, No. 482, eff. 3-1-96.

**ATCP 156.06 Yellow tag grade. (1) GRADE REQUIREMENTS.** Yellow Tag Grade certified seed potatoes shall consist of potatoes of one variety, certified by the college which are:

- (a) Not seriously misshapen and not frozen, except that potatoes seriously misshapen may be graded and certified as Yellow Tag Grade potatoes if the potatoes are acceptable to the buyer, and
- (b) Free from;
  1. Freezing injury,
  2. Blackheart,
  3. Late blight,
  4. Bacterial ring rot,
  5. Soft rot or wet breakdown,
  6. Damage by external defects as defined in s. ATCP 156.04
- (5) (a), and
7. Serious damage, except hollow heart, caused by internal defects as defined in s. ATCP 156.04 (5) (b).

(2) **SIZE.** The size requirements for Yellow Tag Grade potatoes shall be the same as for Badger State Brand certified seed potatoes.

(3) **TOLERANCE FOR SIZE.** (a) In order to allow for variations incident to proper sizing, not more than 3% of the potatoes in any lot of Yellow Tag Grade potatoes may be below the minimum size.

(b) Not more than 15% of the potatoes in any lot of Yellow Tag Grade potatoes may exceed the maximum size, provided that when the maximum size is not more than 12 ounces, the quantity of potatoes in excess of 16 ounces shall not exceed 5% of the lot.

(4) **TOLERANCE FOR DEFECTS.** In order to allow for variations incident to proper grading and handling, the following tolerances are permitted for Yellow Tag Grade potatoes:

- (a) 10% for potatoes damaged by sprouts.
- (b) 5% for potatoes seriously damaged by internal defects.
- (c) 20% for potatoes failing to meet the remaining requirements of this grade, provided that the following tolerances are not exceeded for the following defects:
  1. 6.00% for defects constituting serious damage,
  2. 5.00% for damage by scab,
  3. 1.00% for late blight tuber rot,

4. 0.25% for varietal mixture,
5. 0.00% for injury caused by bacterial ring rot, nematodes or tuber moths,
6. 1.00% for frozen, soft rot or wet breakdown.

(5) **SALE AND DISTRIBUTION.** (a) *Bagged potatoes.* Bagged potatoes of the Yellow Tag Grade may be sold, distributed or transported for sale as certified seed potatoes only in new clean bags. The bags shall bear a net weight statement and otherwise be plain or conspicuously and prominently imprinted with the brand of the grower or an organization through which the seed potatoes are marketed and bear an official yellow tag, issued by the college. The bags shall bear no other grade or brand designation. The official yellow tag shall be securely attached to each bag, and be prominently and conspicuously imprinted with the words "Wisconsin Certified Seed Potatoes Yellow Tag Grade". In addition, the tag shall show the variety of the potatoes, the season during which grown, and name and address of the grower. An official metal seal furnished by the department shall be affixed to the finishing end of the string on all hand sewn bags to seal the contents of the bag. Official metal seals are not required on machine sewn bags where the stitching acts as an effective seal for the contents of the bag.

(b) *Bulk potatoes.* Yellow Tag Grade potatoes may be sold, distributed or transported for sale in bulk quantities, only in containers or carriers which can be sealed and have been thoroughly cleaned and disinfected immediately before the potatoes are placed in the containers or carriers and which can be opened only by the breaking of a seal. Each container or carrier of potatoes shall be identified with an official yellow tag issued by the college and bearing the information required under par. (a). The yellow tag shall be attached to each container or carrier with an official metal seal, furnished by the department, in such a manner that the contents of the container or carrier cannot be removed without the breaking of the seal.

(c) *Transportation.* All vehicles, containers or other conveyance equipment shall be cleaned and sanitized prior to use or loading of seed potatoes. The college may withhold tags from any shipment that does not meet this requirement. Seed potatoes shipped without tags may not be certified.

**History:** 1-2-56; am. Register, September, 1957, No. 21, eff. 10-1-57; am. (3), Register, March, 1958, No. 27, eff. 4-1-58; am. (4), Register, August, 1962, No. 80, eff. 9-1-62; am. (1) and (4), Register, January, 1976, No. 241, eff. 2-1-76; am. (4) (a), Register, April, 1978, No. 268, eff. 5-1-78; am. Register, October, 1981, No. 310, eff. 11-1-81; am. (1) (a), (b) 4., 6. and 7. and (2), r. and recr. (3), renum. (4) to be (5), cr. (4) and (5) (c), Register, September, 1986, No. 369, eff. 10-1-86; renum. from ATCP 26.06 and am. (1) (b) 6. and 7., Register, February, 1996, No. 482, eff. 3-1-96.

**ATCP 156.07 Foundation seed. (1) BADGER STATE BRAND FOUNDATION.** (a) *Grade requirements.* Badger State Brand Foundation certified seed potatoes shall consist of potatoes of one variety, certified by the college, which shall meet the grade requirements of Badger State Brand certified seed potatoes under s. ATCP 156.05.

(b) *Size.* The size requirements and the tolerances for size to be allowed shall be the same as for Badger State Brand certified seed potatoes.

(c) *Sale and distribution.* 1. *Bagged potatoes.* Bagged potatoes of the Badger State Brand Foundation grade may be sold, distributed or transported for sale as Badger State Brand Foundation seed potatoes only in new clean bags. The bags shall bear a net weight statement and be conspicuously and prominently imprinted with the words "Badger State Brand" or the brand of the grower or the organization through which the seed potatoes are marketed and bear an official blue tag issued by the college. The bags shall bear no other grade or brand designation. The official blue tag shall be securely attached to each bag, and be prominently and conspicuously imprinted with the words "Wisconsin Certified Seed Potatoes Badger State Brand" with the word "Foundation" overprinted on the face of the tag. In addition, the tag shall show the variety of the potatoes, the season during which grown, and

name and address of the grower. An official metal seal furnished by the department shall also be affixed to the finishing end of the string on all hand sewn bags to seal the contents of the bag. Official metal seals are not required on machine sewn bags where the stitching acts as an effective seal for the contents of the bag.

2. Bulk potatoes. Potatoes of the Badger State Brand Foundation grade may be sold, distributed or transported for sale in bulk quantities, only in containers or carriers which can be sealed and opened by the breaking of the seal and which have been thoroughly cleaned and disinfected immediately before use for the bulk shipment of potatoes. Each container or carrier of potatoes shall be identified with an official blue tag issued by the college and bearing the information required under subd. 1., with the word "Foundation" overprinted on the face of the tag. The blue tag shall be attached to each container or carrier with an official metal seal, furnished by the department, in such a manner that the contents of the container or carrier cannot be removed without the breaking of the seal. Potatoes of this grade may not be sold, distributed or transported in bulk to out-of-state buyers in interstate commerce. No potatoes of the Badger State Brand Foundation grade may be sold, distributed or transported in bulk within this state without prior notification to or receipt of a permit from the college.

3. Transportation. All vehicles, containers or other conveyance equipment shall be cleaned and sanitized prior to use or loading of seed potatoes. The college may withhold tags from any shipment that does not meet this requirement. Seed potatoes shipped without tags may not be certified.

**(2) YELLOW TAG GRADE FOUNDATION.** (a) *Grade requirements.* Yellow Tag Grade Foundation seed potatoes shall consist of potatoes of one variety, certified by the college, which shall meet the grade requirements of Yellow Tag Grade certified seed potatoes under s. ATCP 156.06.

(b) *Size.* The size requirements and the tolerances for size to be allowed shall be the same as for Badger State Brand certified seed potatoes.

(c) *Sale and distribution.* 1. Bagged potatoes. Bagged potatoes of the Yellow Tag Grade Foundation grade may be sold, distributed or transported for sale as Yellow Tag Grade Foundation seed potatoes only in new clean bags. The bags shall bear a net weight statement and otherwise be plain or conspicuously and prominently imprinted with the brand of the grower or the organization through which the seed potatoes are marketed and bear an official yellow tag issued by the college. The bags shall bear no other grade or brand designation. The official yellow tag shall be securely attached to each bag, and conspicuously and prominently imprinted with the words "Wisconsin Certified Seed Potatoes Yellow Tag Grade" with the word "Foundation" overprinted on the face of the tag. In addition, the tag shall show the variety of the potatoes, the season during which grown, and name and address of the grower. An official metal seal furnished by the department shall also be affixed to the finishing end of the string on all hand sewn bags to seal the contents of the bag. Official metal seals are not required on machine sewn bags where the stitching acts as an effective seal for the contents of the bag.

2. Bulk potatoes. Potatoes of the Yellow Tag Grade Foundation grade may be sold, distributed or transported for sale in bulk quantities, only in containers or carriers which can be sealed and opened by the breaking of the seal and which have been thoroughly cleaned and disinfected immediately before use for the bulk shipment of potatoes. Each container or carrier of potatoes shall be identified with an official yellow tag issued by the college and bearing the information required under subd. 1., with the word "Foundation" overprinted on the face of the tag. The yellow tag shall be attached to each container or carrier with an official metal seal, furnished by the department, in such a manner that the contents of the container or carrier cannot be removed without the breaking of the seal. Potatoes of this grade may not be sold, distributed or transported in bulk interstate to out-of-state buyers in interstate commerce. No potatoes of the Yellow Tag Grade Foundation grade may be sold, distributed or transported in bulk within this state without prior notification to or receipt of a permit from the college.

3. Transportation. All vehicles, containers or other conveyance equipment shall be cleaned and sanitized prior to use or loading of seed potatoes. The college may withhold tags from any shipment that does not meet this requirement. Seed potatoes shipped without tags may not be certified.

**History:** 1-2-56; am. Register, September, 1957, No. 21, eff. 10-1-57; am. Register, August, 1962, No. 80, eff. 9-1-62; am. (1) (c) and (2) (c), Register, January, 1976, No. 241, eff. 2-1-76; am. (1) (c) 1 and (2) (c) 1., Register, April, 1978, No. 268, eff. 5-1-78; am. Register, October, 1981, No. 310, eff. 11-1-81; cr. (1) (c) 3. and (2) 3., Register, September, 1986, No. 369, eff. 10-1-86; renum. from ATCP 26.07 and am. (1) (a) and (2) (a), Register, February, 1996, No. 482, eff. 3-1-96.

#### **ATCP 156.08 Elite foundation seed potatoes.**

**(1)** Seed potatoes produced and sold by the college as elite foundation seed potatoes may be used for the planting and production of potatoes to be entered for certification as foundation or certified seed without grading inspection by the department. Elite foundation seed shall conform to all requirements prescribed in s. ATCP 156.03 (6), and be the progeny from tuber-unit selections combined with clonal increase that have been rigidly screened for freedom from diseases by accepted indexing methods. No person may sell or represent seed potatoes as elite foundation seed potatoes unless the potatoes have been produced by the college and conform to the requirements of this section.

**(2)** Elite foundation seed potatoes shall consist of potatoes of one variety and as a minimum meet the standards for Yellow Tag Grade seed potatoes under s. ATCP 156.06, except for defects not affecting productivity such as shape, sunburn, insect damage, mahogany browning, and internal discoloration. Elite foundation seed potatoes shall be labeled with a white tag printed with the words "Wisconsin Certified Seed Potatoes" with the words "Elite Foundation" overprinted on the face of the tag.

**History:** Cr. Register, October, 1981, No. 310, eff. 11-1-81; renum. from ATCP 26.08 and am. Register, February, 1996, No. 482, eff. 3-1-96.

**ATCP 156.09 Authority.** These rules are adopted under the authority of ss. 93.09 and 100.14, Stats., and enforced as provided under s. 93.21 (3), Stats.

**History:** Cr. Register, October, 1981, No. 310, eff. 11-1-81; renum. from ATCP 26.09, Register, February, 1996, No. 482, eff. 3-1-96.