

# TABLE OF CONTENTS

<b>General Seed Potato Inspection Instructions and Procedures .....</b>	<b>5</b>
Misconduct and Bribery Procedures .....	6
The Golden Rule .....	7
Sampling and Recording Procedures .....	8
Seed Potato Regulations in Idaho and Shipping Point Inspections .....	9
Inspection Procedures .....	10
Procedures for Tagging and Sealing Bulk Certified Seed Potatoes .....	10
Procedures for Tagging and Sealing Bulk Cut Seed Potatoes .....	10
Tagging Requests for Inspection/Arbitration Tagging .....	11
Bulk Holding Container Tag and Seal Issuance .....	12
Bulk Holding Container Tag and Seal Issuance .....	13
Instructions for the use of ICIA "Seed Lot Verification Report" .....	14
"Seed Lot Verification Report" .....	15
Disqualifying Conditions .....	16
Procedures to Follow When Suspect Tubers are Found .....	16
Tuber Symptoms Information Form .....	17
General Instructions for Seed Potato Sampling .....	18
Sampling Ratio Guideline .....	19
Disinfectant Methods for Trays and Inspection Tools .....	20
<b>Rules of Certification for Seed Potatoes in Idaho .....</b>	<b>23</b>
Idaho Certified Seed Grades .....	24 - 25
Definition of Terms .....	26 - 27
Tolerance Comparison Chart .....	29
Percentage and Waste Charts .....	31

**Individual Scoring Criteria Blue, Green, and Yellow Tag Seed Grades ..... 33**

Varietal Purity ..... 35

Shape Requirements ..... 35 – 37

Folded End ..... 36

Second Growth ..... 37– 38

Growth Crack ..... 38

Cuts or Broken off Second Growth ..... 39

Clipping or Trimming ..... 39

Mechanical Injury (Bruise) ..... 39

Air Crack ..... 39

Scab ..... 40

Silver Scurf ..... 40

Skin Checks ..... 40

Sprouts ..... 40

Sunburn and Greening ..... 41

External Discoloration ..... 41

Adhering Dirt ..... 41

Flattened, Depressed, or Sunken Areas ..... 41

Rhizoctonia ..... 42

Wireworm and/or Grub ..... 42

Rodents and/or Bird Damage ..... 42

**Restricted Tolerance**

Dry or Moist Type Fusarium Tuber Rot ..... 43

Dry or Moist Type Tuber Rot ..... 43

Dry Type Freezing Injury ..... 45

**Free From Defects**

Soft Rot or Wet Breakdown ..... 44

Late Blight Tuber Rot ..... 44

Blackheart ..... 44

Live Pest ..... 45

<b>Internal Defects .....</b>	<b>45</b>
Preliminary Cutting to Determine the Presence of Internal Defects .....	46
Hollow Heart .....	47
Vascular Ring Discoloration .....	48
Other Internal Defects .....	48
<b>Zero Tolerance Defects .....</b>	<b>49</b>
Bacterial Ring Rot .....	49
Nematode .....	50
Tuber Moth Injury (Tuber Worm) .....	51
<b>Necrotic Virus Symptoms .....</b>	<b>52</b>
Corky Ring Spot .....	52
PMTV (Potato Mop Top Virus) and PVY .....	52
Inspection plan for lots that have not been pre-cleared .....	53
<b>U.S. Standards and ICIA Rules of Certification .....</b>	<b>55</b>
Idaho Seed Potato Certification Standards .....	57 – 59
United States Standards for Grades of Seed Potatoes .....	62 – 66
United States Standards for Grades of Potatoes .....	67 - 81
<b>Paperwork Survival Guide .....</b>	<b>83</b>



# General Seed Potato Inspection Instructions and Procedures



## EMPLOYEE MISCONDUCT AND BRIBERY PROCEDURES

The integrity of licensees must be above question. Any willful misconduct or any other conduct adverse to the public health, interest, or safety will be cause for suspending or revoking a license. Forms of misconduct which are cause for disciplinary action include, but are not limited to, the following:

- (1) Use of alcoholic beverages in any form while on the job. Their use off the job must not bring discredit to the licensee or to the Service and must not interfere with the performance of official duties;
- (2) Having a financial interest, directly or indirectly, in the products sampled or inspected;
- (3) Performance of duties in a manner which clearly demonstrates disregard for written and/or oral instructions or which raises questions as to the licensee's competence;
- (4) Falsifying expense vouchers or time sheets;
- (5) Accepting money, other valuables, or gifts for "especially efficient or accommodating service";
- (6) Borrowing money or accepting other financial favors from shippers, growers, other users of the Service or their representatives;
- (7) Accepting from users of the Service, offers of aid in getting trade-in allowances, unusual discounts, etc.;
- (8) Accepting gratuities or gifts from patrons of the Service. This includes Christmas presents, meals, tickets to ball games, etc. This restriction does not prohibit:
  - (a) Acceptance of any of the usual courtesies in an obvious family or personal relationship when the circumstances make it clear that it is those relationships rather than the business of the persons concerned which are the motivating factors; and,
  - (b) Acceptance of unsolicited advertising or promotional material, such as pens, pencils, note pads, calendars, and other things of nominal value.
- (9) Soliciting or accepting a bribe. Violators are also subject to prosecution under Section 201 of the United States Code, Title 18, Crimes and Criminal Procedures.
- (10) Taking products or samples of products for personal use.

### **As a licensee of the United States Department of Agriculture, *You agree to the following:***

- \* I will not sample or inspect any lot of products to which I or my employer is an interested party.
- \* To abide by all Federal instructions governing the sampling and inspection of fruits, vegetables, nuts and miscellaneous products, whether given to me in the form of handbooks, memorandums, written instructions, or personally by the Federal Supervising Inspector to whom I am responsible.
- \* In making inspections based on Federal grades, to accept the interpretation of such grades given to me by the Federal Supervising Inspector or other authorized representatives of the USDA, Agricultural Marketing Service.
- \* To make clear and accurate inspection notes, including scoring of grade, defects and other memorandums, of each inspection made by me as shall be directed by the Federal Supervising Inspector.
- \* To prepare my certificates from such notes strictly in accord with Federal instructions.
- \* To surrender my license card when so requested by the Federal Supervising Inspector or upon expiration (December 31 next following date of issue), either to him/her or by mail to the Specialty Crops Inspection Division, Agricultural Marketing Service, U.S. Department of Agriculture, 1400 Independence Ave. SW, Washington, DC 20250.

## **THE GOLDEN RULE**

**POST #1.** Your main objective as a disinterested third party is to satisfy the grower, the shipper and the receiver or consumer, through the impartial and honest application of the grades and standards that are set forth by your supervisors.

**POST #2.** Personal relationship should be friendly, courteous and helpful but only to the point of equality, not to the point of favoritism through bribery or overbearing by his attempt to tell the applicant or the crew how to run their business. Seldom do inspectors get into trouble for talking to little, but often for talking too much. KNOW THE FACTS.

**POST #3.** All information, facts and trade practices are confidential; therefore we should at all times treat them as such and not criticize, express opinions about trade or our work assignments, either in public or in private, except for facts which your supervisors should know.

**POST #4.** Financial transactions are not to be had with the trade, either in the forms of borrowing, loaning, investments, or by the actual sales of products. Never should an inspector grade product he has a financial interest in.

**POST #5.** While on the job be neat, clean, sober at all times, and observe all rules of the trade, such as no smoking signs, etc.. When in Rome do as the Romans do as long as you do not discredit the inspection service either on the job or on your own time.

**POST #6.** All unusual circumstances, changes in practices, temporary shut-downs or questions and gripes should be reported to your supervisors as they occur.

## Sampling and Recording Procedures

Adequate and representative sampling of a lot is vitally important in accurate certification. **The inspector is responsible** for seeing that the product is representatively sampled and for maintaining the integrity of the sampling process.

The following paragraphs appear in the "General Shipping Point Inspection Instructions":

**Attempting Too Many Inspections.** The inspector must not attempt to certify more lots than can be properly examined. **They should get in touch with his supervisor immediately** when he has more work than he can properly handle.

**Avoid Causing Inconvenience in Making Inspections.** When inspections are made during the process of loading, the inspector should avoid unnecessary interference with the loading operation. They should ask shippers to furnish information regarding inspections which they will request far enough in advance so that it will not be necessary to disturb the portion of the car already loaded in order to obtain samples. **However, thoroughness must not be sacrificed for fear of causing inconvenience.** Some shippers may try to stampede the inspector by rapid loading in order to reduce the number of samples examined and so make possible the inclusion of under grade products.

**Misrepresentation of Score Sheets.** All facts must be carefully and accurately determined while the inspection is being made. **Inspectors positively must not enter any score on the notesheet unless it accurately represents a sample that has been examined and scored by him.** Instances have occurred, however, where inspectors have set down scorings of samples not actually taken to make it appear that a very thorough inspection was made. The filling out of a complete score sheet after inspections have been completed for the day when it is not possible for an inspector to remember in detail the scorings of the examined samples, even where there can be no doubt that a great many samples were actually examined, is a serious offense that may result in canceling the license of the inspector. Such a score sheet is a misrepresentation of the facts.

Reasonable Accessibility. It states in the "Regulations Governing Inspection" that an application may be rejected for failure of the **applicant to make the commodity reasonably available or accessible or inspection.** If adequate sampling cannot be accomplished, **certification may be denied.**



# **SEED POTATOES REGULATIONS IN IDAHO AND SHIPPING POINT INSPECTIONS**

## **WHAT DOES CERTIFICATION MEAN?**

The attaching of the official Idaho certification tag to a sack or container of seed potatoes certifies that the potatoes have met the rules and regulations of the Idaho Crop Improvement Association, Inc. and have been inspected and certified for grade by the Idaho Federal-State Inspection Service and found to meet the grade requirements for certified seed at the time of inspection, based on sample inspected. Certification is not complete until all these requirements have been fulfilled.

## **WHAT ARE CERTIFIED SEED POTATOES?**

Certified seed potatoes are those that were entered in the Idaho Crop Improvement Association (ICIA) program and passed 4 inspections and were also inspected, tagged and sealed at shipping time. No other potatoes can be called "Certified".

## **WHAT ARE SEED GRADES?**

Specific apparent and physical standards that seed potatoes must meet. Blue tag refers to the US #1 Seed Potato Grade. The Green and Yellow tag refers to the US #2 Commercial Potato Grades. Each of the grades has some exceptions (see the Idaho Rules of Certification).

Seed grades do not refer to disease content. Blue, Green and Yellow tagged potatoes must all meet the same field, storage and winter testing requirements based on seed class.

## **WHAT DO THE SHIPPING POINT INSPECTORS DO?**

1. The inspector verifies, using an official ICIA storage map, the identity of the potatoes to be tagged and that the potatoes are eligible for tagging.
2. The inspector samples the potatoes as they are being sorted and loaded on to transport vehicles. The samples are used to determine if the load of potatoes conforms to the specific physical grade requirements of the Blue, Green or Yellow Tag.
3. The inspectors observe the potatoes both in the samples and generally as they are being loaded for any evidence of root-knot nematode or bacterial ring rot. If such evidence is found the tagging operation is stopped until such a time that the ICIA verifies the presence or absence of these organisms. No further tagging will occur if either of these organisms are confirmed.
4. The inspector issues an official inspection certificate and fills out the ICIA certification tag with pertinent information concerning the seed lot, load and carrier.
5. The inspector also seals the unloading mechanism of the transport vehicle with a numbered ICIA metal seal which attaches the certification tag to the load or container.

## **INSPECTION PROCEDURES**

1. Samples cannot be drawn from stationary piles or partially or fully loaded carriers. Bulk potatoes must be flowing in order to be representatively sampled . Samples can never be handpicked.
2. Sampling methods and procedures to be at the discretion of the Federal-State Inspection Service.
3. Grade must be stated on the inspection certificate.
4. Identity of inspected lots will be maintained so as to conform to inspection certificate and Idaho Crop Improvement Association, Inc. storage maps.

### **PROCEDURE FOR TAGGING AND SEALING BULK CERTIFIED SEED POTATOES.**

1. Bulk potatoes eligible to be tagged and sealed must be graded to meet the minimum standards for the specified grade.
2. A certification tag with the following information shall be attached to the transporting vehicle with an official numbered seal in such a manner that the unloading mechanism cannot operate without the seal breaking.
  - a. Variety
  - b. Class (generation)
  - c. Seal number
  - d. Grower
  - e. Buyer's name (optional)
  - f. Weight
  - g. Truck and/or trailer license
  - h. Certification number (lot)
  - i. Inspector's name
  - j. Date of inspection

### **PROCEDURE FOR TAGGING AND SEALING BULK CUT SEED CERTIFIED POTATOES.**

1. In order to be eligible for tagging, bulk seed potatoes that will be cut prior to shipment must be inspected and meet the minimum standards for the specified Idaho seed potato grade (Blue, Green or Yellow) prior to cutting.
2. Cut seed will be tagged and sealed as outlined above.
3. The words "Cut Seed" will be stamped on the front of the seed grade tag.
4. Cut seed that will be stored for a period of time before shipment, may be tagged and sealed at a later date as bulk certified seed if seed lot identity is maintained and if the seed was graded and inspected prior to cutting.
5. The Idaho Crop Improvement Association, Inc. must be notified as to where the cut seed is being stored.
6. A federal-state inspector must be present when the cut seed is being loaded on transport vehicles and will tag and seal each vehicle.

## TAGGING REQUEST FOR INSPECTION / ARBITRATION TAGGING

DATE: \_\_\_\_\_ EXPORT: YES \_\_\_\_\_ NO: \_\_\_\_\_

End Use: Recertification \_\_\_\_\_ Commercial Production \_\_\_\_\_

FARM NAME: \_\_\_\_\_

LOT CERTIFICATION NUMBER: \_\_\_\_\_ GENERATION: \_\_\_\_\_

POTATO VARIETY: \_\_\_\_\_ POTATO COLOR: \_\_\_\_\_

GRADE REQUESTED: BLUE \_\_\_\_\_ GREEN \_\_\_\_\_ YELLOW \_\_\_\_\_

SIZE: MINIMUM \_\_\_\_\_ MAXIMUM \_\_\_\_\_

REMARKS:

\_\_\_\_\_  
\_\_\_\_\_

The Idaho Crop Improvement Assoc. has advised the Fed-State Inspection Service that attachment of arbitration tags to all shipments of Idaho Certified seed potatoes in conjunction with the certification tagging was approved by their growers and Board of Directors.

Arbitration as provided for in the Pure Seed Law shall not be required unless notice of arbitration is in the following form or the equivalent as stated below.

### NOTICE OF REQUIRED ARBITRATION

[ Under the seed laws of certain states, arbitration is required as a precondition of maintaining certain legal action, counterclaims or defense against a seller of seed. The buyer must file a complaint, along with the filing fee, with the State Department of Agriculture within such time as to permit inspection of the crops and notify seller of complaint by certified mail. ]

Please indicate if you wish to have arbitration tags attached. We are asking for grower/seller approval before attaching arbitration tags.

**Attach Arbitration Tags:** YES \_\_\_\_\_ NO \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE  
(GROWER/SELLER OR RESPONSIBLE PARTY)

\_\_\_\_\_  
PRINTED NAME TITLE

**NOTICE:** Any grower/seller electing to change a decision concerning arbitration tagging shall contact a representative of the Fed-State Inspection Service immediately.

**Any changes must be submitted in writing by the person signing this form.**

## **Instructions for the use of ICIA “Bulk Holding Container Tag and Seal Issuance Form”**

The Idaho Crop Improvement Association allows Federal-State Inspectors to issue bulk tags and seals to growers for seed lots which have been previously inspected and certified and are being held in bins for later shipment.

The Inspector fills in the Date, Lot Certification Number, Inspection Certificate Number, Total Weight and Seal Numbers issued.

The grower must sign the “Bulk Holding Container Tag and Seal Issuance Form” and is responsible for attaching the seals and tags to the transport vehicles.

A temporary seal attached by a federal-state inspector may seal a holding container for up to 6 days (not inclusive of date inspected). Seed lots held for longer than 6 days must have a new Federal-State Inspection performed when the seed is being loaded onto the transport vehicle. Federal-State will tag and seal each container.

# IDAHO CROP IMPROVEMENT ASSOCIATION, INC. SEED LOT VERIFICATION REPORT

## BULK HOLDING CONTAINER TAG & SEAL ISSUANCE FORM

**INSTRUCTIONS:** When tags and seals are issued to growers for seed lots which have been previously inspected and certified and are being held in bins or containers for later shipment use this form.

A temporary seal attached by a federal-state inspector may seal a holding container for up to 6 days (not inclusive of date inspected). Seed lots held for longer than 6 days (not inclusive of date inspected) will require an updated state inspection when seed is loaded onto the transport vehicle. Federal-state will tag and seal each container and/or load.

**APPLICANT NAME:** \_\_\_\_\_

DATE	CERTIFICATION NUMBER	FEDERAL-STATE INSPECTION CERTIFICATE NUMBER	TOTAL WEGHT	SEAL NUMBERS	SIGNATURE OF GROWER OR AUTHORIZED REPRESENTATIVE

**INSPECTOR'S SIGNATURE** \_\_\_\_\_ **DATE** \_\_\_\_\_

## Instructions for the use of the ICIA "Seed Lot Verification Report"

1. The inspector should follow his or her normal verification procedure. If the identity of the seed to be tagged can be verified by the inspector, this form should not be used. If there is a question as to the identity of a portion of a seed lot because of grower sorting activities, a "Seed Lot Verification Report" should be filled out.
2. The inspector should ask the grower to point out on the ICIA storage map where the seed in question came from.
3. The inspector should then fill out the "Seed Lot Verification Report". The grower or his authorized representative must sign this report before the seed in question can be tagged. A separate inspection certificate should be written to cover the inspection of the seed in question.
4. If for some reason the grower will not sign the report, the seed **cannot be tagged**. If a dispute occurs over this procedure contact your supervisor, your District office or the Idaho Crop Improvement Assn.

Please designate for EACH LOT: Variety, Certification #, Generation & CWT

FARM NAME: North Farms Cellar on 180N COPY

CELLAR NAME NO.: West Side CELLAR NAME NO.: East Side

Cellar Name	Lot #	Quantity (CWT)
West Side	R. Norkotah 63	43,000
West Side	84140131	
West Side	Lot #6	
East Side	R. Norkotah 64	47,000
East Side	84140130	
East Side	Lot #5	

DE P/M/CK

ICIA Storage Map

# IDAHO CROP IMPROVEMENT ASSOCIATION, INC. SEED LOT VERIFICATION REPORT

APPLICANT NAME: \_\_\_\_\_

DATE	CERTIFICATION NUMBER	FEDERAL-STATE INSPECTION CERTIFICATE NUMBER	TOTAL WEGHT	SIGNATURE OF GROWER OR AUTHORIZED REPRESENTATIVE

INSPECTOR'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

## DISQUALIFYING CONDITIONS

Failure to have potatoes inspected, tagged and sealed by the Federal State Inspection Service.

Failing to meet size and grade requirements at the time of inspection.

Federal-state inspectors and Idaho Crop Improvement Association, Inc. fieldmen are given authority to refuse tags and seals on any potatoes for any condition or situation that may bring certified seed into disfavor or make an accurate inspection impossible.

Bacterial Ring Rot and Root-Knot Nematode are zero tolerance factors. Any seed lot, regardless of generation, shall be rejected from certification at any time when any of these factors is confirmed by laboratory testing.

During regular inspections, additional inspections, or at any other time one or more of these diseases or pests are detected inspectors must follow the procedures outlined below.

## Procedures to Follow When Suspect Tubers are Found:

### INSPECTOR

1. Notify the Grower or Responsible Party (ONLY)
2. Stop Tagging Operation
3. Notify Your Supervisor (If unable to contact supervisor, contact District office.)
4. Complete Seed Potato Form - 101

### SUPERVISOR

1. Notify District Office. (If unable to contact District office, contact ICIA.)
2. Secure Tuber in Sealed Container

### DISTRICT MANAGER

1. Contact Idaho Crop Improvement Association, Report Facts and Arrange for Tuber Transport
  2. Contact Boise Office
1. This information is **strictly confidential**.
  2. Suspect tuber symptoms should only be discussed with persons outlined by these procedures.
  3. **Do not remove suspect tubers from the inspection site** unless removal is authorized by Idaho Crop Improvement Association.



**FED-STATE INSPECTION SERVICE**  
**Tuber Symptoms Information Form**

This is to Certify that I \_\_\_\_\_ notified  
Inspector

\_\_\_\_\_  
Grower/Responsible Party                      Variety                      Certification No.

at \_\_\_\_\_  
Hour                      Date                      Inspection Point

A tuber was found to have symptoms characteristic of:

CHECK ONE:

- |                          |            |                          |   |
|--------------------------|------------|--------------------------|---|
| <input type="checkbox"/> | Blackwart  | <input type="checkbox"/> | Virus that Causes Tuber Necrosis (PVY,PMTV,TRV) |
| <input type="checkbox"/> | Tuber Moth | <input type="checkbox"/> | Root-Knot Nematode                              |
| <input type="checkbox"/> | Ring Rot   | <input type="checkbox"/> | Other _____                                     |

\_\_\_\_\_  
Grower or Responsible Party                      Inspector

\_\_\_\_\_  
ICIA Representative Receiving Tuber                      Seal No.

This form does not verify the presence of any disease;

Remarks:

\_\_\_\_\_  
\_\_\_\_\_

Tagging operations will be stopped until ICIA verifies the presence or absence of any suspect organism.

## General Instructions for Seed Potato Sampling

These instructions are a general guide for sampling procedures. They contain the basic principles for sampling potatoes under most conditions. Additional sampling instructions covering various local conditions will be given by the Supervisor in charge of the area.

Representative sampling is an extremely important part of the inspection procedure. Therefore, it is highly important that these instructions be studied carefully and strictly adhered to at all time.

1. It can make no difference to the sampler who the grower or buyer is of the potatoes. You are an employee of the Federal-State Inspection Service. Be strictly impartial.
2. Do not add to or remove anything from a sample such as, vines, rocks, clods, or potatoes. Always draw the sample in the correct manner, no matter who is watching you.
3. To avoid missing loads or delaying unloading, the sampler must remain in the assigned working area until relieved.
4. Company rules must be observed at all times, such as, no smoking, parking cars in designated areas, etc.
5. Do not engage in horseplay or practical jokes while on duty as this often leads to trouble or injury.
6. Be friendly and courteous with the people you are working around.
7. Be alert at all times while working around machinery to avoid injury. Look before you reach or move to be sure you are clear of moving chains, belts, trucks, etc. When lifting, be sure you are in the correct position to use the right muscles to avoid strains, hernias, back injuries, etc. If you are injured, let your supervisor know.
8. Ultimately, sample size and the frequency of samples must be in balance in order to reduce the chances of improper sampling. For instance, ten/twenty pound samples properly drawn should be more representative than two/one hundred pound samples, also properly drawn.
9. When unusual problems arise that are not covered in these instructions, do not hesitate to call your supervisor for further instructions. If it is necessary to act immediately, use your best judgment and advise your supervisor of the action taken.

## Sampling Ratio Guideline

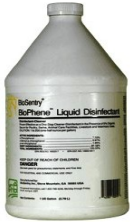
TYPE OF CARRIER	NORMAL NUMBER OF SAMPLES	MINIMUM NUMBER OF SAMPLES REQUIRED FOR CERTIFICATION
Semi. Trailer (approx. 50,000 lbs.)	7 to 10	5
10 Wheeler Truck (approx. 30,000 lbs.)	5	3
Trailer Behind Truck (approx. 15,000 lbs.)	3 to 4	2
Single Axle Truck (approx. 15,000 lbs.)	3 to 4	2

**The sample size shall not be less than 20 pounds.**

## Disinfectant Methods for Trays and Inspection Tools

The University of Idaho has offered the following guidelines to be used when disinfecting Trays and Inspection tools used while inspecting certified seed.

### Bulk-Type Quaternary Ammonium Disinfectants:



(Must be diluted before use)

### Aerosol Spray Disinfectant:



1. Wipe the surface of the equipment clean removing all dirt and debris.
2. Scrub trays with a brush using a diluted food grade detergent.
3. Rinse thoroughly removing all detergent before applying disinfectant.
4. Cover all surfaces with a properly diluted disinfectant.
5. Spray-Type Disinfectants: cover until all surfaces are wet.
6. Leave wet in disinfectant for at least 10 minutes.

## Keep it Clean







# **RULES OF CERTIFICATION SEED POTATOES IN IDAHO**

## **Definition of Terms Tolerances and Grading Criteria**



**Photographs of Potato Defects and Diseases are for Identification Purposes and are not Official USDA Visual Aids**

## Idaho Certified Blue Tag Seed Potatoes

The blue tag shall be equivalent to the **U.S. No. 1 seed potato grade** (see pages 61- 66) with the following exceptions. There is a 1% tolerance for late blight.

1. Minimum size 1½ in. Maximum size 12 oz. unless otherwise specified by the grower.
2. Scab - shall not cover more than one-fifth of the surface area.
3. Adhering dirt - a maximum of 50% of the tuber surface may be covered with caked dirt.
4. Loose dirt and/or foreign material - included in total external tolerance.
5. Clipping or trimming not allowed.
6. Freshly broken off second growth - shall not be damaged.
7. Wireworm and/or grub - damaged by waste.
8. Tolerances: For total defects 10%. Three percent (3%) for potatoes which are affected by freezing injury. One percent (1%) for potatoes which are affected by soft rot, wet breakdown or are frozen. The limitations for external and internal defects shall apply as written in the U.S. No. 1 seed potato grade.
9. An additional 10% may be damaged, but not seriously, by shape.

## Idaho Certified Green Tag Seed Potatoes

The green tag grade shall be equivalent to the **U.S. No. 2 grade** (see pages 67 - 81) with the following exceptions. There is a 1% tolerance for late blight.

1. Maximum and minimum size shall be specified by the grower.
2. Wireworm and/or grub - serious damage by waste. Permit an additional six percent (6%) serious damage by waste.
3. Scab - shall not cover more than one-fifth (1/5) of the surface area.
4. Hollow Heart - no requirements.
5. Adhering dirt - no requirements.
6. Loose dirt and/or foreign material - included in total external tolerance.
7. Varietal purity - not more than 0.2% of other tuber identifiable varieties.
8. Clipping - shall not be clipped or trimmed.
9. Second growth - shall not be seriously damaged.
10. Sunburn and light greening - no requirements.
11. Appearance - discoloring of tubers caused by immaturity or the characteristic checking of tubers that occurs under normal conditions shall not disqualify them.
12. Growth cracks - not to exceed a maximum of 10% serious damage.
13. Mechanical injury - shall not be damaged by waste.
14. Air cracks - damage by waste.
15. Serious damage by dry or moist type tuber rot - 2%.
16. Sprouts – no requirements.
17. Flattened depressed and sunken discolored areas showing no underlying flesh discoloration – no requirements.



## Idaho Certified Yellow Tag Seed Potatoes

The yellow tag grade shall be equivalent to the **U.S. No. 2 grade** (see pages 67 - 81) with the following exceptions. There is a 1% tolerance for late blight.

1. Maximum and minimum size shall be specified by the grower.
2. Wireworm and/or grub - no requirements.
3. Scab - no requirements.
4. Hollow Heart - no requirements.
5. Adhering dirt - no requirements.
6. Loose dirt and/or foreign material - included in total external tolerance.
7. Varietal purity - not more than 0.2% of other tuber identifiable varieties.
8. Clipping - shall not be clipped.
9. Second growth - shall not be seriously damaged.
10. Sunburn and light greening - no requirements.
11. Appearance - no requirements except second growth.
12. Growth cracks - no requirements.
13. Mechanical injury - shall not be seriously damaged by waste.
14. Six percent (6%) serious damage by internal discoloration. Percentages higher than six percent (6%) allowed with Idaho Crop Improvement Association, Inc. approval if laboratory tests show the internal discoloration is not of pathogen origin.
15. Serious damage by dry or moist type tuber rot - 2%.
16. External discoloration – no requirements.
17. Flattened depressed and sunken discolored areas showing no underlying flesh discoloration – no requirements.
18. Rhizoctonia – no requirements
19. Sprouts – no requirements.

## Definition of Terms

- ⦿ **“Scoring”** refers to classifying defects based upon their individual grading criteria, applying scoring guides, tolerances and recording inspection results on official notesheets.
- ⦿ **“Paring”** is the act of removing defective material from a potato using a thin bladed knife and implementing an approved cutting method in such a way to generate the least amount of wasted material.

- ⦿ Flat Cut



- ⦿ Scoop (Round) Cut



- ⦿ Curved Cut



- ⦿ **“External Defects”** are defects which can be detected on the external surface of the potato. However, cutting may be required to determine the extent of the injury.
- ⦿ **“Internal defects”** are defects which cannot be detected without cutting the potato. Any defect shall be considered as an internal defect when the interior flesh of the potato is affected but there is no apparent damage to the surface area of the potato.
- ⦿ **“Waste”** is the portion that is removed when using an approved cutting method, to remove a defect, or combination defects from an individual potato.
- ⦿ **“Damage”** means any defect, or any combination of defects, which materially detracts from the marketing quality, or the internal or external appearance of the potato, or any external defect which cannot be removed without a loss of more than 5% of the total weight of the potato.
- ⦿ **“Serious Damage”** means any defect, or any combination of defects, which seriously detracts from the marketing quality, or the internal or external appearance of the potato, or any external defect which cannot be removed without a loss of more than 10% of the total weight of the potato.
- ⦿ **“Appearance”** is the extent to which a defect or combination of defects detracts from the overall look and marketability of the potato.
- ⦿ **“Surface Area”** is the entire exposed area of a potato as it appears in the sample.

## Definition of Terms

- ① **“In the Aggregate”** means to identify and consider all of the affected areas as if combined together in a single area.
- ① **“Free From Defects”** are those that are scored against all grades when symptoms are present to any degree. There is **no waste allowance** for this class of defect. “Free From” **does not** mean that there can’t be any of these defects in a shipment or lot.
- ① **“Tolerances”** Certified seed potatoes do not have to be perfect. The seed potato grades allow certain percentages for defects, off size, foreign material, etc.
- ① **“Separate Allowance”** is when a lot of potatoes are **allowed** a specified percentage for certain targeted defects that are **not included in the total External or Internal Tolerance**.
- ① An **“Additional Tolerance”** is one that allows a certain percentage of specific defects in **addition to the total External or Internal tolerances**. If the specified defects exceed the tolerance allowed for the lot, those defects **must be included in the total External or Internal Tolerance**.
- ① **“Off Size”** refers to potatoes that fall out of the specified minimum and/or maximum size range. **Minimum and Maximum sizes are specified by the grower on the tagging request** by either weight or diameter.
  - Measure diameter by dropping the potato through a round or square opening with its longitudinal axis at right angles to the sizing ring.
  - Determine weight using a platform scale.
- ① **“Undersize”** refers to potatoes that are smaller than the **specified minimum**.
  - A Potato is scored as Undersize when it can’t support its own weight when passing through the specified diameter of a sizing ring, or when it falls short of the specified weight even slightly.
- ① **“Oversize”** refers to potatoes that are larger than the **specified maximum**.
  - A potato is scored as Oversize when it is too large to pass through the specified diameter of a sizing ring, or when its weight is over ½ oz. larger than the **specified maximum** weight.



## Tolerance Comparison Chart

Blue Tag	Green Tag	Yellow Tag
6% External	6% External	6% External
5% Internal	6% Internal	6% Internal *
<b>Restricted Tolerances (To be included with the total External or Internal tolerance )</b>		
3% Dry Type Freezing Injury		
2% Serious Damage by Moist or Dry Type Fusarium Tuber Rot	2% Serious Damage by Moist or Dry Type Tuber Rot	2% Serious Damage by Moist or Dry Type Tuber Rot
1 % Soft Rot or Wet Breakdown	1 % Soft Rot Wet Breakdown	1 % Soft Rot Wet Breakdown
10% Total Combination	10% Total Combination	10% Total Combination
<b>Additional Tolerances</b> (Percentages over 10% to be included in the total External or Internal tolerance)		* Percentages higher than 6% allowed for Internal Discoloration with ICIA approval if tests show the the internal discoloration is not of pathogen origin.
10% additional for potatoes Damaged but not Seriously Damaged by Shape.	6% additional for potatoes which are Seriously Damaged by Wireworm.	
<b>Separate Allowances</b> (Stand alone. Not to be included with the total External or Internal tolerance)		
10% Maximum Allowed for potatoes in any lot that are Seriously Damaged by Hollow Heart.	10% Maximum Allowed for potatoes in any lot that are Seriously Damaged by Growth Cracks.	
5% Maximum Allowed for potatoes which are Seriously Damaged by Vascular Ring Discoloration.		
20% Maximum Allowed for potatoes with Sprouts over 1 inch in length.		
<b>Off-Size Tolerance</b>		
10% Oversize	10% Oversize	10% Oversize
5% Undersize	3% Undersize	3% Undersize

Restricted and Zero Tolerances	
Serious damage by dry or moist type <b>Fusarium</b> Tuber Rot - <u>Blue Tag grade</u>	2.00
Serious damage by dry or moist type Tuber Rot - <u>Green &amp; Yellow Tag Grades</u>	2.00
Freezing Injury <b>Dry Type</b> - <u>Blue Tag grade</u>	3.00
Varietal mixture - <u>Blue Tag Grade</u>	0.25
Varietal purity - <u>Green &amp; Yellow Tag Grades</u>	0.20
Late Blight Tuber Rot - <u>All Grades</u>	1.00
Frozen, soft rot or wet breakdown. - <u>All Grades</u>	1.00
Corky Ringspot (TRV) - <u>All Grades</u>	0.50
Tuber Moth injury - <u>Blue Tag</u>	0.00
Nematodae - <u>All Grades</u>	0.00
Bacterial Ring Rot - <u>All Grades</u>	0.00



20 lb. Ounce to Percentage Chart					
Ounces	Percentage	Ounces	Percentage	Ounces	Percentage
2	1%	17	5%	33	10%
3	1%	18	6%	34	11%
4	1%	19	6%	35	11%
5	2%	20	6%	36	11%
6	2%	21	7%	37	12%
7	2%	22	7%	38	12%
8	3%	23	7%	39	12%
9	3%	24	8%	40	13%
10	3%	25	8%	41	13%
11	3%	26	8%	42	13%
12	4%	28	9%	43	13%
13	4%	29	9%	44	14%
14	4%	30	9%	45	14%
15	5%	31	10%	56	18%
16	5%	32	10%	47	15%

Waste Percentage to Ounce Chart by Weight					
Weight oz.	5% Waste oz.	10% Waste oz.	Weight oz.	5% Waste oz.	10% waste oz.
3	1/8	1/4	17	7/8	1 3/4
4	1/4	3/8	18	7/8	1 3/4
5	1/4	1/2	19	1	1 7/8
6	1/4	5/8	20	1	2
7	3/8	6/8	21	1	2 1/8
8	3/8	6/8	22	1 1/8	2 2/8
9	1/2	7/8	23	1 1/8	2 2/8
10	1/2	1	24	1 1/4	2 3/8
11	1/2	1 1/4	25	1 1/4	2 1/2
12	5/8	1 1/4	26	1 1/4	2 5/8
13	5/8	1 1/4	27	1 3/8	2 3/4
14	3/4	1 3/8	28	1 3/8	2 3/4
15	3/4	1 1/2	29	1 1/2	2 7/8
16	3/4	1 5/8	30	1 1/2	3

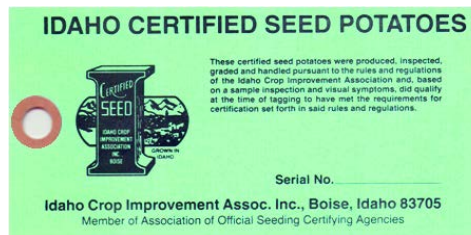




# Individual Scoring Criteria

## Blue Green Yellow

### Tag Seed Grades



Photographs of Potato Defects and Diseases are for Identification Purposes and are not Official USDA Visual Aids



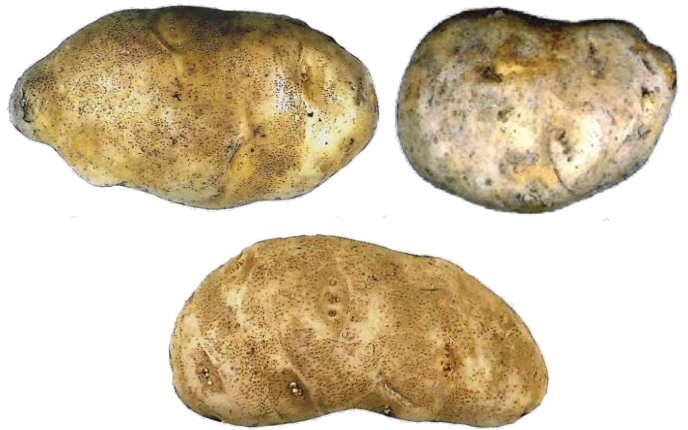
## Varietal Purity

The **BLUE** tag grade has a **.25% tolerance** for “**Varietal Purity**”. Both the **GREEN** and **YELLOW** tag grades have a **.2% tolerance** for **Varietal Purity**. Potatoes in any lot must have the same general shape, color and character of skin, and color of flesh.

## Well Shaped

“**Well Shaped**” means that a potato has the normal shape for the variety. A Well Shaped potato **exceeds the shape requirements** for all grades.

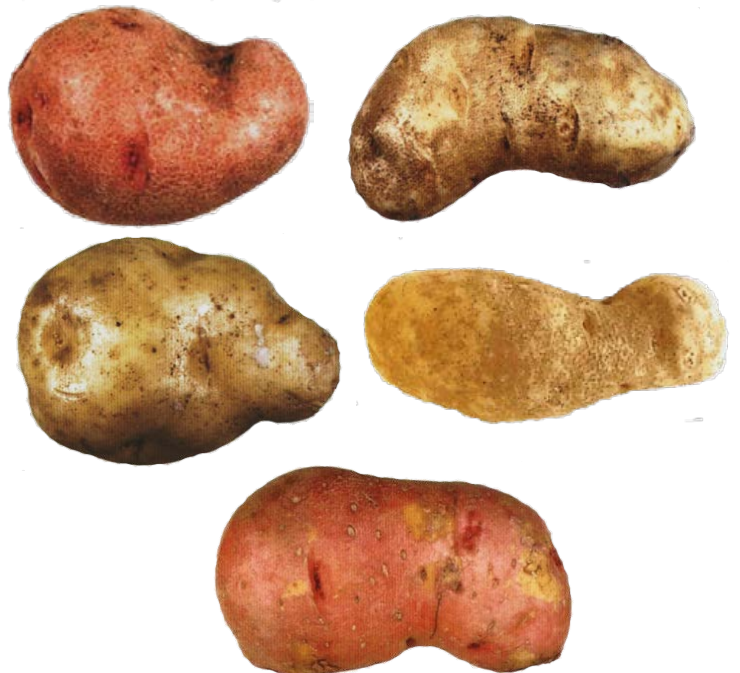
**BLUE GREEN YELLOW**



Maximums Allowed for Well Shaped

## Fairly Well Shaped

“**Fairly Well Shaped**” means that a potato is not materially pointed, dumbbell-shaped or otherwise materially deformed. A Fairly Well Shaped potato meets the minimum requirements for the **BLUE** tag grade, and **exceeds the requirements** of the **GREEN** and **YELLOW** tag grades.



Maximums Allowed for Fairly Well Shaped

## Folded End

“Folded End” scores against the **BLUE** tag grade when **Materially** detracting from the **appearance** of the potato.

“Folded End” scores against both the **GREEN** and **YELLOW** tag grades when they **Seriously** detract from the **appearance** of the potato.



**BLUE**



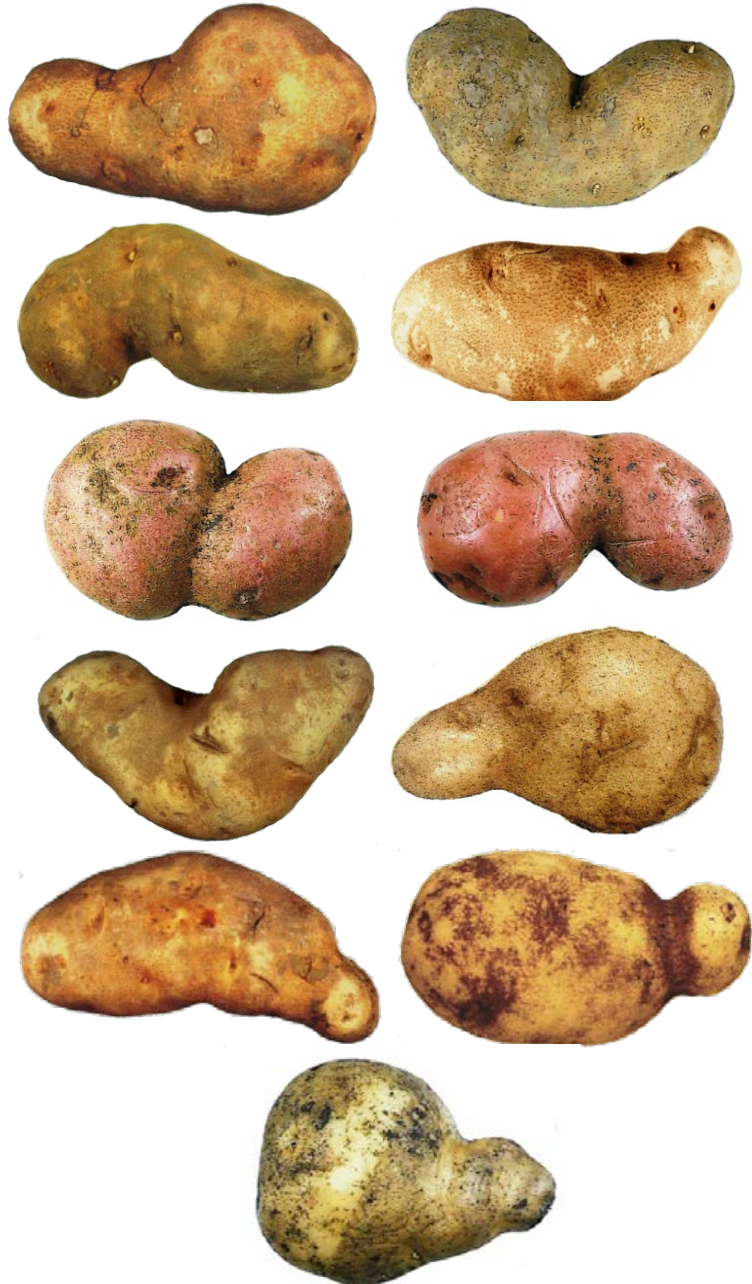
**GREEN & YELLOW**

**Folded End  
(Maximums Allowed)**

## Not Seriously Misshapen (Damaged by Shape)

“Not Seriously Misshapen” means that the potato is not seriously pointed, dumbbell-shaped or otherwise badly deformed and meets the **minimum requirements** for both the **GREEN** and **YELLOW** tag grades.

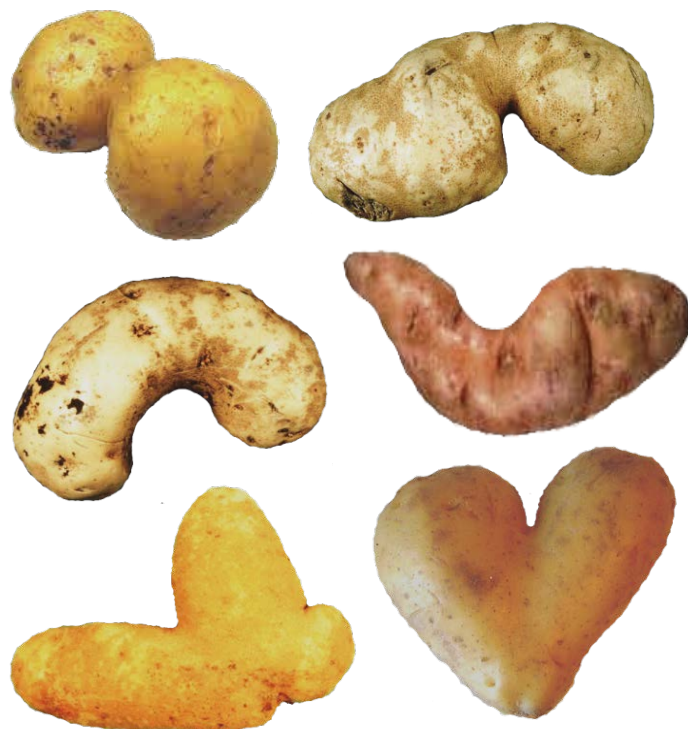
The **BLUE** tag minimum shape requirement is **Fairly Well Shaped**, however there is an allowance for an **additional tolerance** of **10%** for potatoes that are **“Damaged, but not Seriously Damaged by Shape”**. When a lot or shipment exceeds the **10%** additional tolerance for **Damage by Shape** the amount exceeding is **applied to the 6% External Tolerance** along with all other scored defects.



**Not Seriously Misshapen  
(Maximums Allowed)**

## Seriously Misshapen

"**Seriously Misshapen**" means that a potato is seriously pointed, dumbbell-shaped or otherwise badly deformed. A Seriously Misshapen potato **scores as a defect** against the **External Tolerance** in **All** Grades. **BLUE GREEN YELLOW** They **Are Not** to be counted towards the additional **10% Damage by Shape** allowed in the **BLUE** tag grade.



**Seriously Misshapen**  
(Score against all seed Grades)

## Second Growth

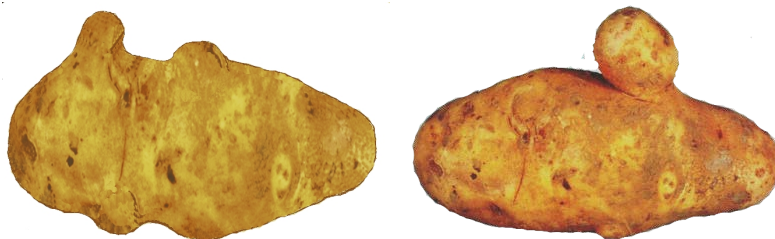
"**Second Growth**" is scored against the **BLUE** tag grade when it materially detracts from the appearance of the potato (**Damaged by Appearance**).



**Maximum Allowed**  
(Not Damaged by Appearance)

## Second Growth

“Second Growth” is scored against both the **YELLOW** and **GREEN** tag grades when it seriously detracts from the appearance of the potato (Seriously Damaged by Appearance).



**Maximum Allowed**  
(Not Seriously Damaged by Appearance)



**Seriously Damaged by Appearance**  
(Score against All Grades)

## Growth Cracks

“Growth Cracks” are scored against the **BLUE** tag grade when they Seriously Detract from the appearance of the potato. (Visual Aid)



**Maximum Allowed Blue Tag**  
(Visual Aid POT- L-1; 119, 120)

“Growth Cracks” are scored against the **GREEN** tag grade when they affects more than 3/4 the length of the potato in the aggregate or when the depth is greater than that as outlined in Table V.

A Separate Allowance of **10%** is allowed in the **GREEN** tag grade. When a lot or shipment exceeds the **10%** allowance it fails the **GREEN** tag grade. The excess Cannot be applied to the **6% External Tolerance**.

There is No Requirement for Growth Crack in the **YELLOW** tag grade.

**Table V**  
**Depth Allowed For Growth Cracks**

Weight	No. 2 (Depth)
Potato is:	Not more than:
Less than 4 oz.	1/4 in.
4 oz. to 6 oz.	3/8 in.
More than 6 oz. to 8 oz.	1/2 in.
More than 8 oz.	5/8 in.

## Cuts or Broken off Second Growth

“Cuts or Broken off Second Growth” are scored on the basis of **5% waste** for the **BLUE** tag grade.

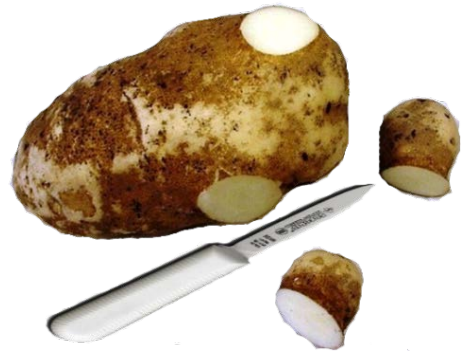
Score on the basis of **10% waste** for both the **GREEN** and **YELLOW** tag grades.



## Clipping or Trimming

**Not Allowed** in any of the seed potato grades.

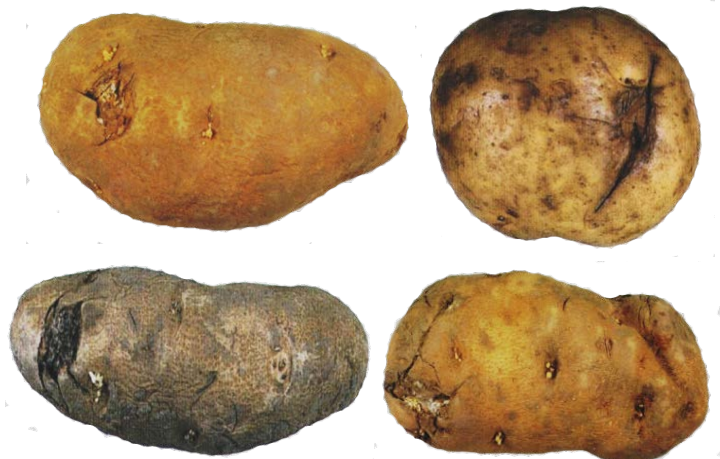
**BLUE GREEN YELLOW**



## Mechanical Injury (Bruise)

Score “Mechanical Injury” against the **BLUE** tag grade when removal causes a loss of more than **5% of the total weight** of the potato.

Score “Mechanical Injury” against the **YELLOW** and **GREEN** tag grades when removal causes a loss of more than **10% of the total weight** of the potato.



## Air Crack

Score “Air Crack” against the **BLUE** and **GREEN** tag grades when removal causes a loss of more than **5% of the total weight of the potato**.

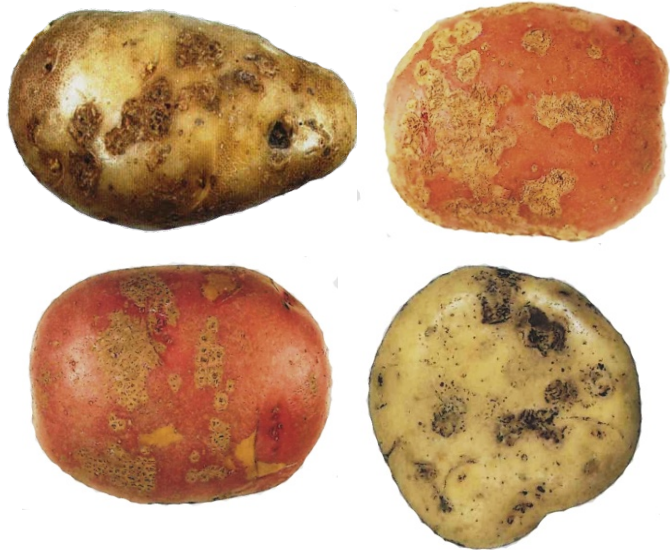
Score “Air Crack” against the **YELLOW** tag grade when removal causes a loss of more than **10% of the total weight of the potato**, or when affecting more than  **$\frac{3}{4}$  the length** of the potato **in the aggregate**.



## Scab (All Types)

“Scab” shall not cover more than 1/5th (20%) of the surface area in both the **GREEN** and **BLUE** tag grades.

There is No Requirement for Scab in the **YELLOW** tag grade.



## Silver Scurf

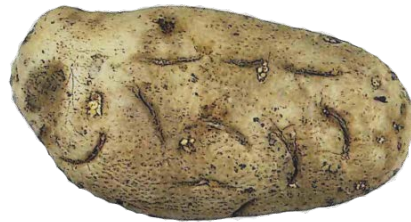
Score “Silver Scurf” against the **BLUE** tag grade when affecting more than 25% of the surface area.

Score against both the **GREEN** and **YELLOW** tag grades when its severity causes a **wrinkling of the skin** over more than 50% of the surface area.



## Skin Checks

There is No Requirement for “Skin Checks” in the any of seed tag grades. **BLUE GREEN YELLOW**



## Sprouts

There is No Requirement for “Sprouts” in the **GREEN** or **YELLOW** tag grades.

There is a 20% Separate Allowance for potatoes with sprouts over 1 inch in length in the **BLUE** tag grade.





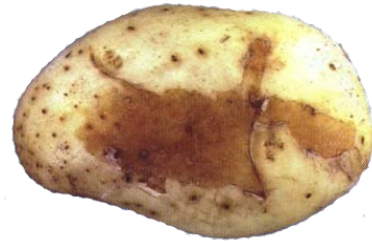
## Sunburn and Greening

“Sunburn and Greening” is allowed in all seed grades. No Requirements.  
**BLUE GREEN YELLOW**



## External Discoloration

There is No Requirement for “External Discoloration” in any of the seed tag grades.  
**BLUE GREEN YELLOW**



## Adhering Dirt

A maximum of 50% of the surface may be covered with caked dirt in the **BLUE** tag grade.

There is No Requirement for “Adhering Dirt” in both **GREEN** and **YELLOW** tag grades.



## Flattened, Depressed, or Sunken Areas (Pressure Bruise)

“Flattened, Depressed, or Sunken Areas” showing no underlying flesh discoloration shall not be scored. In all grades areas showing underlying flesh discoloration shall be scored on the basis of 10% waste. **BLUE GREEN YELLOW**



## Rhizoctonia

No Requirement for both the **GREEN** and **YELLOW** grades. Score against the **BLUE** tag grade when materially detracting from the appearance.



**Rhizoctonia  
(Maximum Allowed)**

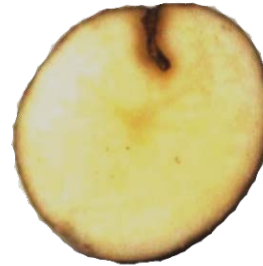
## Wireworm and/or Grub

“Wireworm and/or Grub” is scored as **Damage** against the **BLUE** tag grade when removal of the affected tissue causes a **loss of more than 5%** of the weight of the potato.

The **GREEN** tag grade permits an **Additional Tolerance** of **6%** for potatoes that are **Seriously Damaged by “Wireworm” (10% waste)**. When a lot or shipment exceeds the **10% additional tolerance** the amount exceeding is **applied towards the 6% External Tolerance** along with all other scored defects.

“Grub Damage” is scored against the **GREEN** tag grade when removal causes a loss of more than **10% of the total weight** of the potato or when affecting **more than 10% of the surface**.

There is **No Requirement** for “Wireworm and/or Grub” in the **YELLOW** tag grade.



Wireworm Damage



Grub Damage

## Rodent and/or Bird Damage

Score against the **BLUE** tag grade when **materially detracting** from the appearance of the potato or when removal causes a **loss of more than 5 percent of the total weight of the potato**.

Score on the basis of **10% Surface Area** or **10% Waste** for both the **GREEN** and **YELLOW** tag grades.



Rodent and/or Bird Damage

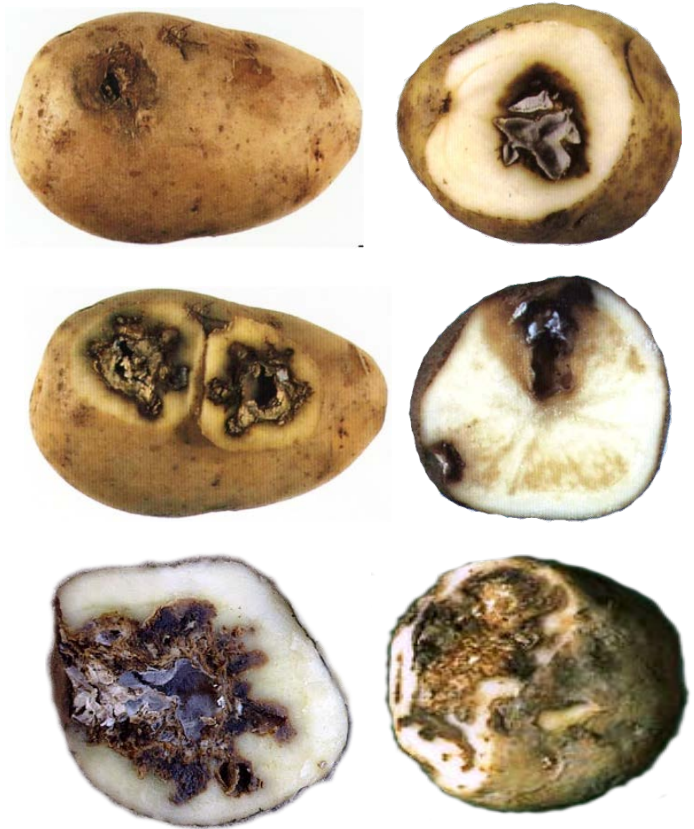
## Dry or Moist Type Fusarium Tuber Rot

Score “Dry or Moist Type Fusarium Tuber Rot” against the **BLUE** tag grade when removal causes more than 5% waste.

The **BLUE** tag grade has a Restricted Tolerance of **2%** for potatoes that are Seriously Damaged by “Dry or Moist Type Fusarium Tuber Rot” (**10% Waste**). Restricted Tolerances are included in the total **6% External Tolerance** along with all other scored defect.

Score against the **1% Restricted Tolerance** when mushy and leaky.

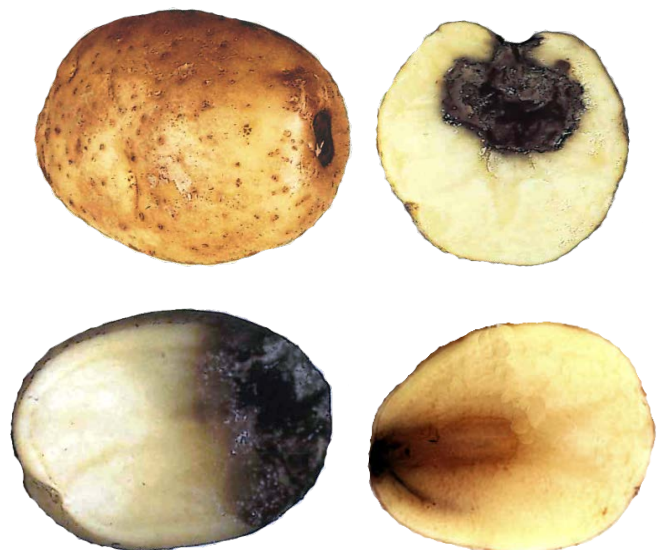
“Type Fusarium Tuber Rot” typically enters through injuries such as cuts and bruises. The tissues becomes sunken and the skin will have a wrinkled appearance. The color of the affected tissues varies from light to dark brown or even black. A distinct open cavity and/or masses of whitish mold are the two conclusive indicators of fusarium infection. The rot may be dry and brittle, wet and jelly-like or even mushy and leaky.



Fusarium Tuber Rot

## Dry or Moist Type Tuber Rot

“Dry or Moist Type Tuber Rot” in both the **GREEN** and **YELLOW** tag grades have a Restricted Tolerance of **2%** for tubers that are Seriously Damaged (**10% Waste**), and include **all** types of dry rots including **Fusarium**. Restricted Tolerances are included in the total **6% External Tolerance** along with all other scored defects.

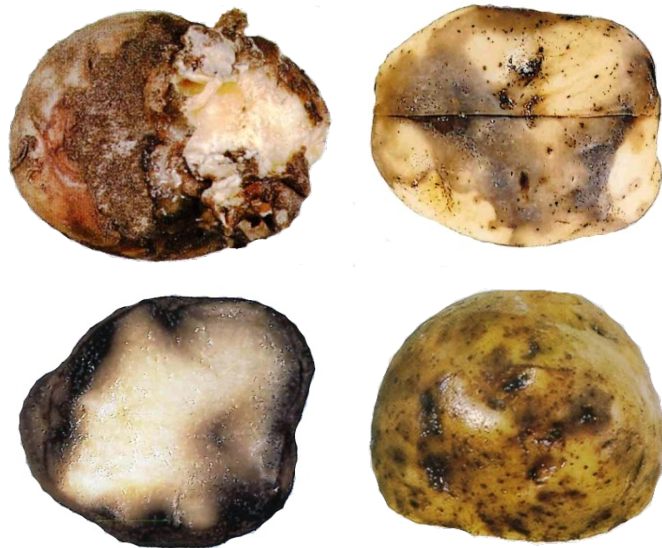


Blackleg, Jelly End, and Other Rots

## Soft Rot or Wet Breakdown (Free From)

"Soft rot or Wet Breakdown" means any soft, mushy, or leaky condition of the tissue such as slimy soft rot, leak, or wet breakdown following freezing injury.

"Soft rot or Wet Breakdown Following Freezing Injury" is a **Free From Defect** and has a **Restricted Tolerance** of 1%. Score against the 1% tolerance when present to **any degree**. **No Waste Allowed**. **Restricted Tolerances** are included in the total 6% **External Tolerance** along with all other scored defects.

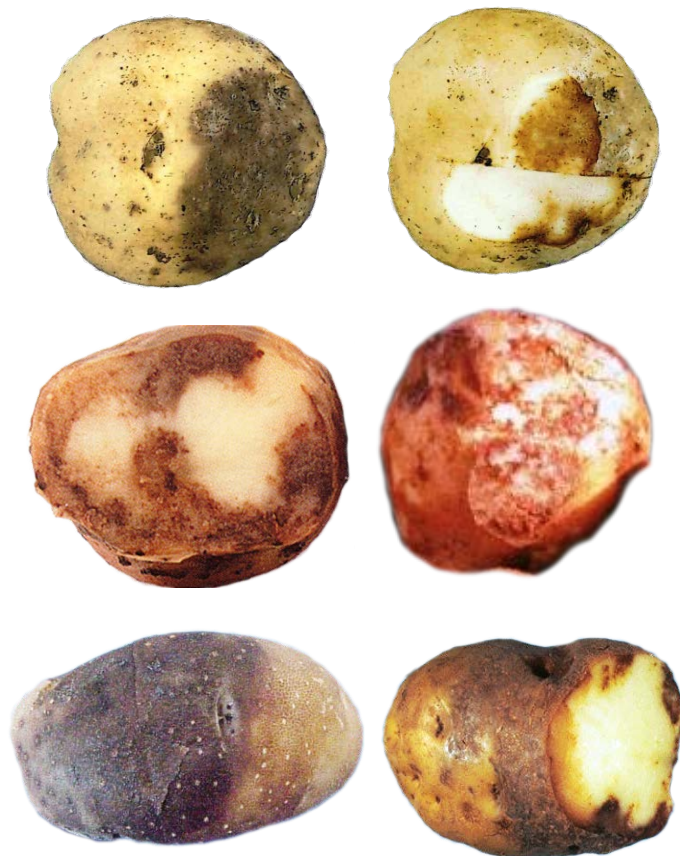


Soft Rot or Wet Breakdown  
(Free From)

## Late Blight Tuber Rot (Free From)

"Late Blight" is a "**Free From Defect**" and scores when present to any degree. **No Waste Allowed**. It is to be included with the **1% Restricted Tolerance** for **Soft Rot and Wet Breakdown** even when firm. **Restricted Tolerances** are **included** in the total 6% **External Tolerance** along with all other scored defects.

"Late Blight" affected tissue appears reddish-brown or purplish-brown in color and spreads irregularly from the surface through the flesh. It typically appears as a dry rot, forming irregular sunken patches which may involve the entire potato. These patches are usually firm, unless affected by a secondary infection such as **bacterial soft rot**. Frequently, they have a metallic tinge, especially on the border of healthy tissue. This defect can be detected by making thin cuts on the exterior of the potatoes.



Late Blight Tuber Rot  
(Free From)

## Blackheart (Free From)

“**Blackheart**” symptoms are a dark gray to purple discoloration which later becomes jet black. The discolored areas are usually sharply set off from the healthy tissues. Usually the discoloration is restricted to the heart of the potato, but frequently radiates to the exterior as well.

Score against all grades when present to any degree.



## Dry Type Freezing Injury (Free From)

“**Dry Type Freezing Injury**” will generally manifest first on areas that are sunburned (exposed to the elements) and often exhibit a leathery sunken skin with chalky white masses of starch beneath. Usually there is a clear line between affected and healthy flesh.

“**Dry Type Freezing Injury**” is a **Free From Defect** and has a **Restricted Tolerance** of 3% in the **BLUE** tag grade. Score against the **3% Restricted Tolerance** when present to any degree. **No Waste Allowed**. **Restricted Tolerances** are included in the total **6% External Tolerance** along with all other scored defects.

“**Freezing Injury**” is **Not Restricted** in the **GREEN** or **YELLOW** tag grades. It is a **Free From Defect**. Score towards the **6% External Tolerance** when present to any degree. **No Waste Allowed**.



Freezing Injury (Dry Type)  
(Free From)



Freezing Injury Internal  
(May be Dry or Soft)  
(Free From)

## Live Pest (Free From)

Score as **Serious Damage** any potato hosting a live pest. **BLUE GREEN YELLOW**



Live Pest  
(Free From)

## PRELIMINARY CUTTING TO DETERMINE THE PRESENCE OF INTERNAL DEFECTS

While inspecting each sample the inspector will cut a minimum of five potatoes selected totally at random from that sample. An inspector may, at their discretion and judgment, make additional cuts on potatoes in the sample to determine if internal defects are present. If no scorable defects are found in this sample the inspector will continue to cut a minimum of five potatoes per sample.

All cut samples must be recorded on the notesheet. When no scorable internal defects are found, the number of potatoes cut for each sample (i.e. "5") must be recorded in the sample size column on the notesheet. This number indicates that "5" or more potatoes were cut, not five or more pounds.

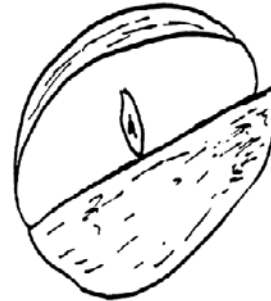
When the internal defects in a 20 pound cut sample cause the lot to cease meeting grade (the application of tolerances is exceeded, etc.), the inspector must cut 20 pounds of the next sample to ensure that the issue has been corrected and that the potatoes being run now meet grade. If the lot meets grade again, the inspector can resume cutting a minimum of five potatoes until a scorable defect is found. If the follow up sample fails grade the next sample must also be examined with a full 20 lb. cut.

## Methods of Cutting to Determine Internal



*Clip stem end of tuber.*

In cutting to remove waste from net necrosis and other similar discoloration at the stem end, inspectors should use a straight cut if the discoloration extends more than 1/2 of the circumference around the potato. If the discoloration affects 1/2 or less of the circumference around the potato, the cut should be made on that particular side, using a curved cut so that an excessive amount of uninjured flesh will not be removed.



*Cut tuber lengthwise and parallel to the flat side.*

Cavities and light brown discoloration are scored according to the **Guide for Maximum Area Allowed** on various potato sizes (see previous section.) After determining the size of the potato use a clear diameter gauge to determine if the potato is damaged or seriously damaged. This is done by laying the appropriate circle of the area gauge (from chart) over the hollow or brown area of the potato.

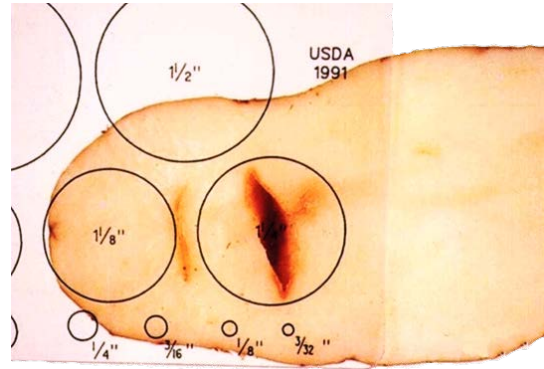
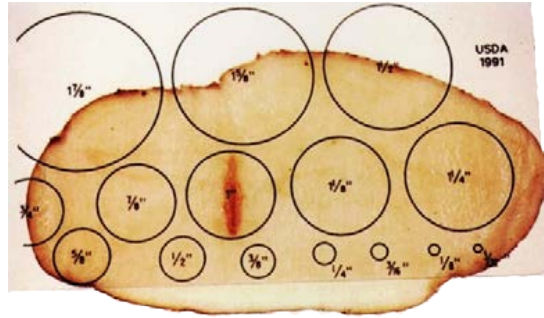
## Hollow Heart

Potatoes affected by “**Hollow Heart**” exhibit one or more irregular cavities of varying size at the center, or core of a potato and are often lined with light brown to brown dead tissues.

“**Hollow Heart**” is scored as  **Serious Damage**  against the  **BLUE**  tag grade when the affected area is more than that of a circle 3/4" in diameter (Based on a 6 oz. potato with correspondingly lesser or greater areas in smaller or larger potatoes).

From the chart labeled “**Guide for Maximum Area Allowed of Hollow Heart**” on various potato sizes, establish the size allowed and use a **clear diameter gauge** to determine if the potato is **Seriously Damaged**. This is done by laying the appropriate circle of the gauge over the hollow or brown area of the potato. The potato is considered **seriously damaged** when the affected area extends beyond the confines of the appropriate circle. **When Hollow Heart with Discoloration** is found and no **Hollow Heart** falls outside of the circle but some discoloration does, the color must be checked against the color comparator **POT-CC-1**. If any color extends outside of the circle and is as dark as or darker than the color comparator, the potato is scored.

In the  **BLUE**  tag grade “**Hollow Heart**” has a **Separate Allowance** of **10%** for potatoes that are **Seriously Damaged** by Hollow Heart. A **Separate Allowance** stands alone and is **Not included with the 6% External Tolerance** for other defects when exceeded. A lot or shipment **fails the grade** when it **exceeds the 10% allowance** for **Serious Damage by Hollow Heart**.



Blue Tag Hollow Heart	
Weight Potato is:	Maximum Diameter
4 oz.	5/8 in.
6 oz.	3/4 in.
7 oz.	7/8 in.
8 oz.	1 in.
10 oz.	1-1/4 in.
14 oz.	1-1/2 in.
16 oz.	1-5/8 in.
20 oz.	1-7/8 in.
24 oz.	2 in.
28 oz.	2-1/8 in.

Guide for Maximum Area Allowed of Hollow Heart

## Vascular Ring Discoloration

“Vascular Ring Discoloration” scores against the **BLUE** tag grade when removal causes a loss of more than **10% of the total weight** of the potato.

“Vascular Ring Discoloration” has a **Separate Allowance** of **5%** in the **BLUE** tag grade. When a lot or shipment exceeds the **5% Separate Allowance** it **fails** the **BLUE** tag grade. The excess **Cannot** be applied to the **6% External Tolerance**.

The **BLUE** tag grade has an **Internal Tolerance** of **5%** for all other internal defects **excluding** “Vascular Discoloration”.



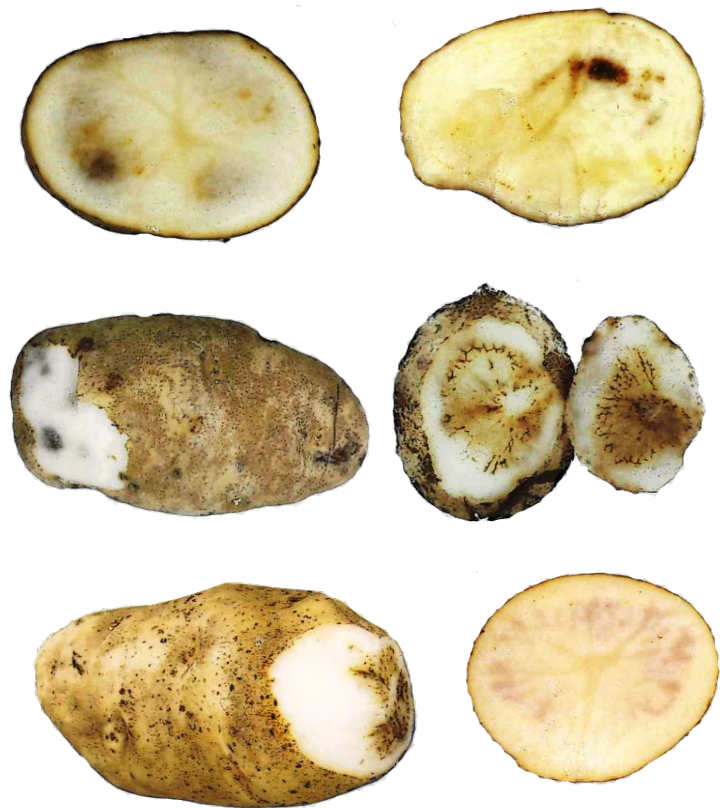
Vascular Ring Discoloration

## Other Internal Defects

Both the **GREEN** and **YELLOW** grades have a total **Internal Tolerance** of **6%** for **Serious Damage** by all Internal defects **including** “Vascular Ring Discoloration”.

Percentages **higher than 6%** may be allowed in the **YELLOW** tag grade with ICIA approval if laboratory tests show the internal discoloration is not of pathogenic origin.

Examples of **Internal Defects** include, but are not limited to; **Mahogany Browning; Internal Brown Spots; Internal Black Spots; Stem End Browning; Net Necrosis**.



Other Internal Defects



**“Zero Tolerance Defects”** are caused by an infection or infestation of certain targeted pest. When found in a lot or shipment during an inspection they cause the inspection and **tagging process to halt**. This information is confidential so it’s crucial to keep it between you and the person in charge.

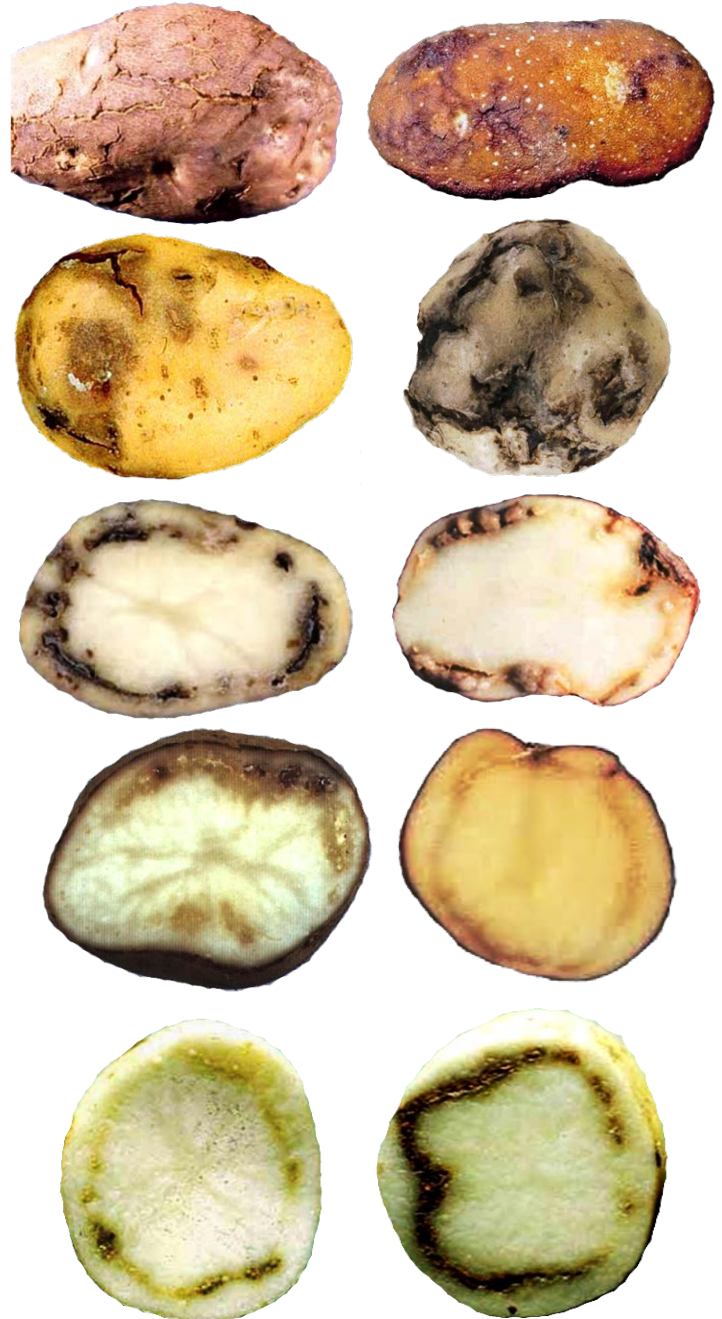
When a **“Zero Tolerance Defect”** is detected the inspector must notify the person in charge of the grower’s operation and show them the potato in question. Implement the instructions found on the, **“Procedures to Follow When Suspect Tubers are Found” form. Notify Your Supervisor or the District Office Immediately.**

### **Bacterial Ring Rot (Zero Tolerance)**

**“Bacterial Ring Rot”** potatoes may appear to be healthy or have dark discolorations under the skin at the stem end or under the eyes. In some cases, they show a characteristic cracking extending only as far as the vascular system. Upon cutting the potato near the stem end, in typical cases the vascular ring shows a yellowish-white or light brown discoloration. This may involve the entire ring or only isolated portions of it. The infected tissue is often crumbly in consistency and may ooze out from the vascular ring on the freshly cut surface when squeezed.

Bacterial ring rot potatoes are susceptible to secondary infection, especially by soft rot organisms. Infected potatoes show various stages of decay up to complete disintegration. With secondary infection, there is often a distinctive separation between the portions of the potato inside and outside of the vascular region and the outer layer may be broken off like a shell.

**If symptoms are found follow the instructions on the “Procedures to Follow When Suspect Tubers are Found” form.**



## Nematode (Zero Tolerance)

“Nematode” potatoes with advanced infestation usually have a roughened, irregular, bumpy or warty appearance due to the presence of galls on the outer surface. When such potatoes are cut, the egg masses are seen in abundance scattered throughout the outer tissues with most of them approximately 1/8 to 1/4 inch beneath the skin. To the naked eye they appear to be somewhat discolored, slightly water-soaked spots. Deposits of eggs in the flesh may hatch out after harvest causing a re-infestation of feeding nematodes, which generally are not visible to the unaided eye.

Infestation may sometimes show no external symptoms.

If symptoms are found follow the instructions on the “Procedures to Follow When Suspect Tubers are Found” form.



Peel 1/8 to 1/4 inch beneath the skin



## Tuber Moth Injury (Tuber Worm)

“**Tuber Moth Injury**” occurs when the larvae borrows into the potato creating irregular tunnels that run laterally beneath the skin. **Tuber Worm** and **Wireworm** show similar entry points. Generally **Tuber Worms** will leave a larger entrance hole than **Wireworms**, however internal characteristics should be considered when distinguishing between the two.

The U.S Standards for Seed Potatoes has a **Zero Tolerance** for “**Tuber Moth Injury**”. Wireworm is very common but Tuber Worm is rare in Idaho. If symptoms of **Tuber Worm** are encountered during an inspection, keep the potato in question and contact your supervisor. **Do not stop the tagging process.**



**Tuber Moth (Tuber Worm) Injury**

## Canada/US-Management Plan for Potato Viruses that Cause Tuber Necrosis

Seed lots that **have not been pre-cleared** as indicated on the current [ICIA Mater Tagging List](#) will be inspected as part of the shipping point inspection for grade.

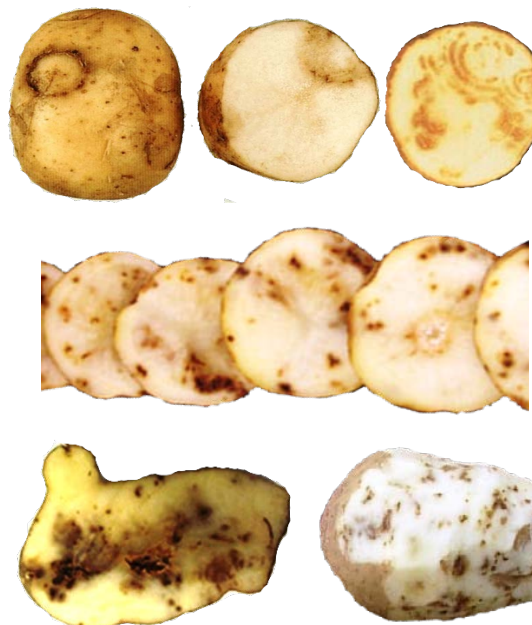
See page 53 "Inspection and sampling plan for seed lots at Shipping Point that have not been pre-cleared"

### Corky Ring Spot (TRV)

**“Corky Ring Spot”** is caused by the tobacco rattle virus which is transmitted by soil borne nematodes. Affected potatoes show brown rings, semicircles, loops and spots on the surface and similar brown rings, loops and spots in the interior tissues.

The skin often cracks over some of the brown slightly sunken rings. The surface markings can usually be traced to similar markings within the tuber, but many internal brown spots and semicircles appear to be independent of the surface lesions. The affected tissues are moderately firm and corky.

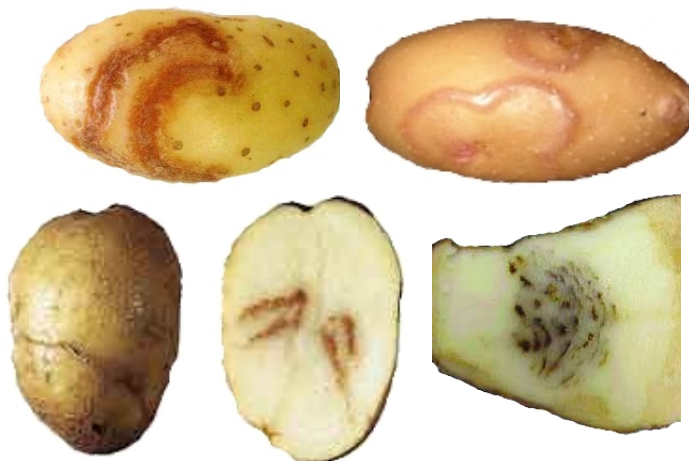
There is a **.5% Restricted Tolerance** in all grades for Corky Ringspot if present to any degree.



### PMTV (Potato Mop Top Virus) and PVY

Both **“PMTV and PVY”** exhibit symptoms similar to Corky Ring Spot (TRV).

**If any of these symptoms are found in a lot that has not been pre-cleared follow the instructions on page 53, "Inspection and sampling plan for seed lots at Shipping Point that have not been pre-cleared"**



**1. Shipping Point Sampling and Inspection Plan for lots that have not been pre-cleared.**

- a. Use existing AMS definition of “Lot” ie individual shipment/certification number covered by a single certificate.
- b. Use existing AMS sampling and cutting procedures to perform preliminary examination of the seed lot. For example, the sampling plan and cutting plan for bulk loads is:
  - 1). One sample per 100 hundredweight.
  - 2). Minimum of 5 tubers exploratory cut per sample.
- c. If virus like symptoms suggestive of one of the tuber necrotic viruses are observed in the exploratory cutting, or at any time during grading, then the existing samples should be retained for further examination and, if necessary, increased to an appropriate number of tubers for the end use of the seed lot (recertification or certification). For example, if no virus like symptoms are observed in the first 4 5-tuber samples cut in b.2 above, but one or more tubers are found with virus like symptoms in the 5<sup>th</sup> 5-tuber sample, the remainder of that sample should be cut. If the end use of the seed lot is commercial planting, and the total number of tubers cut is not sufficient to determine if the tolerance of less than 2% virus like symptoms can be met, cut sufficient tubers (at least 50) to determine if the tolerance can be met. If one or more additional tubers are found with virus like symptoms, cut a total of 200 tubers to determine the incidence of virus like symptoms. If the end use of the seed lot is recertification, cut a total of 200 tubers from the samples to determine % incidence of virus like symptoms.
- d. If tolerances for recertification or certification (as applicable) included in Table 1 are exceeded in the appropriate number of tubers cut for the end use of the seed lot, the symptomatic tubers will be submitted to the certification agency for final determination.

Additionally, if virus like symptoms are found in seed lots that have **been pre-cleared** they will be scored against the tolerance for internal or external defects, whichever is applicable.

<b>Table 1: Eligibility of Seed potatoes related to the Percentage of Internal Tuber Necrosis, apparently caused by PVY complex, PMTV or TRV</b>		
<b>Percentage Internal Tuber Necrosis Scored*</b>	<b>Seed intended for Recertification</b>	<b>Seed intended for Commercial Production</b>
Less than or equal to 0.5%	Eligible	Eligible
Between 0.5 and 2.0%	Eligible if negative lab test for PVY <sup>N/NTN</sup> , PMTV, TRV	Eligible
More than 2.0%	Not eligible	Not eligible
Notes: * Internal tuber necrosis will be calculated as percent incidence {(number of tubers with internal necrosis/number of tubers sampled) x100}.		



**IDAHO CROP IMPROVEMENT ASSOCIATION, INC.  
RULES OF CERTIFICATION FOR  
SEED POTATOES IN IDAHO**



**UNITED STATES STANDARDS  
FOR GRADES OF  
SEED POTATOES**

**UNITED STATES STANDARDS  
FOR GRADES OF  
POTATOES**







Shipping Point Inspection Grade Requirements:

A. Idaho Certified Blue Tag Seed Potatoes

The blue tag shall be equivalent to U.S. No. 1 seed potato grade with the following exceptions. There is a 1% tolerance for late blight.

1. Scab - shall not cover more than one-fifth of the surface area.
2. Adhering dirt - a maximum of 50% of the tuber surface may be covered with caked dirt.
3. Loose dirt and/or foreign material - included in total external tolerance.
4. Clipping or trimming not allowed.
5. Freshly broken off second growth - shall not be damaged.
6. Wireworm and/or grub - damaged by waste.
7. Tolerances: For total defects 10%. Three percent (3%) for potatoes which are affected by freezing injury. One percent (1%) for potatoes which are affected by soft rot, wet breakdown or are frozen. The limitations for external and internal defects shall apply as written in the U.S. No. 1 seed potato grade.
6. An additional 10% may be damaged, but not seriously, by shape.

B. Idaho Certified Green Tag Seed Potatoes

The green tag grade shall be equivalent to the U.S. No. 2 grade with the following exceptions. There is a 1% tolerance for late blight.

1. Maximum and minimum size shall be specified by the grower.
2. Wireworm and/or grub - serious damage by waste. Permit an additional six percent (6%) serious damage by waste.
3. Scab - shall not cover more than one-fifth (1/5) of the surface area.
4. Hollowheart - no requirements.
5. Adhering dirt - no requirements.
6. Loose dirt and/or foreign material - included in total external tolerance.
7. Varietal purity - not more than 0.2% of other tuber identifiable varieties.
8. Clipping - shall not be clipped or trimmed.

9. Second growth - shall not be seriously damaged.
10. Sunburn and light greening - no requirements.
11. Appearance - discoloring of tubers caused by immaturity or the characteristic checking of tubers that occurs under normal conditions shall not disqualify them.
12. Growth cracks - not to exceed a maximum of 10% serious damage.
13. Mechanical injury - shall not be damaged by waste.
14. Air cracks - damage by waste.
15. Serious damage by dry or moist type tuber rot - 2%.
16. Sprouts – no requirements.
17. Flattened depressed and sunken discolored areas showing no underlying flesh discoloration – no requirements.

C. Idaho Certified Yellow Tag Seed Potatoes

The yellow tag grade shall be equivalent to the U.S. No. 2 grade with the following exceptions. There is a 1% tolerance for late blight.

1. Maximum and minimum size shall be specified by the grower.
2. Wireworm and/or grub - no requirements.
3. Scab - no requirements.
4. Hollowheart - no requirements.
5. Adhering dirt - no requirements.
6. Loose dirt and/or foreign material - included in total external tolerance.
7. Varietal purity - not more than 0.2% of other tuber identifiable varieties.
8. Clipping - shall not be clipped.
9. Second growth - shall not be seriously damaged.
10. Sunburn and light greening - no requirements.
11. Appearance - no requirements except second growth.
12. Growth cracks - no requirements.

13. Mechanical injury - shall not be seriously damaged by waste.
14. Six percent (6%) serious damage by internal discoloration. Percentages higher than six percent (6%) allowed with Idaho Crop Improvement Association, Inc. approval if laboratory tests show the internal discoloration is not of pathogen origin.
15. Serious damage by dry or moist type tuber rot - 2%.
16. External discoloration – no requirements.
17. Flattened depressed and sunken discolored areas showing no underlying flesh discoloration – no requirements.
18. Rhizoctonia – no requirements
19. Sprouts – no requirements.





**United States  
Department of  
Agriculture**

**Agricultural  
Marketing  
Service**

**Fruit and  
Vegetable  
Programs**

**Fresh  
Products  
Branch**

# **United States Standards for Grades of Seed Potatoes**

**Effective March 6, 1987**  
*(Reprinted - January 1997)*

## United States Standards for Grades of Seed Potatoes

---

51.3000 General.

51.3001 Grade.

51.3002 Tolerances.

51.3003 Application of tolerances.

51.3004 Samples for grade and size determination.

51.3005 Definitions.

51.3006 Classification of defects.

### **§51.3000 General.**

Compliance with the provisions of these standards shall not excuse failure to comply with provisions of applicable Federal or State Laws.

### **§51.3001 Grade.**

"U.S. No. 1 Seed Potatoes" consist of unwashed potatoes identified as certified seed by the state of origin by blue tags fixed to the containers or official State or Federal State certificates accompanying bulk loads, which identify the variety, size, class, crop year, and grower or shipper of the potatoes, and the State certification agency. These potatoes must meet the following requirements:

(a) Fairly well shaped.

(b) Free from:

(1) Freezing injury;

(2) Blackheart;

(3) Late Blight Tuber Rot;

(4) Nematode or Tuber Moth injury;

(5) Bacterial Ring Rot;

(6) Soft rot or wet breakdown; and,

(7) Fresh cuts or fresh broken-off second growth.

(c) Free from serious damage caused by:

(1) Hollow Heart; and,

(2) Vascular ring discoloration.

(d) Free from damage by soil and any other cause. (See §51.3005 - 06).

(e) Size:

(1) Minimum diameter, unless otherwise specified, shall not be less than 1-1/2 inches (38.1 mm) in diameter;

(2) Maximum size, unless otherwise specified, shall not exceed 3-1/4 inches (82.6 mm) in diameter or 12 ounces (340.20 g) in weight.

(f) Tolerances. (See §51.3002).

### **§51.3002 Tolerances.**

In order to allow for variations incident to proper grading and handling in the foregoing grade, the following tolerances, by weight, are provided as specified.

(a) For defects:

- (1) 10 percent for potatoes in any lot which are seriously damaged by hollow heart;
- (2) 10 percent for potatoes in any lot which are damaged by soil;
- (3) 5 percent for potatoes in any lot which are seriously damaged by vascular ring discoloration;
- (4) 11 percent for potatoes which fail to meet the remaining requirements of the grade including therein not more than 6 percent for external defects and not more than 5 percent for internal defects: Provided, that included in these tolerances not more than the following percentages shall be allowed for the defects listed:

	<b>Percent</b>
Bacterial Ring Rot .....	0.00
Serious damage by dry or moist type Fusarium Tuber Rot .....	2.00
Late Blight Tuber Rot .....	1.00
Nematode or Tuber Moth injury .....	0.00
Varietal mixture .....	0.25
Frozen, soft rot or wet breakdown .....	0.50

Provided, that en route or at destination, an additional 0.50 percent, or a total of 1 percent, shall be allowed for potatoes which are frozen or affected by soft rot or wet breakdown.

(b) For off-size:

- (1) For undersize: 5 percent for potatoes in any lot which fail to meet the required or specified minimum size.
- (2) For oversize: 10 percent for potatoes in any lot which fail to meet the required or specified maximum size.

**§51.3003 Application of tolerances.**

Individual samples (See §51.3004) shall not have more than double the tolerances specified, except that at least one defective and one off-size potato may be permitted in any sample; Provided, that en route or at destination, one-tenth of the samples may contain three times the tolerance permitted for potatoes which are frozen or affected by soft rot or wet breakdown; and provided further, that the averages for the entire lot are within the tolerances specified for the grade.

**§51.3004 Samples for grade and size determination.**

Individual samples shall consist of at least 20 pounds (9.06 kg). The number of such individual samples drawn for grade and size determination will vary with the size of the lot.

**§51.3005 Definitions.**

- (a) "Fairly well shaped" means that the potato is not materially pointed, dumbbell-shaped or otherwise materially deformed.
- (b) "Nematode or Tuber Moth injury" means the presence of, or any evidence of, Nematode or Tuber Moth.
- (c) Soil:
  - (1) "Fairly clean" means that at least 90 percent of the potatoes in the lot have no more than 10 percent of the surface covered with caked soil.
  - (2) "Damage by soil" means that caked soil covers more than 25 percent of a potato's surface.
  - (3) "Loose soil" -- A lot of seed potatoes is not considered damaged by the presence of loose soil, clods, rocks, vines, and foreign material, but such will be considered a tare factor if the following

allowances are exceeded:

- 8 ounces (226.80 g) in a 100 pound (45.3 kg) container.
- 4 ounces (113.40 g) in a 50 pound (22.65 kg) container.
- 2 ounces (56.70 g) in a 25 pound (11.33 kg) container or less.
- 1 percent in a bulk load.

- (d) "Shriveling" -- Damage by shriveling means that the individual potato is more than moderately shriveled, spongy or flabby.
- (e) "Freezing injury" means that the potato is frozen or shows evidence of having been frozen.
- (f) "Soft rot or wet breakdown" means any soft, mushy or leaky condition of the tissue.
- (g) "Zero Tolerance" (0.00) means none found during the normal inspecting procedures. Certification of a lot is not a guarantee that the lot inspected is free of a zero tolerance disease or injury.
- (h) "Damage" means any defect or any combination of defects which materially detracts from the internal or external appearance of the potato, or any external or internal defect which cannot be removed without a loss of more than 5 percent of the total weight of the potato (See §51.3006).
- (i) "Serious damage" means any defect or any combination of defects which seriously detracts from the internal or external appearance of the potato, or any internal or external defect which cannot be removed without a loss of more than 10 percent of the total weight of the potato (See §51.3006).
- (j) "External defects" are defects which can be detected by examining the surface of the potato. Cutting may be required to determine the extent of the injury (See §51.3006, Table I).
- (k) "Internal defects" are defects which cannot be detected without cutting the potato (See §51.3006, Table II).
- (l) "Permanent defects" are defects which are not subject to change during storage or shipment.
- (m) "Condition defects" are defects which may develop or change during storage or shipment.

**§51.3006 Classification of defects.**

- (a) Brown discoloration following skinning, dried stems, flattened depressed areas (showing no underlying flesh discoloration), greening, skin checks and sunburn do not affect seed quality and shall not be scored against the grade.



(b) Table I -- External Defects.

x-indicates method of scoring unless otherwise noted.

Defect	Damage	
	When materially detracting from the appearance of the potato	or When removal causes a loss of more than 5 percent of the total weight of the potato.
Air cracks.....	.....	X
Bruises.....	.....	X
Cuts and broken-off second growth (healed).....	X.....	X
Elephant hide (scaling)	X.....	
Enlarged, discolored or sunken lenticels.....	X.....	
Folded ends.....	X.....	
Second growth.....	X.....	
Shriveling.....	When more than moderately shriveled, spongy, or flabby.	
Sprouts.....	When more than 20 percent of the potatoes in any lot have any sprout more than 1 inch (25.4 mm) in length.	
Surface cracking.....	X.....	X
Flea Beetle injury.....	X.....	X
Grub damage.....	X.....	X
Rodent and/or bird damage.....	X.....	X
Wireworm or grass damage.....	Any hole more than 3/4 inch (19.1 mm) long or when the aggregate length of all holes is more than 1-1/4 inches (31. mm) <sup>1</sup> .	
Dry rots.....	.....	X
Rhizoctonia.....	X.....	
Scab, pitted.....	X.....	X
Scab, russet.....	When affecting more than 1/3 of the surface.....	

Scab, surface.....	When affecting more than 5 percent of the surface	
Silver Scurf.....	When affecting more than 25 percent of the surface.....	
Growth cracks.....	When seriously detracting from the appearance.....	
Pressure bruises and sunken areas-with underlying flesh discolored.	.....	When removal causes a loss of more than 10 percent of the total weight.

<sup>1</sup>Definitions of damage and serious damage are based on potatoes that are 2-1/2 inches (63.5 mm) in diameter or 6 ounces (170.10 g) in weight. Correspondingly lesser or greater areas are permitted on smaller or larger potatoes.

**(c) Table II- Internal Defects.**

Defect	Damage	
	When materially detracting from the appearance of the potato	or When removal causes a loss of more than 5 percent of the total weight of the potato
Ingrown sprouts.....	.....	X
Internal discoloration occurring interior to the vascular ring (such as, Internal Brown Spot, Mahogany Browning and Heat Necrosis.).	When more than the equivalent of three scattered light brown spots 1/8 inch (3.2 mm) in diameter <sup>1</sup>	
All other internal discoloration <b>excluding</b> discoloration confined to the vascular ring.	.....	X

<sup>1</sup>Definitions of damage and serious damage are based on potatoes that are 2-1/2 inches (63.5 mm) in diameter or 6 ounces (170.10 g) in weight. Correspondingly lesser or greater areas are permitted on smaller or larger potatoes.

Defect	Serious damage	
	When seriously detracting from the appearance of the potato.	or When removal causes a loss of more than 10 percent of the total weight of the potato.
Internal Discoloration confined to the vascular ring.	.....	X
Hollow Heart or Hollow Heart with discoloration.	When affected area exceeds that of a circle 3/4 inch (19.1 mm) in diameter. <sup>1</sup>	

<sup>1</sup>Definitions of damage and serious damage are based on potatoes that are 2-1/2 inches (63.5 mm) in diameter or 6 ounces (170.10 g) in weight. Corresponding lesser or greater areas are permitted on smaller or larger potatoes.



**United States  
Department of  
Agriculture**

**Agricultural  
Marketing  
Service**

**Fruit and  
Vegetable  
Programs**

**Fresh  
Products  
Branch**

# **United States Standards for Grades of Potatoes**

**Effective June 3, 2011**

# United States Standards for Grades of Potatoes <sup>1</sup>

---

## **Grades**

51.1540 [Reserved].

51.1541 U.S. No. 1.

51.1542 U.S. Commercial.

51.1543 U.S. No. 2.

51.1544 [Reserved].

## **Size**

51.1545 Size.

## **Tolerances**

51.1546 Tolerances.

## **Application of Tolerances**

51.1547 Application of tolerances.

## **Samples for Grade and Size Determination**

51.1548 Samples for grade and size determination.

## **Skinning**

51.1549 Skinning.

## **Definitions**

51.1550 Similar varietal characteristics.

51.1551 Firm.

51.1552 Clean.

51.1553 Fairly clean.

51.1554 Mature.

51.1555 Fairly well matured.

51.1556 Well shaped.

51.1557 Fairly well shaped.

51.1558 Seriously misshapen.

51.1559 [Removed and Reserved].

51.1560 Damage.

51.1561 Serious damage.

51.1562 Freezing.

51.1563 Soft rot or wet breakdown.

51.1564 External defects.

51.1565 Internal defects.

## **Metric Conversion Table**

51.1566 Metric conversion table.

<sup>1</sup>Packing of the product in conformity with requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food and Drug Cosmetic Act or with applicable State laws and regulations.

## **Grades**

### **§51.1540 [Reserved].**

### **§51.1541 U.S. No. 1.**

"U.S. No. 1" consists of potatoes which meet the following requirements:

- (a) Similar varietal characteristics, except when designated as a mixed or specialty pack;
- (b) Firm;
- (c) Fairly clean;<sup>2</sup>
- (d) Fairly well shaped;
- (e) Free from:
  - (1) Freezing;
  - (2) Blackheart;
  - (3) Late blight, southern bacterial wilt and ring rot; and,
  - (4) Soft rot and wet breakdown.
- (f) Free from damage by any other cause. See §§51.1564 and 51.1565.
- (g) Size. Not less than 1-7/8 inches in diameter, unless otherwise specified in connection with the grade.
- (h) For tolerances see §51.1546.

### **§51.1542 U.S. Commercial.**

"U.S. Commercial" consists of potatoes which meet the requirements of U.S. No. 1 grade except for the following:

- (a) Free from serious damage caused by:
  - (1) Dirt or other foreign matter;
  - (2) Russet scab; and,
  - (3) Rhizoctonia.
- (b) Increased tolerances for defects specified in §51.1546.

### **§51.1543 U.S. No. 2.**

"U.S. No. 2" consists of potatoes which meet the following requirements:

- (a) Similar varietal characteristics, except when designated as a mixed or specialty pack;
- (b) Not seriously misshapen;
- (c) Free from:
  - (1) Freezing;
  - (2) Blackheart;
  - (3) Late blight, southern bacterial wilt and ring rot; and,
  - (4) Soft rot and wet breakdown.
- (d) Free from serious damage by any other cause. See §§51.1564 and 51.1565.
- (e) Size. Not less than 1-1/2 inches in diameter, unless otherwise specified in connection with the grade.
- (f) For tolerances see §51.1546.

### **§51.1544 [Reserved].**

<sup>2</sup>Potatoes in containers bearing official State Seed Certification Tags and Seals are not required to be fairly clean but shall be free from damage by dirt.

## Size

### §51.1545 Size.

(a) The minimum size, or minimum and maximum sizes may be specified in connection with the grade in terms of diameter or weight of the individual potato, or in accordance with one of the size designations in Table I or Table II: **Provided**, That sizes so specified shall not be in conflict with the basic size requirements for the grade.

(b) When size is designated as shown in Table II, the corresponding weight ranges shall apply. These size designations may be applied to potatoes packed in any size container: **Provided**, That the weight ranges are within the limits specified.

**Table I**

Size designation	Minimum diameter <sup>1</sup> or weight		Maximum diameter <sup>1</sup> or weight	
	Inches	Ounces	Inches	Ounces
Creamer.....	3/4	( <sup>3</sup> )	1-5/8	( <sup>3</sup> )
Chef.....	2-3/4	8	4-1/2	28
Size A <sup>2</sup> .....	1-7/8	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Size B.....	1-1/2	( <sup>3</sup> )	2-1/4	( <sup>3</sup> )
Small.....	1-3/4	( <sup>3</sup> )	2-1/2	6
Medium.....	2-1/4	5	3-1/4	10
Large.....	3	10	4-1/2	28

<sup>1</sup>Diameter means the greatest dimension at right angles to the longitudinal axis, without regard to the position of the stem end.

<sup>2</sup>In addition to the minimum size specified, a lot of potatoes designated as Size A shall contain at least 40 percent of potatoes which are 2-1/2 inches in diameter or larger or 6 ounces in weight or larger.

<sup>3</sup>No requirement.

**Table II**  
[Ounces]

Size designation	Minimum weight	Maximum weight
Under 50.....	15	.....
50.....	12	19
60.....	10	16
70.....	9	15
80.....	8	13
90.....	7	12
100.....	6	10
110.....	5	9
120.....	4	8
130.....	4	8
140.....	4	8
Over 140.....	4	8

## Tolerances

### §51.1546 Tolerances.

To allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances by weight or equivalent basis, are provided as specified.

(a) **For defects -- (1) U.S. No. 1.** (i) **At Shipping Point:** A total of 8 percent for potatoes in any lot which fail to meet the requirements for the grade: **Provided**, That included in this tolerance not more than the following percentages shall be allowed for the defects listed:

(A) 5 percent for external defects;

(B) 5 percent for internal defects; and

(C) Not more than a total of 1 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See §51.1547.

(ii) **En route or at Destination:** A total of 10 percent for potatoes in any lot which fail to meet the requirements for the grade: **Provided**, That included in this tolerance not more a total of 8 percent shall be allowed for permanent defects: **And provided further**, the following percentages shall be allowed for the defects listed:

(A) 7 percent for external defects, including therein not more than 5 percent for permanent external defects;

(B) 7 percent for internal defects, including therein not more than 5 percent for permanent internal defects; and

(C) Not more than a total of 2 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See §51.1547.

(2) **U.S. Commercial.** A total of 20 percent for potatoes in any lot which fail to meet the requirements for the grade: **Provided**, That included in this tolerance not more than the following percentages shall be allowed for the defects listed:

(i) 10 percent for potatoes which fail to meet the requirements for U.S. No. 2 grade, including therein not more than:

(ii) 6 percent for external defects;

(iii) 6 percent for internal defects; and

(iv) Not more than a total of 1 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See §51.1547.

(3) **U.S. No. 2.** (i) **At Shipping Point:** A total of 10 percent for potatoes in any lot which fail to meet the requirements for the grade: **Provided**, That included in this tolerance not more than the following percentages shall be allowed for the defects listed:

(A) 6 percent for external defects;

(B) 6 percent for internal defects; and

(C) Not more than a total of 1 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See §51.1547.

(ii) **En route or at Destination:** A total of 12 percent for potatoes in any lot which fail to meet the requirements for the grade: **Provided**, That included in this tolerance not more than 10 percent shall be allowed for permanent defects: **And provided further**, the following percentages shall be allowed for the defects listed:

(A) 8 percent for external defects, including therein not more than 6 percent for permanent external defects;

(B) 8 percent for internal defects, including therein not more than 6 percent for permanent internal defects; and



(C) Not more than a total of 2 percent for potatoes which are frozen or affected by soft rot or wet breakdown. See §51.1547.

(b) **For off-size.** (1) Not more than 3 percent of the potatoes in any lot may be smaller than the required or specified minimum size except that a tolerance of 5 percent shall be allowed for potatoes packed to meet a minimum size of 2-1/4 inches or larger in diameter or 5 ounces or more in weight. In addition, not more than 10 percent may be larger than any required or specified maximum size. See §51.1547.

(2) When a percentage of the potatoes is specified to be of a certain size and larger, individual samples shall have not less than one-half of the percentage specified: **Provided**, That the average for the entire lot is not less than the percentage specified.

#### **Application of Tolerances**

##### **§51.1547 Application of tolerances.**

Individual samples shall have not more than double the tolerances specified, except that at least one defective and one off-size potato may be permitted in any sample: **Provided**, That en route or at destination one-tenth of the samples may contain three times the tolerance permitted for potatoes which are frozen or affected by soft rot or wet breakdown. **And provided further**, That the averages for the entire lot are within the tolerances specified for the grade.

#### **Samples for Grade and Size Determination**

##### **§51.1548 Samples for grade and size determination.**

Individual samples shall consist of at least 20 pounds. When individual packages contain at least 20 pounds, each individual sample is drawn from one package; when packages contain less than 20 pounds, a sufficient number of adjoining packages are opened to provide at least a 20-pound sample. The number of such individual samples drawn for grade and size determination will vary with the size of the lot.

#### **Skinning**

##### **§51.1549 Skinning.**

(a) The following definitions provide a basis for describing lots of potatoes as to the degree of skinning whenever description may be appropriate:

(1) "Practically no skinning" means that not more than 5 percent of the potatoes in the lot have more than one-tenth of the skin missing or "feathered;"

(2) "Slightly skinned" means that not more than 10 percent of the potatoes in the lot have more than one-fourth of the skin missing or "feathered;"

(3) "Moderately skinned" means that not more than 10 percent of the potatoes in the lot have more than one-half of the skin missing or "feathered;" and

(4) "Badly skinned" means that more than 10 percent of the potatoes in the lot have more than one-half of the skin missing or "feathered."

#### **Definitions**

##### **§51.1550 Similar varietal characteristics.**

"Similar varietal characteristics" means that the potatoes in any lot have the same general shape, color and character of skin, and color of flesh.

##### **§51.1551 Firm.**

"Firm" means that the potato is not shriveled or flabby.

##### **§51.1552 Clean.**

"Clean" means that at least 90 percent of the potatoes in any lot are practically free from dirt or staining and practically no loose dirt or other foreign matter is present in the container.

**§51.1553 Fairly clean.**

"Fairly clean" means that at least 90 percent of the potatoes in any lot are reasonably free from dirt or staining and not more than a slight amount of loose dirt or foreign matter is present in the container.

**§51.1554 Mature.**

"Mature" means that the skins of the potatoes are generally firmly set and not more than 5 percent of the potatoes in the lot have more than one-tenth of the skin missing or "feathered."

**§51.1555 Fairly well matured.**

"Fairly well matured" means that the skins of the potatoes are generally fairly firmly set and not more than 10 percent of the potatoes in the lot have more than one-fourth of the skin missing or "feathered."

**§51.1556 Well shaped.**

"Well shaped" means that the potato has the normal shape for the variety.

**§51.1557 Fairly well shaped.**

"Fairly well shaped" means that the potato is not materially pointed, dumbbell-shaped or otherwise materially deformed.

**§51.1558 Seriously misshapen.**

"Seriously misshapen" means that the potato is seriously pointed, dumbbell-shaped or otherwise badly deformed.

**§51.1559 [Removed and Reserved].**

**§51.1560 Damage.**

"Damage" means any defect, or any combination of defects, which materially detracts from the edible or marketing quality, or the internal or external appearance of the potato, or any external defect which cannot be removed without a loss of more than 5 percent of the total weight of the potato. See Tables III, IV, V, and VI in §51.1564 and Table VII in §51.1565.

**§51.1561 Serious damage.**

"Serious damage" means any defect, or any combination of defects, which seriously detracts from the edible or marketing quality, or the internal or external appearance of the potato, or any external defect which cannot be removed without a loss of more than 10 percent of the total weight of the potato. See Tables III, IV, V, and VI in §51.1564 and Table VII in §51.1565.

**§51.1562 Freezing.**

"Freezing" means that the potato is frozen or shows evidence of having been frozen.

**§51.1563 Soft rot or wet breakdown.**

"Soft rot or wet breakdown" means any soft, mushy, or leaky condition of the tissue such as slimy soft rot, leak, or wet breakdown following freezing injury.

**§51.1564 External defects.**

"External defects" are defects which can be detected externally. However, cutting may be required to determine the extent of the injury. Some external defects are listed in Tables III, IV, V, and VI.

**Table III - External Defects**

<b>Defects</b>	<b>Damage</b>	<b>Serious Damage<sup>1</sup></b>
Air Cracks	When removal causes a loss of more than 5 percent of the total weight of the potato or when the air crack(s) affects more than 1/3 the length or diameter of the potato (whichever is greater) in the aggregate.	When removal causes a loss of more than 10 percent of the total weight of the potato or when the air crack(s) affects more than 3/4 the length or diameter of the potato (whichever is greater) in the aggregate.
Artificial Coloring	When unsightly or when concealing any defect causing damage or when penetrating the flesh and removal causes loss of more than 5 percent of total weight of potato.	When concealing a serious defect or when penetrating into the flesh and removal causes loss of more than 10 percent of total weight of potato.
Bruises (Not including pressure bruise and sunken discolored areas)	When removal causes a loss of more than 5 percent of the total weight of the potato or when the area affected is more than 5 percent of the surface in the aggregate (i.e. 3/4 inch on a 2-1/2 inch or 6 oz. potato). Correspondingly lesser or greater areas in smaller or larger potatoes.	When removal causes a loss of more than 10 percent of the total weight of the potato or when the area affected is more than 10 percent of the surface in the aggregate (i.e. 1-1/4 inches on a 2-1/2 inch or 6 oz. potato). Correspondingly lesser or greater areas in smaller or larger potatoes.
Cuts	When one smooth cut affects more than 5 percent of the surface area.	Cut(s) that affect more than 10 percent of the surface area in the aggregate or when a single side cut extends beyond 1/2 the length of the potato.
Dirt	When materially detracting from the appearance of the potato.	When seriously detracting from the appearance of the potato.
Elephant Hide	When affecting over 10 percent of the surface area of the potato.	When affecting over 25 percent of the surface area.
Enlarged Lenticels	When materially detracting from the appearance of the potato.	When seriously detracting from the appearance of the potato.
External Discoloration (Areas that are light tan or lighter in color and blends should be ignored.)	When more than 30 percent of the surface is affected by light tan or light brown colors which do not blend or when more than 15 percent of the surface is affected by colors darker than light tan or light brown.	When more than 60 percent of the surface is affected by light tan or light brown colors which do not blend or when more than 30 percent of the surface is affected by colors darker than light tan or light brown.

<b>Defects</b>	<b>Damage</b>	<b>Serious Damage<sup>1</sup></b>
Flattened or Depressed Areas/Pressure Bruises	When removal of underlying discolored flesh causes a loss of more than 5 percent of the total weight of the potato or when the flattened or depressed area(s) covers more surface area than allowed in Table IV. (See Table IV.)	When removal of underlying discolored flesh causes a loss of more than 10 percent of the weight of the potato or when the flattened depressed area(s) covers more surface area than allowed in the Table IV. (See Table IV.)
Flea Beetle Injury	When materially detracting from the appearance or when removal causes a loss of more than 5 percent of the total weight of the potato or when the area affected is more than 5 percent of the surface in the aggregate.	When seriously detracting from the appearance of the potato or when removal causes a loss of more than 10 percent of the weight of the potato or when the area affected is more than 10 percent of the surface in the aggregate.
Greening	When removal causes a loss of more than 5 percent of the total weight of the potato or when green color affects more than 25 percent of the surface in the aggregate.	When removal causes a loss of more than 10 percent of the weight of the potato or when green color affects more than 50 percent of the surface in the aggregate.
Growth Cracks	When the growth crack(s) affects more than 1/2 the length of the potato in the aggregate on round varieties or more than 1/3 the length in the aggregate on long varieties; or, when the depth is greater than that as outlined in Table V. (See Table V.)	When the growth crack(s) affects more than 3/4 the length of the potato in the aggregate or when the depth is greater than that as outlined in Table V. (See Table V.)
Grub Damage	When removal causes a loss of more than 5 percent of the total weight of the potato or when affecting more than 5 percent of the surface area (i.e. more than 3/4 inch on a 2-1/2 inch or 6 ounce potato). Correspondingly lesser or greater areas in smaller or larger potatoes.	When removal causes a loss of more than 10 percent of the total weight of the potato or when affecting more than 10 percent of the surface area (i.e. more than 1-1/4 inch on a 2-1/2 inch or 6 ounce potato). Correspondingly lesser or greater areas in smaller or larger potatoes.
Insects or Worms	(See Serious Damage.)	When present inside the potato.
Nematode (Root Knot)	When removal causes loss of more than 5 percent of total weight of potato.	When removal causes loss of more than 10 percent of total weight of potato.
Rhizoctonia	When affecting more than 15 percent of the surface in the aggregate.	When affecting more than 50 percent of the surface in the aggregate.

<b>Defects</b>	<b>Damage</b>	<b>Serious Damage<sup>1</sup></b>
Rodent or Bird Damage	When removal causes a loss of more than 5 percent of the total weight of the potato or when affecting more than 5 percent of the surface area (i.e. more than 3/4 inch on a 2-1/2 inch or 6 ounce potato). Correspondingly lesser or greater areas in smaller or larger potatoes.	When removal causes a loss of more than 10 percent of the total weight of the potato or when affecting more than 10 percent of the surface area (i.e. more than 1-1/4 inch on a 2-1/2 inch or 6 ounce potato). Correspondingly lesser or greater areas in smaller or larger potatoes.
Russeting (On Non Russet Type)	When more than 50 percent of the surface is affected in the aggregate.	N/A
Scab, Pitted	When removal causes a loss of more than 5 percent of the total weight of the potato or when scab affects an aggregate area of more than 1/2 inch. (Based on a potato 2-1/2 inches in diameter or 6 oz. in weight.) Correspondingly lesser or greater areas in smaller or larger potatoes.	When the removal causes a loss of more than 10 percent of the total weight of the potato or when scab affects an aggregate area of more than 1 inch. (Based on a potato 2-1/2 inches in diameter or 6 oz. in weight.) Correspondingly lesser or greater areas in smaller or larger potatoes.
Scab, Russet	Smooth and affecting more than 1/3 of the surface or rough russet scab which affects more than 10 percent of the surface in the aggregate.	Rough and affecting more than 25 percent of the surface in the aggregate.
Scab, Surface	When more than 5 percent of the surface in the aggregate is affected.	When more than 25 percent of the surface in the aggregate is affected.
Second Growth	When materially detracting from the appearance of the potato.	When seriously detracting from the appearance of the potato.
Silver Scurf	When affecting more than 50 percent of the surface area of the potato.	When its severity causes a wrinkling of the skin over more than 50 percent of the surface.
Sprouts	When more than 5 percent of the potatoes in any lot have any sprout more than 1/4 inch in length at shipping point, more than 1/2 inch in length at destination; or have numerous individual and/or clusters of sprouts which materially detract from the appearance of the potato.	When more than 10 percent of the potatoes in any lot have any sprout more than 1/2 inch in length at shipping point, more than 1 inch in length at destination; or have numerous individual and/or clusters of sprouts which seriously detract from the appearance of the potato. Serious damage by sprouts shall only be scored against the U.S. Commercial and U.S. No. 2 grades.

<b>Defects</b>	<b>Damage</b>	<b>Serious Damage<sup>1</sup></b>
Sunburn	When removal causes loss of more than 5 percent of total weight of potato.	When removal causes loss of more than 10 percent of total weight of potato.
Sunken Discolored Areas	<b>SEE TABLE VI</b>	<b>SEE TABLE VI</b>
Surface Cracks (Areas affected by fine net-like cracking should be ignored.)	When smooth shallow cracking affects more than 1/3 of the surface or when rough deep cracking affects more than 5 percent of the surface.	When rough deep cracking affects more than 10 percent of the surface.
Wireworm or Grass Damage	When affecting the flesh of the potato and removal causes loss of more than 5 percent of total weight of potato.	When affecting the flesh of the potato and removal causes loss of more than 10 percent of total weight of potato.

<sup>1</sup>The following defects are considered serious damage when present in any degree: 1. Freezing. 2. Late blight. 3. Ring rot. 4. Southern bacterial wilt. 5. Soft rot. 6. Wet breakdown.

**Table IV  
Flattened or Depressed Areas - Pressure Bruises Maximum Area Allowed**

<b>Diameter</b>	<b>Weight</b>	<b>No. 1 (aggregate area)</b>	<b>No. 2 (aggregate area)</b>
Potato is:	Potato is:	Not more than:	Not more than:
Less than 2 in.	Less than 4 oz.	1/2 in.	1 in.
2 to 2-1/2 in.	4 to 6 oz.	1 in.	1-1/2 in.
More than 2-1/2 to 3 in.	More than 6 to 8 oz.	1-1/4 in.	1-3/4 in.
More than 3 to 3-1/2 in.	More than 8 to 14 oz.	1-1/2 in.	1-7/8 in.
More than 3-1/2 to 4 in.	More than 14 to 20 oz.	1-3/4 in.	2 in.
More than 4 to 4-1/2 in.	More than 20 to 28 oz.	2 in.	2-1/4 in.
More than 4-1/2 to 5 in.	More than 28 to 36 oz.	2-1/4 in.	2-3/4 in.
More than 5 in.	More than 36 oz.	2-1/2 in.	3-1/4 in.

**Table V**  
**Depth Allowed For Growth Cracks**

<b>Diameter</b>	<b>Weight</b>	<b>No. 1 (Depth)</b>	<b>No. 2 (Depth)</b>
Potato is:	Potato is:	Not more than:	Not more than:
Less than 2 in.	Less than 4 oz.	1/8 in.	1/4 in.
2 to 2-1/2 in.	4 oz. to 6 oz.	1/4 in.	3/8 in.
More than 2-1/2 to 3 in.	More than 6 oz. to 8 oz.	3/8 in.	1/2 in.
More than 3 in.	More than 8 oz.	1/2 in.	5/8 in.

**Table VI**  
**Sunken Discolored Areas Maximum Area Allowed**

<b>Diameter</b>	<b>Weight</b>	<b>No. 1 (aggregate area)</b>	<b>No. 2 (aggregate area)</b>
Potato is:	Potato is:	Not more than:	Not more than:
Less than 2 in.	Less than 4 oz.	3/8 in.	3/4 in.
2 to 2-1/2 in.	4 to 6 oz.	3/4 in.	1 in.
More than 2-1/2 to 3 in.	More than 6 to 8 oz.	1 in.	1-1/4 in.
More than 3 to 3-1/2 in.	More than 8 to 14 oz.	1-1/4 in.	1-1/2 in.
More than 3-1/2 to 4 in.	More than 14 to 20 oz.	1-1/2 in.	1-3/4 in.
More than 4 to 4-1/2 in.	More than 20 to 28 oz.	1-3/4 in.	2 in.
More than 4-1/2 to 5 in.	More than 28 to 36 oz.	2 in.	2-1/4 in.
More than 5 in.	More than 36 oz.	2-1/4 in.	2-1/2 in.

**§51.1565 Internal defects.**

"Internal defects" are defects which cannot be detected without cutting the potato. Some internal defects are listed in Table VII.

**Table VII -- Internal Defects**

<b>Defects</b>	<b>Damage Maximum Allowed</b>	<b>Serious Damage Maximum Allowed</b>
<b>Occurring outside of or not entirely confined to the vascular ring</b>		
Ingrown Sprouts, Internal Black Spot, Internal Discoloration, Vascular Browning, Fusarium Wilt, Net Necrosis, Other Necrosis, Stem End Browning	5% waste	10% waste
Internal Black Spot.	When the spot(s) are darker than the official color chip (POT-CC-2) after removing 5 percent of the total weight of the potato.	When the spot(s) are darker than the official color chip (POT-CC-2) after removing 10 percent of the total weight of the potato.
<b>Occurring entirely within the vascular ring</b>		
Hollow Heart or Hollow Heart with Discoloration	Area affected not to exceed that of a circle 1/2 inch in diameter in a potato 2-1/2 inches in diameter or 6 ounces in weight. <sup>1</sup>	Area affected not to exceed that of a circle 3/4 inch in diameter in a potato 2-1/2 inches in diameter or 6 ounces in weight. <sup>1</sup>
Light Brown Discoloration (Brown Center)	Area affected not to exceed that of a circle 1/2 inch in diameter in a potato 2-1/2 inches in diameter or 6 ounces in weight. <sup>1</sup>	Area affected not to exceed that of a circle 3/4 inch in diameter in a potato 2-1/2 inches in diameter or 6 ounces in weight. <sup>1</sup>
Internal Brown Spot and Similar Discoloration (Heat Necrosis)	Not more than the equivalent of 3 scattered spots 1/8 inch in diameter in a potato 2-1/2 inches in diameter or 6 ounces in weight. <sup>1</sup>	Not more than the equivalent of 6 scattered spots 1/8 inch in diameter in a potato 2-1/2 inches in diameter or 6 ounces in weight. <sup>1</sup>

<sup>1</sup>**Note:** Correspondingly lesser or greater areas in smaller or larger potatoes.



**Metric Conversion Table**  
**§51.1566 Metric conversion table.**

<b>Ounces</b>	<b>Grams</b>
1 equals.....	28.35
4 equals.....	113.40
5 equals.....	141.75
6 equals.....	170.10
7 equals.....	198.45
8 equals.....	226.80
9 equals.....	255.15
10 equals.....	283.50
12 equals.....	340.20
14 equals.....	396.90
16 equals.....	453.60
18 equals.....	510.30
19 equals.....	538.60
20 equals.....	567.00

<b>Inches</b>	<b>Millimeters (mm)</b>
1/8 equals.....	3.2
1/4 equals.....	6.4
1/2 equals.....	12.7
3/4 equals.....	19.1
1 equals.....	25.4
1-1/2 equals .....	38.1
2 equals.....	50.8
2-1/2 equals .....	63.5
3 equals.....	76.2
3-1/2 equals .....	88.9
4 equals.....	101.6
4-1/2 equals .....	114.3



# Paperwork Survival Guide

## Line by Line Instructions

UNITED STATES DEPARTMENT OF AGRICULTURE  
 FEDERAL AGENCIES  
 FEDERAL AGRICULTURAL EXTENSION SERVICE  
**FEDERAL SEED INSPECTION REPORT**  
As adopted by Federal Seed Act, amended 1967, 1974, 1980, and 1982.

**IDENTIFICATION NUMBER**  
 VARIETY: COUNTY AND COUNTY NUMBER, GRADE: \_\_\_\_\_

**LOCATION** \_\_\_\_\_

**TIME OF INSPECTION** \_\_\_\_\_

**SERIAL NUMBER** \_\_\_\_\_

**INSPECTOR** \_\_\_\_\_

**WEIGHT** \_\_\_\_\_

**EXPENSES** \_\_\_\_\_

**TOTAL** \_\_\_\_\_

METS CANADIAN  METS M. O. \_\_\_\_\_

**LES. EXAMINED**  
 Size: \_\_\_\_\_ Off size: \_\_\_\_\_  
 Foreign: \_\_\_\_\_ Under: \_\_\_\_\_  
 Min. Max. Moist: \_\_\_\_\_ Over: \_\_\_\_\_

**QUALITY DEFECTS**  
 Lib. Cut \_\_\_\_\_ Lib. Scored \_\_\_\_\_  
 Internal % O \_\_\_\_\_ Internal % D \_\_\_\_\_  
 External Lib. or Cr. \_\_\_\_\_ External % S. D. \_\_\_\_\_  
 Total % \_\_\_\_\_ Total % \_\_\_\_\_  
 Salt rot/Decay \_\_\_\_\_ Salt rot/Seed stem \_\_\_\_\_  
 Cuts \_\_\_\_\_ Cuts \_\_\_\_\_  
 Beils \_\_\_\_\_ Beils \_\_\_\_\_  
 Sunburn \_\_\_\_\_ S. growth \_\_\_\_\_  
 S. cracks \_\_\_\_\_ S. cracks \_\_\_\_\_  
 Scab \_\_\_\_\_ Scab \_\_\_\_\_  
 Rodent/Preys \_\_\_\_\_ Rodent/Preys \_\_\_\_\_  
 Worms \_\_\_\_\_ Worms \_\_\_\_\_  
 Mashroom \_\_\_\_\_ Mashroom \_\_\_\_\_  
 Spruce \_\_\_\_\_ Spruce \_\_\_\_\_  
 Mold \_\_\_\_\_ Mold \_\_\_\_\_  
 Doubles \_\_\_\_\_ Doubles \_\_\_\_\_  
 Spins \_\_\_\_\_ Spins \_\_\_\_\_  
 Senealed \_\_\_\_\_ Senealed \_\_\_\_\_

**CONDITION**  
 Well \_\_\_\_\_ Fairly Well \_\_\_\_\_  
 Clean \_\_\_\_\_ Clean \_\_\_\_\_  
 F. Clean \_\_\_\_\_ F. Dirty \_\_\_\_\_  
 Dirty \_\_\_\_\_ Dirty \_\_\_\_\_  
 Fair \_\_\_\_\_ Fair \_\_\_\_\_  
 PMS \_\_\_\_\_ PMS \_\_\_\_\_  
 Slightly S. \_\_\_\_\_ Slightly S. \_\_\_\_\_  
 Moderately \_\_\_\_\_ Moderately \_\_\_\_\_  
 Appreciably \_\_\_\_\_ Appreciably \_\_\_\_\_  
 Badly \_\_\_\_\_ Badly \_\_\_\_\_  
 Mature \_\_\_\_\_ Mature \_\_\_\_\_  
 Well \_\_\_\_\_ Well \_\_\_\_\_  
 Fairly Well \_\_\_\_\_ Fairly Well \_\_\_\_\_  
 Bright \_\_\_\_\_ Bright \_\_\_\_\_  
 Fairly Bright \_\_\_\_\_ Fairly Bright \_\_\_\_\_  
 Dull \_\_\_\_\_ Dull \_\_\_\_\_

**REMARKS**  
 Showings/Showings \_\_\_\_\_  
 Corn \_\_\_\_\_ Corn \_\_\_\_\_  
 Impurities \_\_\_\_\_ Impurities \_\_\_\_\_

**Grade, Variety, Count, Brand, etc., to appear on the line above first sample.**

PL-2971-7 (06-84) (Previous editions are to be destroyed) (See reverse of Copy 1 for administration)

ORIGINAL - RETAIN

**1.1. Statement of Administrative FEDERAL SEED INSPECTION REPORT**  
As optional report of inspector or conference by the United States upon application of seed producer.

**INSPECTOR NAME** \_\_\_\_\_ **LOCATION** \_\_\_\_\_

**DATE** \_\_\_\_\_ **CONTINUATION OF REPORT** \_\_\_\_\_

**INSPECTOR'S SIGNATURE** \_\_\_\_\_

**OR**

**Grade, Variety, Count, Brand etc., to appear on the line above first sample.**

**LES. EXAMINED**  
 Lib. Exam: \_\_\_\_\_  
 Foreign: \_\_\_\_\_  
 Min. Max. Moist: \_\_\_\_\_

**QUALITY DEFECTS**  
 Under: \_\_\_\_\_ Over: \_\_\_\_\_  
 Lib. Cut \_\_\_\_\_ Lib. Scored \_\_\_\_\_  
 Internal % S. D. \_\_\_\_\_ Internal % S. D. \_\_\_\_\_  
 External Lib. or Cr. \_\_\_\_\_ External % S. D. \_\_\_\_\_  
 Total % \_\_\_\_\_ Total % \_\_\_\_\_  
 Salt rot/Decay \_\_\_\_\_ Salt rot/Seed stem \_\_\_\_\_  
 Dry rot/Seed stem \_\_\_\_\_ Dry rot/Seed stem \_\_\_\_\_  
 Cuts \_\_\_\_\_ Cuts \_\_\_\_\_  
 Beils \_\_\_\_\_ Beils \_\_\_\_\_  
 Sunburn \_\_\_\_\_ S. growth \_\_\_\_\_  
 S. cracks \_\_\_\_\_ S. cracks \_\_\_\_\_  
 Scab \_\_\_\_\_ Scab \_\_\_\_\_  
 Rodent/Preys \_\_\_\_\_ Rodent/Preys \_\_\_\_\_  
 Worms \_\_\_\_\_ Worms \_\_\_\_\_  
 Mashroom \_\_\_\_\_ Mashroom \_\_\_\_\_  
 Spruce \_\_\_\_\_ Spruce \_\_\_\_\_  
 Mold \_\_\_\_\_ Mold \_\_\_\_\_  
 Doubles \_\_\_\_\_ Doubles \_\_\_\_\_  
 Spins \_\_\_\_\_ Spins \_\_\_\_\_  
 Senealed \_\_\_\_\_ Senealed \_\_\_\_\_

**CONDITION**  
 Well \_\_\_\_\_ Fairly Well \_\_\_\_\_  
 Clean \_\_\_\_\_ Clean \_\_\_\_\_  
 F. Clean \_\_\_\_\_ F. Dirty \_\_\_\_\_  
 Dirty \_\_\_\_\_ Dirty \_\_\_\_\_  
 Fair \_\_\_\_\_ Fair \_\_\_\_\_  
 PMS \_\_\_\_\_ PMS \_\_\_\_\_  
 Slightly S. \_\_\_\_\_ Slightly S. \_\_\_\_\_  
 Moderately \_\_\_\_\_ Moderately \_\_\_\_\_  
 Appreciably \_\_\_\_\_ Appreciably \_\_\_\_\_  
 Badly \_\_\_\_\_ Badly \_\_\_\_\_  
 Mature \_\_\_\_\_ Mature \_\_\_\_\_  
 Well \_\_\_\_\_ Well \_\_\_\_\_  
 Fairly Well \_\_\_\_\_ Fairly Well \_\_\_\_\_  
 Bright \_\_\_\_\_ Bright \_\_\_\_\_  
 Fairly Bright \_\_\_\_\_ Fairly Bright \_\_\_\_\_  
 Dull \_\_\_\_\_ Dull \_\_\_\_\_

**REMARKS**  
 Showings/Showings \_\_\_\_\_  
 Corn \_\_\_\_\_ Corn \_\_\_\_\_  
 Impurities \_\_\_\_\_ Impurities \_\_\_\_\_

**Grade, Variety, Count, Brand etc., to appear on the line above first sample.**

PL-2971-7 (06-84) (Previous editions are to be destroyed) (See reverse of Copy 1 for administration)

ORIGINAL - RETAIN

## Example 1 - DESTINATION

<b>SAMPLE NOTESHEET</b> Out of State Shipments City (if known) and State 50,000 lbs. Pasco Washington	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE		If Seed Potatoes are being shipped <u>within the state of Idaho</u> indicate by placing <b>IDAHO</b> here. ..... If the declared destination is a <u>state other than Idaho</u> indicate the <b>CITY</b> (if known) and <b>STATE</b> here. ..... If the applicant states the shipments comprise of destinations both within Idaho and Out-of-State list all destinations but indicate the <u>weight in pounds</u> next to the <u>out-of-State</u> destinations. <b>Do Not</b> indicate weights next to the shipments whose destinations are within Idaho. *The Idaho Falls District requests that out of state shipments be inspected and recorded on separate numbered notesheets whenever possible.			
		WEIGHT	SIGNATURE OF INSPECTOR(S)		
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____					

## Example 2 - APPLICANT

<b>SAMPLE NOTESHEET (CERTIFICATE)</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE		<b>APPLICANT:</b> This space is for the grower or company name, as it appears in the Seed Directory or on the cellar map. <b>DO NOT OVERWRITE OR MAKE CORRECTIONS IN THIS AREA.</b> <b>*Idaho Falls District :</b> Growers are issued unique numbers which is on list provided to the Inspectors. Place this number in the margin above the Applicants Name. This number also goes on your weekly timesheet indicating where you've been, and how many hrs. charged.			
		WEIGHT	SIGNATURE OF INSPECTOR(S)		
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____					

### Example 3 - LOCATION

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION ↑	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>LOCATION:</b> In this space, write the location in which the inspection is being done. (example: Grace, Idaho) <b>DO NOT OVERWRITE OR MAKE CORRECTIONS IN THIS AREA.</b>		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)			

### Example 4 - SERIAL NUMBER

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>SERIAL NUMBER:</b> This is the number assigned and pre-printed on the Numbered Notesheet. This number is used by State and Federal Agencies for tracking and reporting. In seed, this will be the number that is assigned to each tag as it becomes the <b>TAG NUMBER</b> . If an error is found after shipping and the Numbered Notesheet is incorrect, the <b>original tag or Serial</b> number must be written in the remarks on the <b>NEW</b> Notesheet to reference the original tag number.		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)			

### Example 5 - PAGE

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>PAGE:</b> In this space, write the number you assign to the first and the last page of your inspection. (Example: 1 of 5) This will indicate the total number of pages in the document, helping to link each page to the Numbered Notesheet in order. The Numbered Notesheet will always be 1 and the subsequent pages will 2, 3, 4, etc.. Examples of how this should appear in the space: 1 of 5, 2 of 5, 3 of 5, etc.. If no extra pages are used then the Numbered Notesheet would just read 1.		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)			

### Example 6 - DATE

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>DATE:</b> In this space write the date the inspection is being performed. Month/Day/Year. <b>Do Not Use Military Format.</b> <b>DO NOT OVERWRITE OR MAKE CORRECTION IN THIS SPACE.</b>		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)			

### Example 7 - TIME INSPECTION BEGUN

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>TIME INSPECTION BEGUN:</b> Record the time the grower requests your services and include the time needed to set up and verify the identity of the seed lot. Be sure to indicate whether the time is A.M. or P.M. <b>Do Not Use Military Format. DO NOT OVERWRITE OR MAKE CORRECTION IN THIS SPACE.</b>		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)			

### Example 8 - TIME INSPECTION COMPLETED

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>TIME INSPECTION COMPLETED:</b> In this space record the time when the inspection is completed. Inspection is complete when you finish your last sample, have completed your paperwork and have cleaned/sanitized your equipment. Be sure you indicate whether the time is A.M. or P.M. <b>Do Not Use Military Format. DO NOT OVERWRITE OR MAKE CORRECTION IN THIS SPACE.</b>		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)			

### Example 9 - REMARKS

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<p><b>REMARKS:</b> In this space there are 3 items that need to be recorded.</p> <p><b>1</b> - Describe the container you are inspecting into, as such;                  "ALL LOADS" if the inspections are for bulk shipments being loaded directly onto trucks or trailers.                  "ALL BULK CONTAINERS" if inspecting into individual Bulk type containers.</p> <p>"ALL SACKS and or BOXES" if inspecting into burlap and mesh sacks or boxes.</p> <p><b>2</b> - Record the tag number ie: "TAG NO. A - 000000". In most cases this will be the same as the serial number at the top of the Numbered Note Sheet. This applies to <b>bulk</b> shipments being loaded <b>directly onto trucks or trailers</b>. If <u>uniquely numbered</u> tags have been issued by ICIA for individual containers such as sacks, bulk containers or boxes, indicate all tags issued by number and sequence.  <b>Collect all unused numbered tags and return them to the District Office.</b></p> <p><b>3</b> - Write the certification number(s) of the seed lot being inspected as such;                  "Certifiication No. 12345678" or "CERT. NO. 12345678". Certification numbers are found in the ICIA Seed Directory as well as on the the cellar maps.</p>		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____					

### Example 10 - IDENTIFICATION NO.

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<p><b>IDENTIFICATION NUMBER:</b> In this space write "<b>SEE BELOW</b>".  <b>DO NOT OVERWRITE OR MAKE CORRECTION IN THIS SPACE.</b></p>		
		WEIGHT			
		FEE			
		EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)			



### Example 11 - VARIETY - COUNT AND CONTAINER, GRADE

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>VARIETY - COUNT AND CONTAINER, GRADE:</b> along the left side write; <b>Variety:</b> Example: "Russet Burbank Potatoes" <b>Generation:</b> Examples: G-3 or PVX G-4. <b>Grade Statement .</b> -"Meets Idaho (Blue; Green; Yellow) Tag Seed Grade". <b>CUT SEED:</b> grade statement Example: "Russet Burbank Potatoes" - "Meets Idaho (Blue; Green; Yellow) Tag Seed Grade Prior to Cutting". <b>DO NOT OVERWRITE OR MAKE CORRECTIONS IN THIS AREA.</b>		
←		WEIGHT			
←		FEE			
		EXPENSES			
		TOTAL			
		SIGNATURE OF INSPECTOR(S)			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____					

### Example 12 - VARIETY - COUNT AND CONTAINER, GRADE

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>VARIETY - COUNT AND CONTAINER, GRADE:</b> Use this area to lable the Fees and Expenses as shown in this example.		
	Approx Lbs. Bulk	WEIGHT			
	# hrs @ \$30.00 / hr.	FEE			
	# Miles @ .535 c / mile	EXPENSES			
		TOTAL			
		SIGNATURE OF INSPECTOR(S)			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____					

## Example 13 - WEIGHT

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>WEIGHT:</b> Use this space or the gray space above to show the total combined weight, in pounds, of all loads certified by this Notesheet. For example if three trucks carrying approximately 50,000 LBS each were inspected, the combined weight would be approximately 150,000 LBS. <b>Note:</b> It is important that the term <u>Approx.</u> or <u>Approximately</u> be used on bulk shipments because they are approximated weights. <b>Note:</b> Due to space and for clarity <u>do not show "LBS."</u> when recording the total weight.		
	Approx LBS. Bulk	WEIGHT			
	# hrs @ \$30.00 /hr.	FEE			
	# Miles @ .535¢ / mile	EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____					

## Example 14 - FEE

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>Fee:</b> The fee in this space represents the <u>actual hours</u> required to complete the inspection, including setup, cleaning equipment and doing paper work when required. The hours charged will be regular hours only and not include travel time. <b>NOTE:</b> Due to space and for clarity do not use the "\$" sign when entering the fee.		
	Approx LBS. Bulk	WEIGHT			
	# hrs @ \$30.00 / hr.	FEE			
	# Miles @ .535¢ / mile	EXPENSES			
		TOTAL			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____					

## Example 15 - BLANK

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>BLANK:</b> In this space show the fee for additional time traveled to and from work locations if eligible. <b>NOTE:</b> Due to space and for clarity, <u>do not use the "\$" sign</u> when entering the fee.		
	Approx LBS. Bulk	WEIGHT			
	# hrs @ \$30.00 / hr.	FEE			
	# Miles @ .535¢ / mile	EXPENSES			
		TOTAL	SIGNATURE OF INSPECTOR(S)		
<input type="checkbox"/> MEETS CANADIAN		<input type="checkbox"/> MEETS M.O. _____			

## Example 16 - EXPENSES

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>EXPENSES:</b> Use this space to charge for mileage traveled to and from worksite. Mileage incurred between different storages or growers will be charged <u>in addition to</u> the established amount. When travelling between different growers this mileage should be <u>divided</u> appropriately. <b>NOTE:</b> Due to space and for clarity <u>do not use the "\$" when entering the fee.</u>		
	Approx LBS. Bulk	WEIGHT			
	# hrs @ \$30.00 / hr.	FEE			
	# Miles @ .535¢ / mile	EXPENSES			
		TOTAL	SIGNATURE OF INSPECTOR(S)		
<input type="checkbox"/>		<input type="checkbox"/> MEETS M.O. _____			

### Example 17 - TOTAL

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>TOTAL:</b> Add together all of the fees and write total in this space. <b>NOTE:</b> Due to space and for clarity <u>do not use the "\$"</u> when entering the fee.		
	Approx LBS. Bulk	WEIGHT			
	# hrs @ \$30.00 / hr.	FEE			
	# Miles @ .535¢ / mile	EXPENSES			
		<b>TOTAL</b>			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____			SIGNATURE OF INSPECTOR(S)		

### Example 18 - SIGNATURE OF INSPECTOR

<b>SAMPLE NOTESHEET</b>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-000000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	IDENTIFICATION NUMBER				
VARIETY - COUNT AND CONTAINER, GRADE			<b>SIGNATURE OF INSPECTOR:</b> This is where you certify the inspection by signing your name. In addition to signing your name, legibly print your name.		
	Approx LBS. Bulk	WEIGHT			
	# hrs @ \$30.00 / hr.	FEE			
	# Miles @ .535¢ / mile	EXPENSES			
		<b>TOTAL</b>			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____			SIGNATURE OF INSPECTOR(S)		

## Example 19 - MEETS MO 945/CANDIAN & CERTIFICATE BODY

<b>SAMPLE NOTESHEET</b>		APPLICANT (Name)				LOCATION				SERIAL NUMBER <b>A-000000</b>		PAGE																											
		DATE		TIME INSPECTION BEGUN		TIME INSPECTION COMPLETED				REMARKS																													
		IDENTIFICATION NUMBER																																					
VARIETY - COUNT AND CONTAINER, GRADE								<b>DISREGARD THESE AREAS UNLESS OTHERWISE INSTRUCTED: This area is not used for Seed Inspection.</b> <b>The Body of the Numbered Notsheet (FV 291) will generally not be used.</b> <b>Draw a diagonal line through the body to indicate that it is un-used area.</b>																															
Approx LBS. Bulk				WEIGHT																																			
# hrs @ \$30.00/hr.				FEE																																			
# Miles @ .535c / mile				EXPENSES																																			
								TOTAL				SIGNATURE OF INSPECTOR(S)																											
<input type="checkbox"/> MEETS CANADIAN				<input type="checkbox"/> MEETS M.O. _____																																			
LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS							GRADE DEFECTS										DESCRIPTION																	
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/Peelers	Worms	Mishapen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness			Skinning/Staining				Cure		Brightness	
	Min.	Max																									% of Mostly	Firm	PNS	Slightly S.	Moderately Appreciably	Badly	Mature	Well	Fairly Well	Brightness	Fairly Bright	Dull	
<div style="position: absolute; width: 100%; height: 100%; border-left: 2px solid black; border-bottom: 2px solid black; pointer-events: none;"></div>																																							

# Example 20 - WORKSHEET

<b>SAMPLE WORKSHEET</b>			APPLICANT (Name)										DATE		CONTINUATION OF (Enter Serial No.)						PAGE																			
			LOCATION												A- SIGNATURE OF INSPECTOR						OF																			
LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS								GRADE DEFECTS										DESCRIPTION																	
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. of Oz.	Total %	Soft-Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S. Growth	G. Cracks	Scrab	Rodent/Peelers	Worms	Mishappen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness			Skinning/Staining					Cure		Brightness	
	Min.	Max																									% of Mostly	Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately Appreciably	Badly	Mature	Well
These areas are to be filled with the same information as the Numbered Notesheet. This will assure that the proper worksheets are attached to the correct Numbered Notesheet.																																								
This space must indicate the page in sequence with inspections and indicates total quantity of pages required for the entire inspection, including the Numbered Notesheet. For example, if this were the 2nd page of your 10 page inspection, this space would read "Page 2 of 10". The next page would read "Page 3 of 10", then "Page 4 of 10" and so forth, until the final page which would read, "Page 10 of 10".																																								



# Example B - SEPARATE ALLOWANCES

<b>Seperate Allowances</b>	APPLICANT (Name)		DATE	CONTINUATION OF (Enter Serial No.)	PAGE
	LOCATION			<b>A-</b>	
				SIGNATURE OF INSPECTOR	OF

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS				GRADE DEFECTS											DESCRIPTION																																						
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal %	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G-Cracks	Scab	Rodent/Peelers	Wire	Worms	Misshapen	Sprouts	Mold	VR Disc.	Ser. H.H.	DBS	Shape		Cleanness			Skinning/Staining			Cure		Brightness																			
	Min.	Max																											% of Mostly	Well	Fairly well	Cleaness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately Appreably	Badly	Well	Fairly Well	Brightness	Fairly Bright	Dull													
																	Green Tag: 10% Max. S. Damage by G. Crack																																									

The **BLUE** and **GREEN** tag grades both have ***Separate Maximum Allowances*** for a specific defects. These defects are totaled separately and are not included in the total *External and Internal* tolerance. They are stand alone. When the Maximim allowances are exceeded the lot or shipment fails the grade even if the the total *External and Internal* tolerances are within grade.

The **BLUE** tag grade has a Mximum ***Separate Allowance*** of **10%** for potatoes that are Seriously Damaged by Hollow Heart.

The **BLUE** tag grade has a Mximum ***Separate Allowance*** of **5%** for potatoes that are Seriously Damaged by Vascular Ring Discoloration.

The **BLUE** tag grade has a Mximum ***Separate Allowance*** of **20%** for potatoes with Sprouts over 1 inch in length.

The **GREEN** tag grade has a Mximum ***Separate Allowance*** of **10%** for potatoes that are Seriously Damaged by Growth Crack.

**ALWAYS SHOW A ZERO IF NOTHING IS FOUND.**

**NOTE: ALWAYS USE THE HIGH LIGHTED COLUMNS SHOWN ABOVE FOR THE DEFECTS ASSIGNED TO THEM.**

ID-15-Seed

96

Section 14  
V03-18



## Example C - ADDITIONAL TOLERANCES

<b>ADDITIONAL TOLERANCES</b>						APPLICANT (Name)				DATE		CONTINUATION OF (Enter Serial No.)				PAGE																											
						LOCATION				SIGNATURE OF INSPECTOR				OF																													
LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS					GRADE DEFECTS										DESCRIPTION																							
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/Peelers	Wire Worms	Misshapen	Sprouts	Mold	Doubles	Splits	DBS	Shape		Cleanliness				Firm			Skinning/Staining			Cure		Brightness		
	Min.	Max.																									% of Mostly	Well	Fairly well	Cleaness	F. Clean	S. Dirty	Dirty	PNS	Slightly S.	Moderately/Appealably	Badly	Well	Fairly Well	Brightness	Fairly Bright	Dull	

The **BLUE** and **GREEN** tag grades allow **Additional Tolerances** for a specific *External* defects. These defects are not included in the 6% total *External* tolerance until they exceed the additional percentage allowed for the grade. Defects in excess of the **Additional Tolerance** are applied to the total *External* tolerance for the grade.

The **BLUE** tag grade has an **Additional Tolerance** off **10%** for potatoes that are **Damaged by Shape**. In addition to the 6% tolerance for the *External* grade, 10% of the potatoes in a lot or shipment may be Damaged by Shape. If the tolerance exceeds the 10% **Additional Tolerance** allowed for Damage by Shape, the amount in excess will be applied to the 6% *External* tolerance allowed with all other scoreable defects.

The **GREEN** tag grade has an **Additional Tolerance** of **6%** for potatoes that are **Seriously Damaged by Wireworm**. In addition to the 6% tolerance for the *External* grade, 6% of the potatoes in a lot or shipment may be Seriously Damaged by Wireworm. If the tolerance exceeds the 6% **Additional Tolerance** allowed for seriously damaged by wireworm the amount in excess will be applied to the 6% *External* tolerance with all other scoreable defect.

**ALWAYS SHOW A ZERO IF NOTHING IS FOUND.**

**NOTE: ALWAYS USE THE HIGH LIGHTED COLUMNS SHOWN ABOVE FOR THE DEFECTS ASSIGNED TO THEM.**

# Example D - MULTI-TRUCK CERTIFICATE

ID-15-Seed

<b>SAMPLE CERTIFICATE</b> <b>(Multiple Truck or Semi)</b>	APPLICANT (Name) <p style="text-align: center;">Blue Burbank</p>		LOCATION <p style="text-align: center;">Anywhere, Idaho</p>		SERIAL NUMBER <b>A-000000</b>	PAGE 1 of 2
	DATE 3/17/2018	TIME INSPECTION BEGUN 8:00 A.M.	TIME INSPECTION COMPLETED 10:00 A.M.		REMARKS All Loads Tag No. A-000000 Cert No. 00000000	
	CERTIFICATION NUMBER <p style="text-align: center;">SEE BELOW</p>					PVX G-3

VARIETY - COUNT AND CONTAINER, GRADE					
Approx. Lbs. Bulk	WEIGHT	100,000			
Russet Norkotah Potatoes	2 Hrs. @ 30.00 / hr.	FEE	60.00		
Meets Idaho BlueTag					
Seed Grade.	40 miles @ .535¢ / mile	EXPENSES	21.40		
		TOTAL	81.40	SIGNATURE OF INSPECTOR(S)	
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		<div style="display: flex; justify-content: space-around; font-size: 2em;"> <span><i>Blue Baby</i></span> <span>Blue Baby</span> </div>			

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS										GRADE DEFECTS										DESCRIPTION														
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/Peelers	Worms	Misshapen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness			Skinning/Staining				Cure		Brightness	
	Min.	Max																									% of Mostly	Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately Appreciably	Badly	Mature
<div style="position: relative; height: 400px;"> <span style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black;"></span> </div>																																							

98

Section 14  
V03-18

## Example E - MULTI-TRUCK WORKSHEET

<b>SAMPLE WORKSHEET (Multiple Truck or Semi)</b>	APPLICANT (Name) Blue Burbank	DATE 3/17/18	CONTINUATION OF (Enter Serial No.) <b>A-000000</b>	PAGE 2 OF 2
	LOCATION Anywhere, Idaho		SIGNATURE OF INSPECTOR <i>Blue Baby</i>	

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS							GRADE DEFECTS													DESCRIPTION																		
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal %	Dam.	Internal %	S.D.-HH	External	Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/Peelers	Fusarium	Worms	Misshapen	Sprouts	Mold	Doubles	Splits	D. Shape	Shape		Cleanness			Skinning/Staining				Cure		Brightness	
	Min.	Max																													% of Mostly	Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately/Approachably	Badly	Mature
Approx. WT. 50,000 lbs. Bulk Tarp covered Semi Trailer Lic. No. Idaho 4B 6767 Certification No.0011001 Seal No. 00001																																											
20	1 1/2	12	0	0	20	0	12	0								✓	✓					0								0	✓		✓	✓				✓					
20	✓	✓	0	0	(5)	0	15	0								✓						6								15	✓		✓	✓				✓					
20	✓	✓	0	17	✓	0	6	4														0								12	✓		✓	✓				✓					
20	✓	✓	0	28	✓	0	19	6	✓												✓	9								9	✓		✓	✓				✓					
20	✓	✓	0	0	✓	0	11	0														0		✓						19	✓		✓	✓				✓					
100	1 1/2	12		45			63	10					10	-1% soft rot								15								55	FW		SD	F				M					
				3%			4%	Defects														1%								3%													
Approx. WT. 50,000 lbs. Bulk Tarp covered Semi Trailer Lic. No. Idaho 4B 7070 Certification No.0011001 Seal No. 00002																																											
20	1 1/2	12	0	0	20		14	0	✓	✓	✓										4								0	✓		✓	✓				✓						
20	✓	✓	0	0	(5)		0	0													0								9	✓		✓	✓				✓						
20	✓	✓	0	0	✓		9	0													0			✓					22	✓		✓	✓				✓						
20	✓	✓	0	17	✓		20	0													7								17	✓		✓	✓				✓						
20	✓	✓	0	0	✓		10	0													0								20	✓		✓	✓				✓						
100	1 1/2	12		17			53														11								68	FW		SD	F				M						
				1%			3%	Defects														-1%								4%													

ID-15-Seed

99

Section 14  
V03-18

# Example F - MIXED CERTIFICATIONS

ID-15-Seed

<b>SAMPLE CERTIFICATE (Mixed Certifications)</b>	APPLICANT (Name) <b>Blue Burbank</b>		LOCATION <b>Anywhere, Idaho</b>	SERIAL NUMBER <b>A-000000</b>	PAGE <b>1 of 2</b>
	DATE <b>3-17-2018</b>	TIME INSPECTION BEGUN <b>11:00 A.M.</b>	TIME INSPECTION COMPLETED <b>2:00 P.M.</b>		REMARKS <b>All Loads</b> Tag No. <b>A-000000</b> Cert No. <b>000000011 - 12</b> <span style="float: right;"><b>G-2</b></span>
	CERTIFICATION NUMBER <b>SEE BELOW</b>				

VARIETY - COUNT AND CONTAINER, GRADE							
	Approx. Lbs. Bulk	WEIGHT	<b>60,000</b>				
<b>Alturas Potatoes</b>	2 1/2 Hrs. @ 30.00 / hr.	FEE	<b>75.00</b>				
<b>Meets Idaho Blue</b>							
<b>Tag Seed Grade.</b>	40 miles @ .535¢ / mile	EXPENSES	<b>21.40</b>				
		TOTAL	<b>96.40</b>	SIGNATURE OF INSPECTOR(S)  <i>Blue Baby</i> <span style="float: right;"><b>Blue Baby</b></span>			
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____							

LBS. EXAMINED	SIZE		OFF SIZE	TOTAL DEFECTS														GRADE DEFECTS										DESCRIPTION												
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/peelers	Worms	Misshappen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness				Skinning/Staining				Cure		Brightness	
	Min.	Max																									% of Mostly	Well	Fairly well	Cleaness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately/ Appreciably	Badly	Mature	Well
(This table contains a large diagonal line from the top-left to the bottom-right, indicating no data was recorded.)																																								

100

Section 14  
V03-18

## Example G - MIXED CERTIFICATION WORKSHEET

<b>SAMPLE WORKSHEET</b> <b>(Mixed Certification Numbers)</b>	APPLICANT (Name)	DATE	CONTINUATION OF (Enter Serial No.)	PAGE  2 OF 2
	Blue Burbank	3/17/2018	A-000000	
	LOCATION		SIGNATURE OF INSPECTOR	
	Anywhere, Idaho		<i>Blue Baby</i>	

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS					GRADE DEFECTS													DESCRIPTION																	
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % Dam.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/Peelers	Fusarium	Worms	Misshap	Sprouts	Mold	Doubles	Splits	D. Shape	Shape		Cleanness			Skinning/Staining				Cure		Brightness	
	Min.	Max.																										% of Mostly	Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately/ Appreciably	Badly	Mature
	Approx. WT. 60,000 lbs. Bulk		Tarp covered Semi Trailer					Lic. No. Washington 8080													Certification Nos. 01010-01011 Seal No. 00003																			
20	1 1/2	12	0	0	20	0	12	0				✓	✓						0								10	✓		✓	✓				✓					
20	✓	✓	0	0	(5)	0	0	0						✓													11	✓		✓	✓				✓					
20	✓	✓	0	0	✓	0	6	0														✓					9	✓		✓	✓				✓					
20	✓	✓	0	0	✓	0	6	0										✓									0	✓		✓	✓				✓					
20	✓	✓	0	0	✓	0	16	0																			12	✓		✓	✓				✓					
100	1 1/2	12					40																				41	FW		SD		F					M			
							2% Defects																																	

# Example H - BULK BIN CERTIFICATE

ID-15-Seed

<b>SAMPLE CERTIFICATE (Bulk Bin)</b>	APPLICANT (Name) <b>Blue Burbank</b>		LOCATION <b>Anywhere, Idaho</b>		SERIAL NUMBER <b>A-000000</b>	PAGE <b>1 of 2</b>
	Date: <b>3/17/2018</b>	TIME INSPECTION BEGUN <b>8:00 A.M.</b>	TIME INSPECTION COMPLETED <b>11:00 A.M.</b>		REMARKS <b>Bulk Holding Bin</b>	
	CERTIFICATION NUMBER <b>SEE BELOW</b>				Tag No. <b>A-000000</b> Cert No. <b>00000000 PVX G3</b>	

VARIETY - COUNT AND CONTAINER, GRADE			
	Approx. Lbs. Bulk	WEIGHT	150,000
Russet Burbank Potatoes	3 Hrs. @ 30.00 / hr.	FEE	90.00
Meets Idaho Blue			
tag seed grade.	100 miles @ .535c / mile	EXPENSES	53.50
		TOTAL	143.50
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____		SIGNATURE OF INSPECTOR(S)  <div style="display: flex; justify-content: space-around; font-size: 1.2em;"> <span><i>Blue Baby</i></span> <span>Blue Baby</span> </div>	

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS										GRADE DEFECTS										DESCRIPTION													
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/Peelers	Worms	Misshappen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanliness			Skinning/Staining			Cure		Brightness	
	Min.	Max.																									% of Mostly	Well	Fairly well	Cleaness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately Appreciably	Bedly
<div style="position: relative; width: 100%; height: 100%;"> <span style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black;"></span> </div>																																						

102

Section 14  
V03-18

## Example I - BULK HOLDING BIN WORKSHEET

<b>SAMPLE WORKSHEET (Bulk Bin)</b>				APPLICANT (Name) Blue Burbank														DATE March 17, 2018		CONTINUATION OF (Enter Serial No.) <b>A-000000</b>						PAGE 2 OF 2																
				LOCATION Anywhere, Idaho														SIGNATURE OF INSPECTOR <i>Blue Baby</i>																								
LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS							GRADE DEFECTS										DESCRIPTION																				
	Range		 % of Mostly	Under	Over	Lbs. Cut	Lbs. Scored	Internal % Dam.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/ Decay	Dry Rot/ Seed Stem	Cuts	Bruise	Sunburn	S. Growth	G. Cracks	Scab	Rodent/ Peelers	Fusarium	Worms	Misshapper	Sprouts	Mold	Doubles	Splits	D. Shape	Shape		Cleanness				Skinning/Staining			Cure		Brightness		
	Min.	Max																											Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately/ Appreciably	Badly	Mature	Well	Fairly Well
Approx. WT. 150,000 lbs. Bulk Bin 3 tags and seals No. 00004 thru 00006 Issued to Grower. Valid through March 23, 2018																																										
20	1 1/2	12		0	0	20	0		12	0				✓	✓												0	✓		✓	✓				✓							
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
20	✓	✓																																								
300	1 1/2	12																																								

# Example J - SACK TAG CERTIFICATE

<b>SAMPLE CERTIFICATE SACKS</b>	APPLICANT (Name) <p style="text-align: center;">Blue Burbank</p>		LOCATION <p style="text-align: center;">Anywhere, Idaho</p>	SERIAL NUMBER <b>A-000000</b>	PAGE <p style="text-align: center;">1 of 2</p>
	DATE 1-1-2018	TIME INSPECTION BEGUN 9:00 am	TIME INSPECTION COMPLETED 10:00 am	REMARKS All In Sacks	
	CERTIFICATION NUMBER <p style="text-align: center;">See Below</p>			Certification No. 010101	PVX-G3
VARIETY - COUNT AND CONTAINER, GRADE					
Blue Bell Potatoes		850-50lb sx Approx lbs	WEIGHT	42,500	
Meets Idaho Blue		1 Hr @ 30.00 / hr.	FEE	30.00	
tag seed grade.		10 Miles @ .535¢ / mile	EXPENSES	5.35	
			TOTAL	35.35	
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____			SIGNATURE OF INSPECTOR(S)  <div style="display: flex; justify-content: space-around; font-size: 1.2em;"> <span><i>Blue Baby</i></span> <span>Blue Baby</span> </div>		

LBS. EXAMINED	SIZE		OFF SIZE	TOTAL DEFECTS														GRADE DEFECTS											DESCRIPTION													
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S. Growth	G. Cracks	Scab	Rodent/Peelers	Worms	Mishappen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape			Cleanness				Skinning/Staining				Cure		Brightness		
	Min.	Max																									% of Mostly	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately Appreciably	Badly	Mature	Well	Fairly Well	Brightness	Fairly Bright
<div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; background: linear-gradient(to top right, transparent 49%, black 49%, black 51%, transparent 51%);"></div> </div>																																										

ID-15-Seed

104

Section 14  
V03-18



## Example K - SACK TAG WORKSHEET

<b>SAMPLE WORKSHEET (SACKS)</b>					APPLICANT (Name) Blue Burbank										DATE 3/17/18		CONTINUATION OF (Enter Serial No.) <b>A-000000</b>										PAGE  2 OF 3													
					LOCATION Anywhere, Idaho												SIGNATURE OF INSPECTOR <i>Blue Baby</i>																							
LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS					GRADE DEFECTS															DESCRIPTION															
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Dz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S. Growth	G. Cracks	Scab	Rodent/Peelers	Worms	Misshapen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness			Firm	Skinning/Staining			Cure		Brightness		
	Min.	Max																									% of Mostly	Well	Fairly well	Cleaness	F. Clean		S. Dirty	Dirty	Slightly S.	Moderately/Apreciably	Badly	Mature	Well	Fairly Well
850	- approx. 50 lb. Burlap sacks				No Brand tagged and sealed					Certification No. 10101															Tag Nos. 1P220140001 - 850															
20	1 1/2	12																																						
20																																								
20																																								
20																																								
20																																								



# Example M - CUT SEED CERTIFICATE

<b>SAMPLE CERTIFICATE (CUT SEED)</b>	APPLICANT (Name) <p style="text-align: center;">Blue Burbank</p>		LOCATION <p style="text-align: center;">Anywhere, Idaho</p>	SERIAL NUMBER <p style="text-align: center;"><b>A-000000</b></p>	PAGE <p style="text-align: center;">1 of 2</p>
	DATE <p style="text-align: center;">3-17-2018</p>	TIME INSPECTION BEGUN <p style="text-align: center;">8:00 A.M.</p>	TIME INSPECTION COMPLETED <p style="text-align: center;">10:00 A.M.</p>		REMARKS All Loads Tag No. A-000000 Cert No. 00000000 <p style="text-align: right;">PVX G-3</p>
	IDENTIFICATION NUMBER <p style="text-align: center;">SEE BELOW</p>				

VARIETY - COUNT AND CONTAINER, GRADE						
	Approx. Lbs. Bulk	WEIGHT	100,000			
Russet Norkotah Potatoes	2 Hrs. @ \$30.00 / hr.	FEE	60.00			
Meets Idaho Blue						
Tag Seed Grade	40 miles @ .535c / mile	EXPENSES	21.40			
prior tocutting.		TOTAL	81.40	SIGNATURE OF INSPECTOR(S) <p style="text-align: center; font-size: 1.5em; font-family: cursive;">Blue Baby</p>		
<input type="checkbox"/> MEETS CANADIAN <input type="checkbox"/> MEETS M.O. _____						

LBS. EXAMINED	SIZE			OFF SIZE		TOTAL DEFECTS										GRADE DEFECTS										DESCRIPTION																	
	Range		% of Mostly	Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S.Growth	G.Cracks	Scab	Rodent/Peelers	Fusarium	Worms	Mishap	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness				Firm	Skinning/Staining				Cure		Brightness	
	Min.	Max																											Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty		PNS	Slightly S.	Moderately/ Appreciably	Badly	Mature	Well	Fairly Well	Brightness
(This section is crossed out with a diagonal line in the example image)																																											

<h1>Example Notesheet</h1>	APPLICANT (Name)		LOCATION	SERIAL NUMBER <b>A-00000</b>	PAGE
	DATE	TIME INSPECTION BEGUN	TIME INSPECTION COMPLETED	REMARKS	
	CERTIFICATION NUMBER				

VARIETY - COUNT AND CONTAINER, GRADE		
	WEIGHT	
	FEE	
	EXPENSES	
	TOTAL	SIGNATURE OF INSPECTOR(S)

MEETS CANADIAN      MEETS M.O. \_\_\_\_\_

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS								GRADE DEFECTS												DESCRIPTION																			
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External lbs. or Oz.	Total %	Soft rot/Decay	Dry rot/Seed Stem	Cuts	Bruise	Sunburn	S. Growth	G. Cracks	Scab	Rodent/Peelers	Worms	Mishappen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness			Skinning/Staining			Cure		Brightness							
	Min.	Max																									% of Mostly	Firm	PNs	Slightly S.	Moderately/ Appreciably	Badly	Mature	Well	Fairly Well	Brightness	Fairly Bright	Dull						

1/2 Hr Lunch

(Applicant No.)

Precleared for NVS

<p><b>PRECLEARED</b>  <b>NVS - Necrotic Virus Symptom</b>  <b>Example</b>  <b>Pasco, Washington</b></p>	APPLICANT (Name) <p style="text-align: center;">Spuddy Buddy Farms</p>		LOCATION <p style="text-align: center;">Blue Valley, Idaho</p>		SERIAL NUMBER <p style="text-align: center;"><b>A-000000</b></p>	PAGE <p style="text-align: center;">1 of 2</p>
	DATE <p style="text-align: center;">2-28-2018</p>	TIME INSPECTION BEGUN <p style="text-align: center;">9:00 am</p>	TIME INSPECTION COMPLETED <p style="text-align: center;">1:00 pm</p>		REMARKS <p style="text-align: center;">All Loads                  Tag No. A-000000                  Cert. No. 84120731 G3</p>	
	CERTIFICATION NUMBER <p style="text-align: center;">See Below</p>					
VARIETY - COUNT AND CONTAINER, GRADE <p>Russet Burbank Potatoes</p>			100,000 Approx. lbs. WEIGHT 120.00			
Meets Idaho Blue tag seed grade.			4 hrs. @ \$30.00 p/h 10 miles @ .535 p/m EXPENSES 5.35			
			TOTAL 125.35		SIGNATURE OF INSPECTOR(S) <p style="text-align: center;"><i>Your Signature</i>      Your Printed Name</p>	
<input type="checkbox"/> MEETS CANADIAN			<input type="checkbox"/> MEETS M.O. _____			

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS										GRADE DEFECTS										DESCRIPTION																
	Range		Under	Over	Lbs. Cut	Lbs. Scored	Internal % D.	Internal % S.D.	External Lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S. Growth	G. Cracks	Scab	Rodent/Peelers	Worms	Misshappen	Sprouts	Mold	Doubles	Splits	Sunburn	Shape		Cleanness				Skinning/Staining				Cure		Brightness		
	Min.	Max																									% of Mostly	Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately Appreciably	Badly	Mature	Well	Fairly Well
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5; font-size: 4em;">/</div>																																									

## NVS - Necrotic Virus Symptom Worksheet Example

APPLICANT (Name) Spuddy Buddy Farms	2/28/2018	CONTINUATION OF (Enter Serial No.) <b>A-000000</b>	PAGE <b>2 OF 2</b>
LOCATION Blue Valley, Idaho	SIGNATURE OF INSPECTOR <i>Your Signature</i>		

LBS. EXAMINED	SIZE		OFF SIZE		TOTAL DEFECTS								GRADE DEFECTS												DESCRIPTION																									
	In.	Oz.	NVS	Oz.	Oz.	Oz.								Oz.												Shape		Cleanness			Skinning/Staining			Cure		Brightness														
	Range		Tubers % of Mostly	Under	Over	lbs. Cut	Oz. scored	Internal % D.	Internal % S.D.	External lbs. or Oz.	Total %	Soft Rot/Decay	Dry Rot/Seed Stem	Cuts	Bruise	Sunburn	S. Growth	G. Cracks	Scab	Rodent/Peelers	SP Fusarium	Worms	Misshapen	Sprouts	Mold	Doubles	Spills	Dam Shape	Well	Fairly well	Cleanness	F. Clean	S. Dirty	Dirty	Firm	PNS	Slightly S.	Moderately/ Appreciably	Badly	Mature	Well	Fairly Well	Brightness	Fairly Bright	Dull					
	Min.	Max.																																																
Approx. Wt. 50,000 lbs		License No. ID 3795										Tarp covered Semi								Seal no. 947328																														
20	1 1/2	10	0	2	11	(5)	0		9	0		X								4						0	X			X		X																		
20	x	x	0	0	0	(5)	0		4	0		X								0						#	X			X		X																		
20	x	x	1	0	26	20	6	2%	16	0		X							0		X				4	X			X		X																			
20	x	x		1	17	(5)	0		0	0										0						8	X			X		X																		
20	x	x		5	0	(5)	0		7	3		X								0						#	X			X		X																		
100	1 1/2	10		8	54		6		36	3										4						#	FW			SD		F																		
				0%	3%		0%		2%	-1%										0%																														
45	Cut		1	NVS Found																																														
155	Cut		3	NVS Found																																														
200	Total cut		4 = 2% NVS																																															
				1 When a NVS potato is found during AMS internal cut the remainder of sample must																																														
				be cut, but first count how many potatoes are in the sample																																														
				2 Record how many NVS are found in AMS internal sample																																														
				3 Add the potatoes cut in Previous AMS internal samples.																																														
				4 Collect additional potatoes to make a total of 200 potatoes to check for NVS																																														
				5 Have grower stop loading until all 200 potatoes is cut																																														
				6 Record how many NVS were found in the Additional potatoes																																														
				7 Add NVS found and show percentage.																																														
				8 If allowable tolerance is exceeded tagging will stop and the NVS potatoes must be taken																																														
				to lab to be tested																																														
				9 If NVS percentage does not exceed allowable tolerance NVS sampling is satisfied and no																																														
				more cutting is required and any NVS found will be applied to the internal or external																																														
				grade tolerance.																																														