

# MONTANA SEED POTATO CERTIFICATION PROGRAM

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TO: Montana Certified Seed Potato Growers

FROM: Nina Zidack, Director

RE: Instructions for Picking Samples for Post-harvest Grow-out Test

**Samples from ALL FIELDS producing Generation 1, 2, 3 and 4 seed potatoes must be submitted for post-harvest grow-out testing in Hawaii.**

Nuclear seed is exempt from this rule if and only if they are not for sale. **Postharvest testing is highly recommended if PVY was detected during summer testing in the nuclear or in any lot surrounding nuclear.** Call the lab if you need nuclear tags.

Minimum sample size is **400** tubers for a field size of 2 acres or more.

Minimum samples size is **100** tubers for G1: See back of page.

Sample tuber size is 2-3 ounces (egg to kiwi sized tubers).

The planter can't handle tubers over 3 oz. PLEASE COUNT your tubers and sort for rotted tubers.

The readings from this test will be required by seed potato certification agencies in other states. Post-harvest virus testing will be conducted on all samples using leaves collected from the Hawaii grow-out test.

You can figure what samples you must submit by referring to the chart on the back of this page.

➤ **REMEMBER: *Post-harvest grow-out testing can only be as good as the sample sent. Picking representative samples is essential for accurate test results.***

➤ ***Random samples of tubers should be picked at the time of harvesting, preferably from each truck while conveying into the cellar.***

1. Select tubers of **2 to 3 ounces**. This is important because it works best for the cup planter.
2. You must use **plastic NET** bags. All samples will be treated with rindite or bromoethane. Bags, Tags, & zip ties will be provided:  
Manhattan area growers: pick them up at Danhoff's  
Ronan area growers: pick them up at the Extension Office  
Kalispell, Dillon, Twin Bridges, Townsend, Kinsey, DeerLodge and Great Falls area growers' sacks will be mailed.

*Instructions continued on other side ...*

3. The table below indicates the number of tubers required from each field, depending on the size of the field.

Field Size by Number of Acres	Sample Size by Number of Tubers
40 or fewer	400 (1 sample)
41 – 80	800 (2 samples)
81 – 120	1200 (3 samples)
121 – greater	1600 (4 samples)

3. **Place 400 tubers into one plastic mesh bag.** This is 1 sample. Put the tag on the index card in a ziploc and place it inside each bag. Put the matching tyvek tag on the outside of each bag with the zip tie.  
**Make sure the tag numbers match on the inside and outsides of all bags.**
4. G1 Tuber Sample:
- Minimum of 100 tubers per sample. Call Nina if you can not feasibly send this large of sample.
  - **Do not** combine small bags in a large bag.

<u>Field size:</u>	<u>Sample size:</u>
0.1 - 1.0 acre	100 Tuber
>1.0 - 2.0 acres	200 Tubers
More than 2 acres	400 Tubers

### **Nuclear Tuber Samples**

If the lab detected PVY in summer leaf testing or visual inspection, or if nuclear plantings were adjacent to lots with significant PVY, sampling of nuclear lots for post-harvest testing is strongly recommended. Call the lab for tags for your nuclears!

### **Duplicate Samples**

It is advised that you collect a duplicate sample of each Generation 2 seed lot at the same time you are collecting your samples for planting in Hawaii. If there is a need to re-test a sample from a specific seed lot, this is the only way to get an accurate result. If you need additional bags, call the lab.

**A tag is needed on every sample. If you are submitting samples that you didn't receive a tag for please call the lab for tags. Without a tag, samples can easily be lost! Please let us know if you have any questions. Since many states are now requiring this information in detail for imported potatoes, it is imperative that instructions be followed to the letter so that testing results can be accurately reported.**