



**Extension Plant Pathology Laboratory
Hermiston Agricultural Research and Extension Center**

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Instructions for Preparation of Potato Tuber Samples and Submission Procedures for Bacterial Ring Rot Testing

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1. **In order to process samples as quickly as possible, call the Plant Pathology Lab (541-567-8321 Ext. 120) or email Robert (Robert.cating@oregonstate.edu) to schedule a time to bring tuber samples for bacterial ring rot testing to the lab. If you need to ship, call the lab for information.**
2. Randomly select the required number of tubers (usually 4,600) best collected randomly at harvest but can come from across the top of the entire pile and place them in **groups of 200** in a plastic container lined with a new garbage bag. For example, a sample of 4,600 tubers would require 23 subsamples of 200 tubers. Be aware that tuber samples that are less than 4600 will not generally be adequate to test a seed lot for BRR
3. Tuber core samples are then taken from each of the subsamples using a 13mm melon baller.
 - a. Wash the melon baller first with soap and water and then disinfect the melon baller by dipping the METAL portion of the tool in 95-100% alcohol and pass through a flame. Allow the alcohol to completely burn off before using. If this is not an option, disinfect the tool with a standard commercial disinfectant, replacing the disinfectant as needed. **Repeat this process between each seed lot but not between each subsample of each seed lot.**
 - b. When the tool is ready to use, take a sample from each tuber at the stolon (stem) end containing as much of the vascular ring as possible. **Melon ballers should NOT be larger than 13mm, but can be as small as 10 mm.**
4. Place the cores from the 200 tuber sub sample in a 1 quart plastic Ziploc bag and seal. Make sure each bag is labeled with seed lot information and sub sample number.
5. The garbage bag can now be removed, closed, and labeled. It is recommended that tuber samples are kept until all testing is complete. Core samples should be stored in the refrigerator at 4°C (39°F) and brought to the laboratory as soon as possible. Again schedule submission with the plant pathology laboratory. Cores should **NOT** be stored for more than a few days before submission.

If you have questions about taking samples or need assistance, please contact the OSU Hermiston Plant Pathology Lab at the number above.

Note: Failure to detect a pathogen in a field/sample does not guarantee that field/sample to be pathogen free.