

DISINFECTION PROTOCOL FOR SHARED POTATO EQUIPMENT

Why sanitation matters: Potato diseases like blight and bacterial ring-rot are costly, hard to get rid of and can easily be spread from farm to farm by equipment. **PROTECT YOUR FARM** by following these steps **BEFORE** and **AFTER** use of the equipment.

BEFORE USING EQUIPMENT AT YOUR FARM

- 1) **Has equipment been thoroughly washed?** Because most disinfectants are inactivated by organic matter, equipment must be clean before disinfecting. See Step 1 below for instructions.
- 2) **Mix a 10% bleach solution.** Bleach is effective as a disinfectant, inexpensive and readily available in Alaska, however it loses effectiveness after 6 months. In a 1-gallon (or larger) hand-pumped sprayer, mix 1 part fresh household bleach to 9 parts water. Wear appropriate personal protective equipment when mixing or spraying bleach solution.
- 3) **Disinfect.** Spray equipment thoroughly and repeatedly with bleach solution so that all surfaces are covered with a wet film for 5-10 minutes. This solution can also be used for up to 24 hours to disinfect clean harvest bins, hand tools and any surfaces that come into contact with potatoes.
- 4) **Rinse.** Bleach is highly corrosive. For the longevity of the equipment, please rinse all surfaces thoroughly with clean water.



AFTER USING EQUIPMENT AT YOUR FARM

- 1) **Clean and Pressure Wash.** Most disinfectants are inactivated by organic matter. Remove dirt and plant residue with brush or scraper, then clean thoroughly with a pressure washer. Washing with a garden hose is not sufficient. If you do not own a pressure washer, take equipment to a self-serve car wash.
- 2) **Disinfect.** Spray equipment thoroughly and repeatedly with 10% bleach solution so that all surfaces are covered with a wet film for 5-10 minutes.
- 3) **Rinse.** Bleach is highly corrosive. For the longevity of the equipment, please rinse all surfaces thoroughly with clean water.

References: *Bacterial Ring Rot in Alaska Potato Crops* by Stephen C. Brown, William L. Campbell and Jeffrey Smeenck, UAF Cooperative Extension publication PMC-00340, July 2016, downloadable at <http://cespubs.uaf.edu/publications>; *Disinfection 101* by Glenda Dvorak, The Center for Food Security & Public Health, Iowa State University, <http://www.cfsph.iastate.edu/Disinfection/Assets/Disinfection101.pdf>; email correspondence with Dr. Jeffrey Smeenck, potato grower and horticulture specialist, and Robert Carter, Alaska Div. of Agriculture.