

POTATO STORE DISINFECTION

The facts

- Experimental work at SAC (Scottish Agricultural College) and BPC Sutton Bridge Experimental Unit has identified the benefits of potato store hygiene and disinfection.
- Many important skin and tuber pathogens were found surviving in potato stores including silver and black scurf, skin spot, dry rot, gangrene, bacterial soft rot and brown rot.
- SAC trials introducing known quantities of contaminants into potato stores found vacuuming was the single best method of cleaning. However, cleaning alone removed only 60-90% of contaminants, leaving fungal spores and bacteria behind.
- Chemical disinfectants must be preceded by mechanical cleaning (vacuuming or washing down) as any organic matter remaining reduces the disinfectant effect.
- Disinfection offers the opportunity to break the disease cycle.
- The benefit of an integrated approach to potato seed and ware disease control is a reduction in the risk of resistance to chemical tuber treatments.

Jet 5 disinfectant

- Jet 5 contains peroxyacetic acid, a highly effective disinfectant.
- Jet 5 is a biocide which controls all diseases found in stores including bacterial soft rot and brown rot.
- Fast acting – treated areas, including chitting trays can be re-used within one hour of treatment.
- Jet 5 is environmentally innocuous breaking down to acetic acid and water.
- Jet 5 can be applied via knapsack sprayers, fogging machines or high pressure washers.

Procedures for disinfection

For effective disinfection of stores and equipment, the following steps should be taken.

1. Remove as much dust and dirt as possible with an industrial vacuum cleaner (most effective method in SAC trials 1998).
2. Steam clean or pressure wash all equipment in the store, all storage boxes, walls and floors. Use Jet 5 at a concentration of 1 part in 500.
3. Disinfect store, applying Jet 5 as a spray or fog to all surfaces, using the rates set out below.
4. Stores and treated containers are ready to use in one hour.
5. Continue to use potato seed treatments as appropriate.

Jet 5 dilution rates (% solution)

Application method	Target	Treated surfaces		
		Walls	Boxes	Floors
Spray	Fungi	0.5	0.5	2.5
Spray	Bacteria and virus	1.0	1.0	5.0
Fog	Fungi and bacteria	8.0 – 11.0	8.0 – 11.0	8.0 – 11.0

NOTE: For concrete or dirt floors double the rate of Jet 5

Further information

For specific advice on Certis products, visit our website www.certiseurope.co.uk,
Telephone 01980 676501 or fax 01980 626555. revised 120704
