**TABLE 1. Soft-rot *Erwinia* spp. Detected in Potato Seed Tubers by the Direct Lenticel Isolation Method**

| Cultivar | Source | No. tubers sampled | Tubers infested with *Erwinia* |
|---|---|---|---|
| | | | *percent* |
| White Rose | California | 24 | 88 |
| White Rose | Oregon | 24 | 100 |
| White Rose | California | 20 | 50 |
| White Rose | Washington | 25 | 12 |
| Centennial | Colorado | 24 | 46 |
| Centennial | Colorado | 24 | 88 |
| Russet Burbank | Montana | 25 | 24 |
| Russet Burbank | Canada | 25 | 24 |
| Russet Burbank | Canada | 24 | 8 |
| Russet Burbank | California | 25 | 9 |
| Red Lasoda | California | 25 | 9 |
| Nooksack | Washington | 17 | 12 |
| Kennebec | North Dakota | 12 | 17 |
| Kennebec | California | 12 | 82 |
| Kennebec | California | 12 | 75 |

**TABLE 2. Soft-rot *Erwinia* spp. Isolated from Root Zone Soils of Various Crop and Weed Plants**

| Crop or weed | No. of plants sampled | No. of plants with *Erwinia* |
|---|---|---|
| *Latuca sativa* L. (lettuce) | 15 | 8 |
| *Daucus carota* L. var. *sativa* | 10 | 4 |
| *Brassica oleracea* L. var. *botrytis* L. (broccoli) | 5 | 5 |
| *Medicago sativa* L. (alfalfa) | 8 | 2 |
| *Beta vulgaris* L. (sugarbeet) | 10 | 1 |
| *Sorghum vulgare* Pers. (sorghum) | 5 | 0 |
| *Solanum tuberosum* L. (apparently healthy seedpiece) | 20 | 11 |
| *Brassica oleracea* L. var. *botrytis* L. (cauliflower) | 6 | 0 |
| *Brassica oleracea* var. *capitata* L. (cabbage) (seedlings) | 5 | 0 |
| *Anagalis arvensis* L. (scarlet pimpernel) | 1 | 1 |
| *Sonchus asper* (L.) Hill (spiny sowthistle) | 2 | 1 |
| *Malva parviflora* L. (little mallow) | 9 | 6 |
| *Portulaca oleracea* L. (common purslane) | 8 | 1 |
| *Sisybrium irio* L. (London rocket) | 1 | 0 |
| *Polygonum argyrocoleon* Steud. (silversheath knotweed) | 1 | 0 |
| *Chenopodium murale* L. (nettleleaf goosefoot) | 1 | 0 |
| *Amaranthus palmeri* Wats. (palmer amaranth) | 1 | 0 |
| *Poa annua* L. (annual bluegrass) | 3 | 3 |
| *Chenopodium album* L. (common lambsquarters) | 7 | 0 |

crop harvest.

General sanitation should be practiced whenever possible since typical seedlots are infested with *Erwinia* spp. and contaminate any equipment they contact. Many chemicals such as chlorine will kill the bacteria on surfaces of tubers and equipment. However, the principal source of soft-rot and blackleg bacteria appears to be the potato lenticels. An effective control, therefore, appears to depend on the finding of a material that will penetrate and eradicate the bacteria in these sites without causing phytotoxicity.

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