

POSTER 2

Efficacy of Scholar (fludioxonil) for Control of Sclerotinia Rot of Carrot in Cold Storage

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Sclerotinia sclerotiorum (Lib.) de Bary is the cause of one of the most important storage disease of carrots, Sclerotinia rot of carrot, also called cottony soft rot. An emergency registration of the fungicide Scholar (fludioxonil) was approved in 2009 for post harvest application to washed carrots to prevent rot in storage. A trial to evaluate the efficacy of Scholar to control Sclerotinia in storage was conducted in 2008 to 2009. Each experimental unit consisted of 30 non-inoculated but treated carrots in a mesh bag with a single Sclerotinia- infected carrot in the middle. Treatments were: Scholar at the rates of 65.6, 131.2 and 250.6 mL product, Mertect (thiamethoxam) at 108.4 mL and Scholar + Mertect at 131.2 mL + 108 mL, respectively, per100 L of water used as dip treatments, and Scholar at the rate of 131.2 mL/100 L of water applied as a drench. Untreated non-inoculated and inoculated checks were also included. Bags were placed in a cold storage (~1°C, 95% rh) and four bags per treatment were assessed each month for 6 months. Incidence and severity was recorded. Disease in the inoculated, untreated check increased from 17% to 74% during the trial. All rates of Scholar applied as a dip effectively reduced disease incidence and severity in the final three months of the trial. Scholar applied as a drench reduced disease in the final two months of the trial. The Mertect treatment was not effective in reducing Sclerotinia rot in storage.