

USE OF IN-FURROW FUNGICIDE TREATMENTS AND SEEDPIECE DUSTS FOR DISEASE CONTROL IN WHITE POTATO

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On the Eastern Shore of Virginia, potato growers plant potatoes in early spring for summer harvest. Fungicide dusts have been typically used to protect the potato seedpiece from infection when planted in cool, wet soil in the early spring. Protection of the seed piece should result in healthier stands of potatoes and higher yields at harvest. Trials were conducted in 2003 and 2004 to examine some of the newer fungicide dust treatments and to compare and combine them with in-furrow sprays of Amistar or Ridomil Gold for the control of *Rhizoctonia solani*, and bacterial soft rot caused by *Erwinia carotovora* subsp. *carotovora*. Results presented here are for selected treatments that were evaluated in both years. These studies contained other treatments - for more information call Christine Waldenmaier (757) 414-0724.

2003 Results: Seed that did not emerge 27 days after planting (DAP) were dug up and examined for decay. All treatments had significantly less soft-rotted seedpieces than the untreated control. Quadris was the only treatment to significantly decrease the percentage of rotten tubers at harvest when compared with the control. Total yield was significantly increased by Moncoat, Quadris in-furrow, and Ridomil Gold in-furrow when compared to the untreated control

2004 Results: Overall, only 3% of the seed pieces did not emerge and of these only 21% were infected with soft rot bacteria. This infection could not be correlated with any particular treatment. Ten stems taken randomly from each plot were evaluated for *Rhizoctonia* infection on 7/8. Amistar (Quadris) in-furrow and Maxim both reduced lesion length significantly when compared with the untreated control, but not significantly more than any other treatment. Amistar (Quadris) in-furrow increased total yield significantly when compared with the untreated control and Maneb treatment, however, marketable yield and percent U.S. #1 potatoes did not differ significantly by treatment.

Treatment	2003 Results		2004 Results	
	Yield cwt/A	%Rot at harvest	Yield cwt/A	% Rot at harvest
Quadris (Amistar) in-furrow	292 a	2 c	222 a	13 a
Ridomil Gold in-furrow 0.42 fl oz/1000 ft row	288 a	3 bc	180 abc	5 a
Moncoat Dust 12 oz/100 lb seed	285 a	7 abc	175 abc	6 a
Maxim Dust 8 oz/100 lb seed	266 ab	4 bc	186 ab	12 a
Maneb Dust 16 oz/100 lb seed	273 ab	12 a	132 b	19 a
Untreated Control	237 b	9 ab	152 bc	15 a

Originally printed in *Virginia Vegetable, Small Fruit and Specialty Crops* – January February 2005.