

Influence of Fungicides and Cultivar on Development of Cavity Spot of Carrot

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Cavity spot of carrot, caused by several species of *Pythium*, is an important soilborne disease of carrots in many parts of the world including Canada and the United States. Field trials were conducted in the Holland/Bradford Marsh region of Ontario from 2002 to 2009 to identify differences in susceptibility to cavity spot among carrots with different pigments. Trials were conducted in 2008 and 2009 to determine the efficacy of fungicide Ranman® 400SC (cyazofamid 34.5%) on cavity spot incidence and severity. Carrots were assessed 12 to 14 weeks after seeding and again 18 to 20 weeks after seeding to determine 'early' and 'late' symptom expression. Rainfall and temperature data were collected within 100 m of the plots. Some carrots with purple pigments, such as Purple Haze, had consistently lower levels of cavity spot. Cavity spot was lower on susceptible cultivars in years with low rainfall, and were high in 2008 and 2009 where high levels of rain occurred in June and July. An increase in cavity spot incidence and severity late in the season varied with cultivar and year. Application of Ranman 400SC within 3 days or 14 days after seeding suppressed cavity spot more effectively under moderate disease pressure than high disease pressure.