QUANTIFYING ASCOSPORE PRODUCTION BY APOTHECIA OF CIBORINIA CAMELLIAE

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Field collected sclerotia with fresh apothecia were suspended in bottles and the spore production measured each day for the duration of ascospore production. Apothecia ranging from 8-19 mm in diameter could produce ascospores for up to 21 days, although there was a peak in production at 2-3 days and most spores were released in the first 4 days. Following this peak in spore release, some apothecia produced a smaller, secondary peak 4-5 days later then production diminished over the next 6-10 days. Other apothecia produced a large peak early in the first 4 days and spore production diminished without a secondary peak. Ascospore production was not related to apothecial size, sclerotial fresh weight or dry weight.

CONTROL OF ONION WHITE ROT (*SCLEROTIUM CEPIVORUM*) VIA DRIP IRRIGATION (FUNGIGATION)

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Onion white rot is a very important disease of onions in the Pukekohe region and control has relied upon foliar fungicide application. Such applications to the soil surface rely upon rainfall to move the active ingredient into the root zone. As rainfall can be unreliable, disease control may be uncertain. A possible way to circumvent this is with irrigation (fungigation). A four replicate trial with three treatments was established on a commercial property in Pukekohe in July 1999. Treatments were an untreated control, triadimenol (Cereous 250EC) applied through T-Tape irrigation at 375 g ai/ha and triadimenol applied by a spray boom at 375 g ai/ha. Both fungicide treatments were applied three times at 21-day intervals. Assessment of white rot infected onions commenced one week after the final triadimenol application. Infected plants were recorded and removed from sample plots. By harvest, accumulated losses were significantly higher ($P < 0.05$) in the untreated control plots (mean 28.7%) compared to the triadimenol via boom spray (mean 0.16 %) and triadimenol via irrigation (mean 8.23%).