

## EVALUATION OF ALTERNATIVE FUNGICIDES FOR CONTROL OF CERCOSPORA SPOT ON 'FUERTE'

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Cercospora spot caused by *Pseudocercospora purpurea* is the most serious pre-harvest disease on 'Fuerte' and 'Ryan' avocados in South Africa. The disease is typically controlled by high volume applications of copper oxychloride (CuOCl), which may cause a build up of copper in soils. Alternative products to CuOCl have been evaluated at Westfalia Estate since 1999 to present and until the 2003/4 season, the only feasible alternative treatments were other copper containing fungicides. However in the 2004/5 season, good control of cercospora spot was obtained when either azoxystrobin or chlorothalonil was applied in combination with CuOCl. In the 2005/6 season the aim was to further evaluate these alternative fungicides for the control of cercospora spot and post-harvest diseases. The experiment was carried out at Westfalia Estate and treatments were applied with mist-blowers. Fruit were evaluated for the incidence of cercospora spot, sooty blotch and visible spray residues at harvest. Fruit samples from each treatment were cold-stored for 28 days, and evaluated for post-harvest diseases and disorders upon ripening. The best control of cercospora spot was obtained when two applications of azoxystrobin (October and November) were followed by two applications of CuOCl (December and January). This treatment resulted in 50% less copper being applied than the commercial treatment of CuOCl applied four times. Incidence of visible spray residues was similar for both of these treatments. Incidence of post harvest diseases was zero in the commercial treatment and also in the treatment where azoxystrobin applications were in December and January. Azoxystrobin can be considered an alternative fungicide that can replace two applications of CuOCl.