

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

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A.Willis and J.A. Duvenhage

Merensky Technological Services. P O Box 14. Duiwelskloof 0835. South Africa.

E-mail: anitaw@hansmerensky.co.za

Cercospora spot caused by *Pseudocercospora purpurea* is the most serious pre-harvest disease of avocado in South Africa. The disease is typically controlled by high volume copper sprays which may cause build up of copper in soils. Alternative chemicals were evaluated during the 1999/2000, 2000/01 and 2001/02 seasons for control of *Cercospora* spot and post harvest diseases with the aim to reduce or replace copper sprays. The experiments were carried out in a high disease pressure orchard at Westfalia Estate in Limpopo Province, South Africa.

Results from the 1999/2000 and 2000/01 seasons indicated that Ortiva (azoxystrobin) should be further evaluated in the 2001/02 season. Thiovit Jet (sulphur) and Bravo (chlorothalonil) were evaluated for the first time as well as other non-copper compounds mixed with lowered rates of copper oxychloride. Fruit of different treatments were evaluated for incidence of *Cercospora* spot, sooty blotch and visible spray residues in the orchard. A sample of fruit from each treatment was stored at 5.5°C for 28 days, and evaluated for post-harvest diseases and disorders after ripening at 20°C.

In 2001/02 disease pressure was extremely high in the experimental orchard and 2 to 3 applications of copper oxychloride (3g/L) gave the best control of *Cercospora* spot. The lower rate of copper oxychloride (2g/L) combined with Ferric chloride gave fair results. Ortiva and Bravo yielded disappointing results for *Cercospora* spot control, however Ortiva did result in lower incidence of post harvest anthracnose than standard copper oxychloride.