

Effect of chemical seed treatment, seeding rate and row width on plant populations and yield of canola (*Brassica napus* var. *oleifera*)

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Field experiments were conducted in 2003 and 2004 at Roodebloem, representing the Rûens, in the canola production area of the Western Cape Province to determine the influence of seeding rate, row width and chemical seed treatment on the plant density (plants m⁻²) and yield of canola (cv. Varola 44). Untreated (control) seeds and seeds treated with Cruiser® (fludioxonil, metalaxyl and thiamethoxam) and a local mixture (SA-combination, which consist of thiram, metalaxyl, imidacloprid and iprodione) were seeded in 17 cm and 34 cm row spacings at seeding rates of 3, 5 and 7 kg ha⁻¹. In general results showed that treated seeds tend to produce more plants m⁻² and yield more than untreated seeds, while the highest seeding rate produced significantly more plants m⁻², but not significantly higher yield than the lowest seeding rate at the same locality. Although row width did not have an effect on plant densities in 2003; yield was significantly lower with wider (34 cm) rows than narrow (17 cm) rows.

Keywords: Canola, seed treatment, seeding rate, row width, yield