Annual ryegrass seed set reduced by desiccation and swathing of canola

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Summary  Field studies were conducted at Mt Barker in 2010 and 2011 and Katanning in 2012 and 2013 to investigate techniques to reduce annual ryegrass viable seed set. The Mt Barker experiments included swathing with a commercially available sprayer kit attached and desiccation of the standing crop while at Katanning only desiccation was tested. Results in 2010 showed, on average, desiccation with diquat reduced the viable ryegrass seed production by 65%, and on average, desiccation or spraying on the swather with glyphosate reduced the viable ryegrass seed production by 45%.

The 2011 results showed swathing with above 2.4 L ha⁻¹ of glyphosate at either 30% or 60% seed colour change of the canola reduced ryegrass seed viability by an average of 43% compared to the average of the nil and swathing alone while desiccation with above 2.4 L ha⁻¹ of glyphosate at either 30% or 60% seed colour change of the canola reduced ryegrass seed viability by an average of 73% compared to the average of the nil and swathing alone.

In 2012, desiccation with Roundup Attack had no effect on yield or ryegrass viability at different rates at 20% or 50% seed colour change. In 2013, desiccation with Weedmaster DST at different rates and different water rates had no effect on yield but there was less ryegrass seed produced at 4.0 L ha⁻¹ at 40 and 120 L ha⁻¹ of water at 37% seed colour change.

Keywords  Canola, desiccation, swathing, ryegrass.