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Grazing canola and blackleg

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Background

- **The idea:** sow early, graze in winter, harvest for grain
- **System benefits**
 - Break crop for dual-purpose wheat
 - Grass weed control
 - Pasture spelling in winter
 - Flexibility, profitability, sustainability

But does it work??



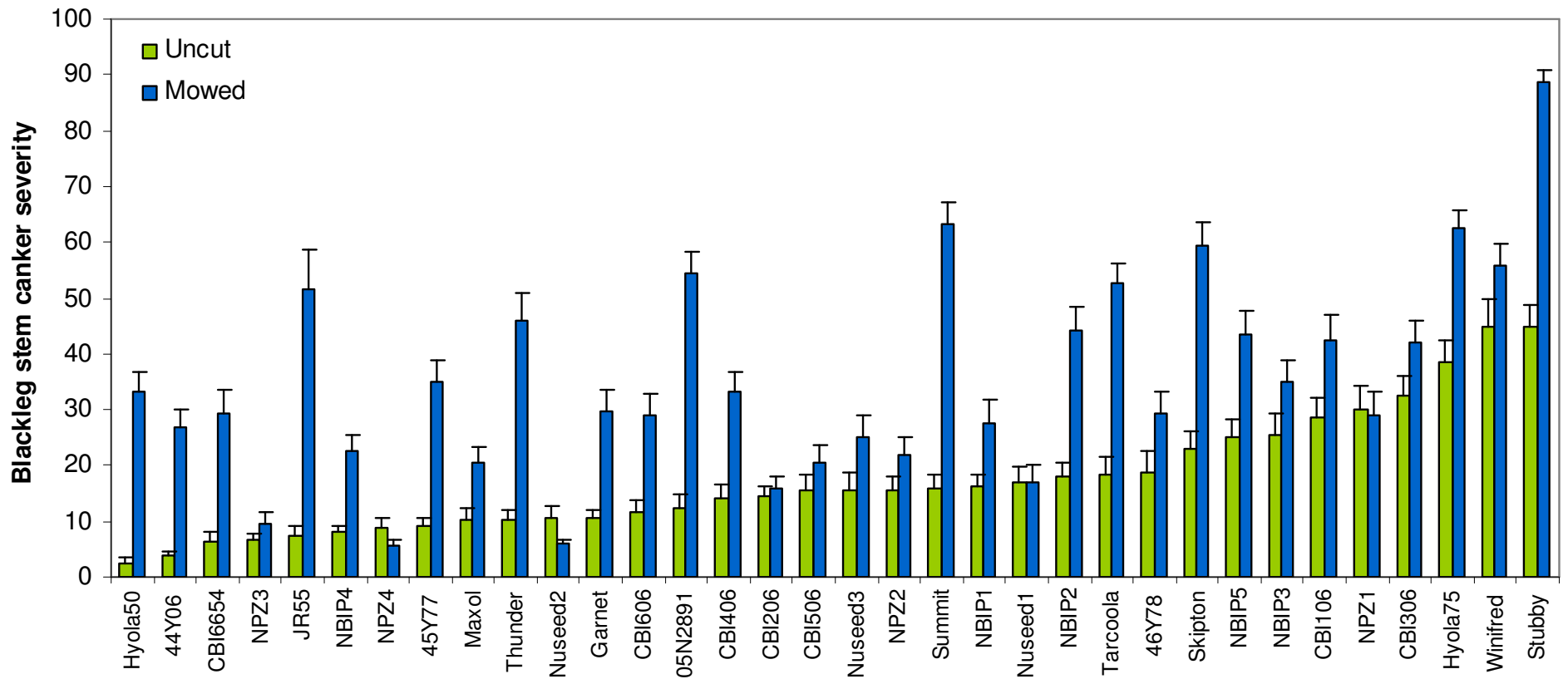
Summary of findings

- Significant winter biomass from earlier sowing (2 – 4 t/ha)
- High-quality forage, good live-weight gain (210 – 300 g/day), no animal health issues
- Grazing before bud elongation has little impact on flowering time or yield
- Impact on yield depended on
 - timing and intensity of grazing
 - seasonal conditions for re-growth
- Suitable lines identified for different environments
- Significant opportunity to capture benefits
 - \$100-\$400 GM/ha depending on how feed valued

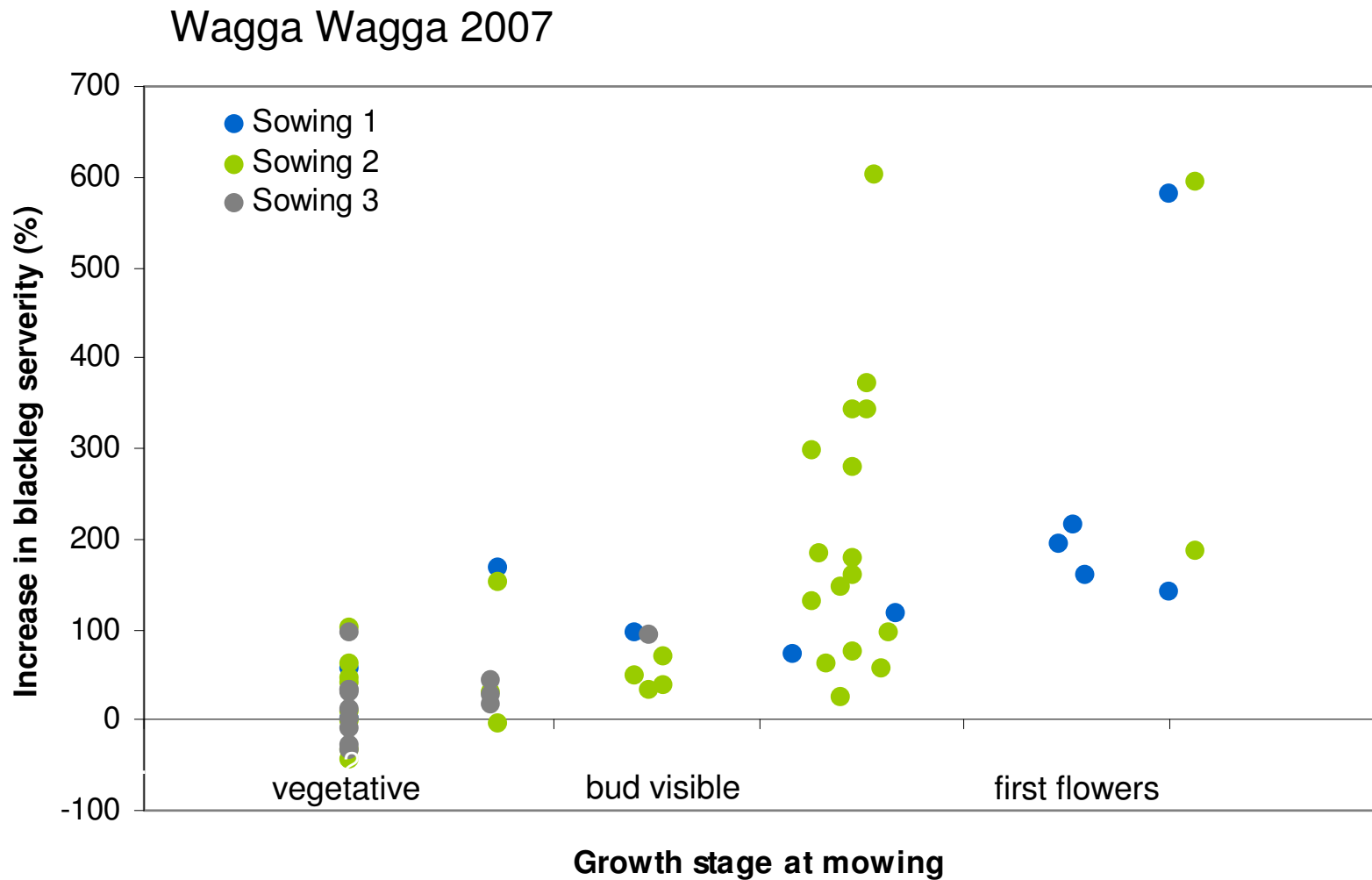


Blackleg severity in defoliated plants

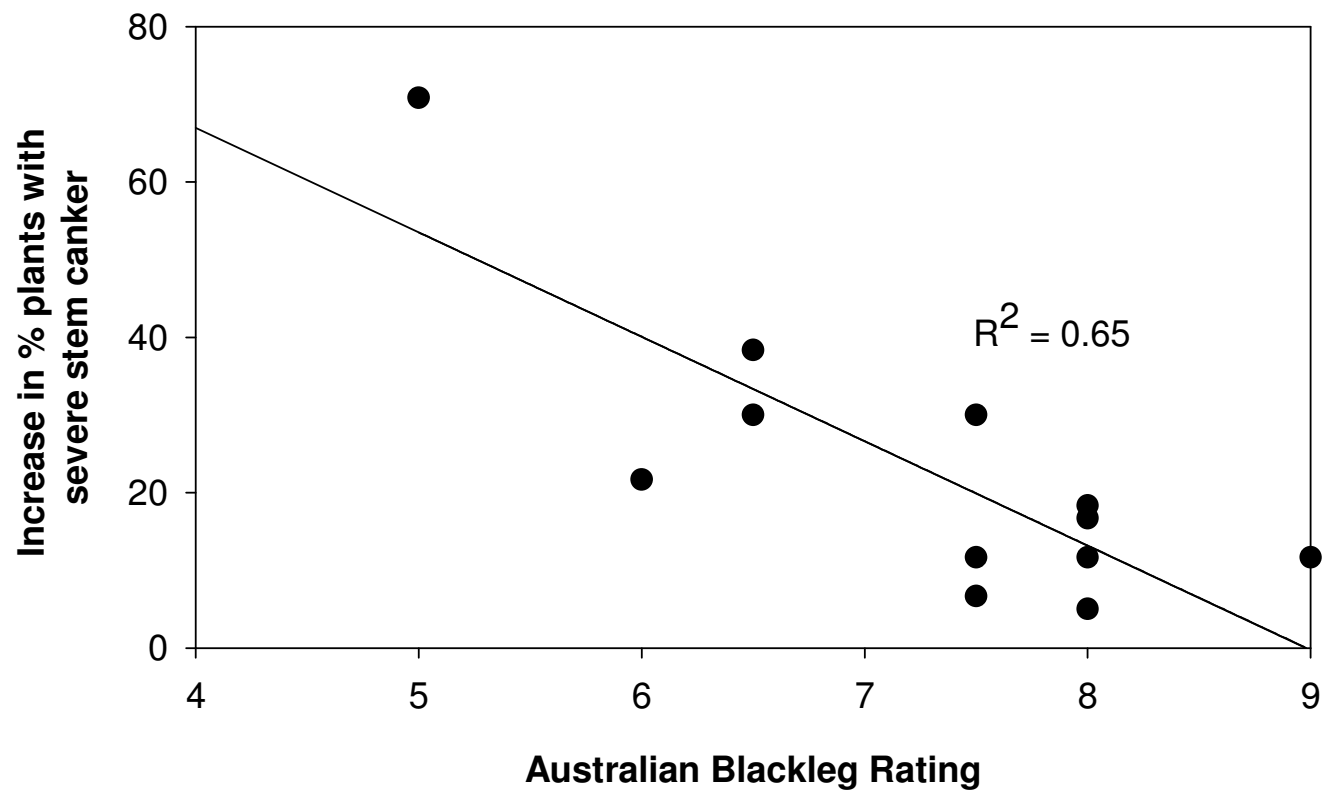
Wagga Wagga 2007



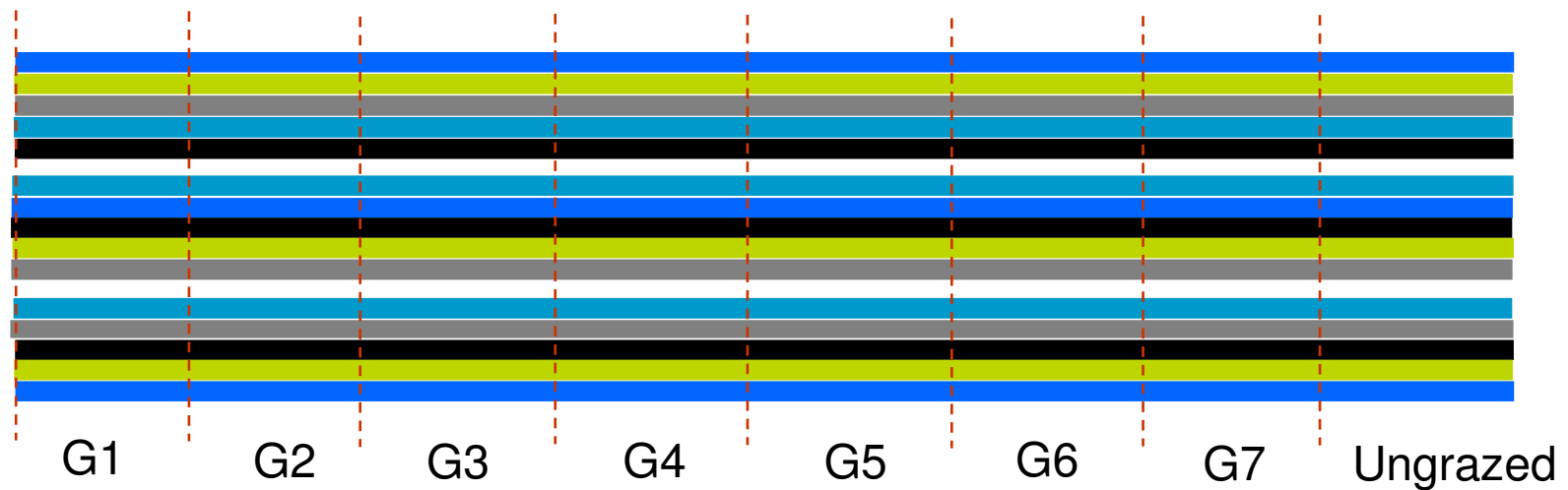
Increased blackleg severity with later growth stage at defoliation



ABR and blackleg severity with defoliation

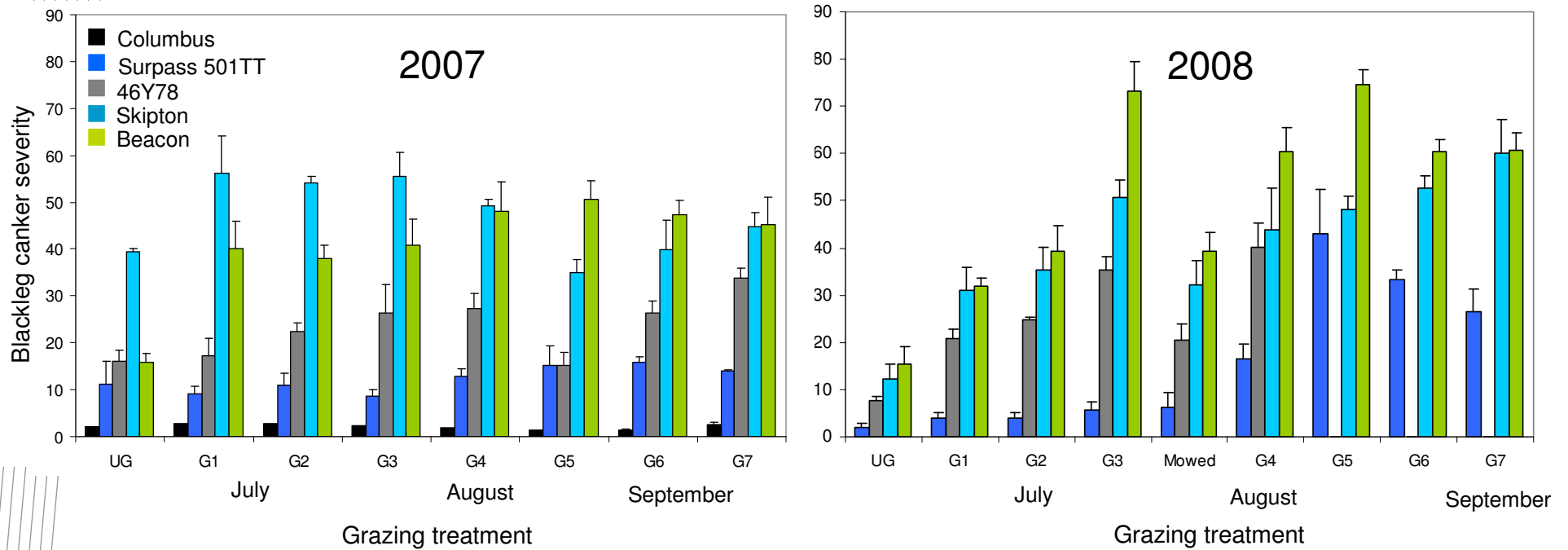


Experiment design 2007 & 2008

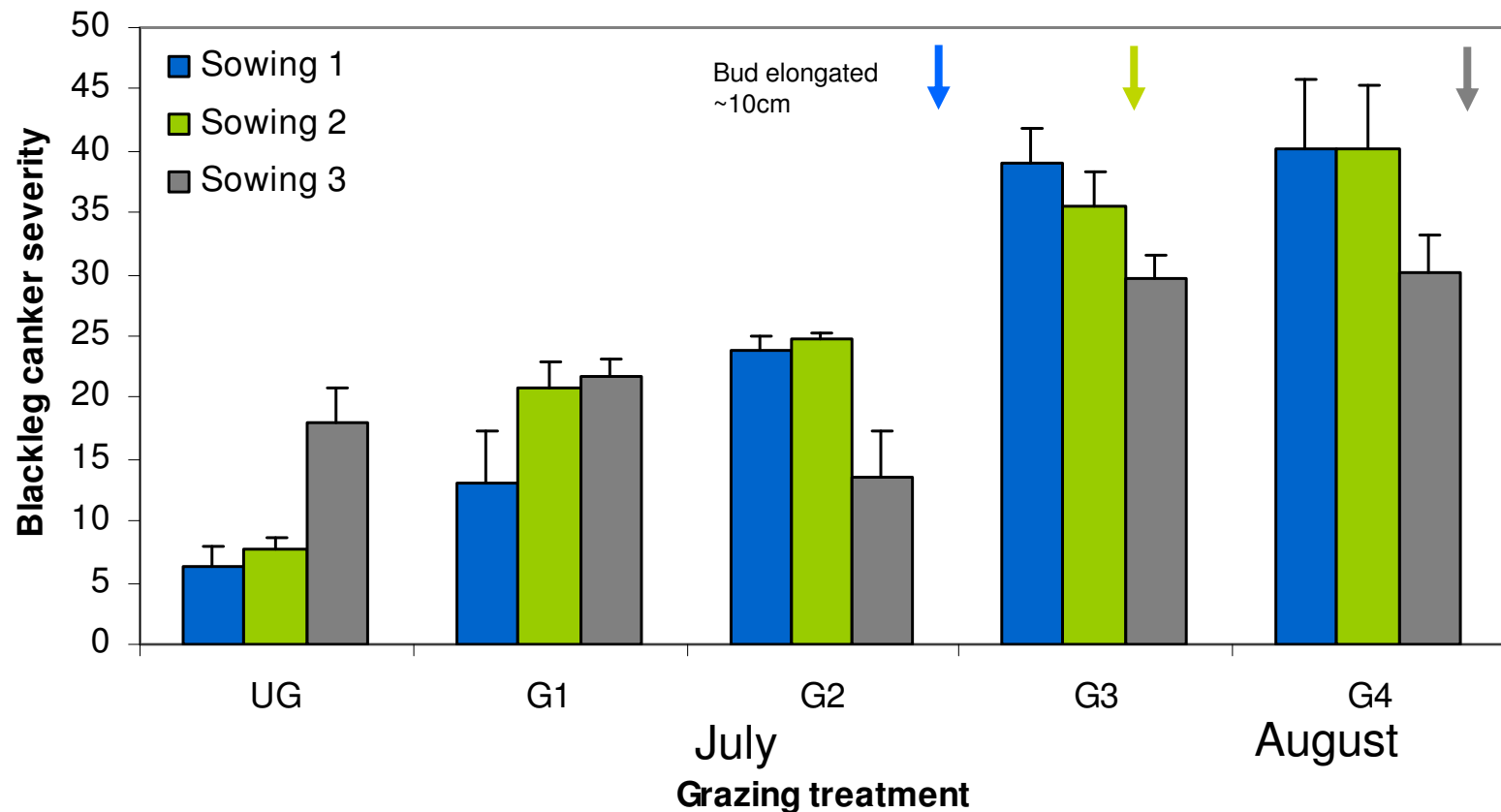


- Grazing periods at 2-weekly intervals from June to September
- Stem canker severity measured at maturity

Blackleg severity in grazed cultivars



Blackleg severity in 46Y78 grazed at different growth stages



2004-2008 Experiment summary

- 2004 - 2006
 - Canberra: pilot experiments
 - Do sheep eat canola? Yes
 - Does canola regrow after grazing? Yes
 - Is it profitable? Yes, even in drought. Profitability depends on how the feed is valued.
- 2007 (GRDC – CSP00085)
 - Canberra, Naracoorte, Wagga Wagga
 - Identification of lines with suitable phenology for different environments
 - Grazing simulated by mowing
 - Young
 - Effect of grazing on blackleg development
 - Grazing by sheep
 - On-farm trials
 - How does this fit in the system?
- 2008
 - Canberra, Naracoorte, Wagga Wagga, Young
 - Few varieties grazed by sheep
 - Young
 - Effect of grazing on blackleg development
 - Grower paddocks