<u>Lentil, Herbicide Management +/- zinc, MRZ Mid North (Warnertown), South Australia</u> <u>Lentil, Herbicide Management +/- zinc, LRZ Eyre Peninsula (Wudinna), South Australia</u>

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Aim

- 1. To determine safe margins for applying post sowing pre-emergent herbicides on herbicide tolerant lentil variety, PBA Hallmark XT grown on different soil types.
- 2. To assess the herbicide damage recovery effects of zinc.

Treatments

Herbicide strategies:

The bridge strategies.	
Treatment	Application rate and timing
Nil	Nil
Terbuthylazine*	Applied post-sowing pre-emergent at 500 g/ha
Diuron	Applied post-sowing pre-emergent at 500 g/ha
Metribuzin*	Applied post-sowing pre-emergent at 150 g/ha
Imazethapyr*	Applied post-sowing pre-emergent at 50 g/ha
Zinc	Zinc sulfate applied post-emergent (6-node growth stage) at 2 kg/ha

^{*}Experimental herbicide treatment (product or timing)

Results and Interpretation

 Key message: Herbicide damage symptoms were not observed in PBA Hallmark XT due to herbicide treatments at Wudinna and Warnertown, 2019. This is likely due to the dry seasonal conditions, which lowered herbicide mobilisation within the soil. Consequently, effects of zinc sulphate on herbicide damage recovery were not visible. Average grain yield of PBA Hallmark XT was 0.71 t/ha at Wudinna and 0.93 t/ha at Warnertown.

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