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

## Authors

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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:

| Treatment | Application rate and timing |
| :--- | :--- |
| Nil | Nil |
| Terbuthylazine* | Applied post-sowing pre-emergent at $500 \mathrm{~g} / \mathrm{ha}$ |
| Diuron | Applied post-sowing pre-emergent at $500 \mathrm{~g} / \mathrm{ha}$ |
| Metribuzin* | Applied post-sowing pre-emergent at $150 \mathrm{~g} / \mathrm{ha}$ |
| Imazethapyr* | Applied post-sowing pre-emergent at $50 \mathrm{~g} / \mathrm{ha}$ |
| Zinc | Zinc sulfate applied post-emergent (6-node growth stage) at $2 \mathrm{~kg} / \mathrm{ha}$ |

*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 $0.71 \mathrm{t} / \mathrm{ha}$ at Wudinna and 0.93 t/ha at Warnertown.


## Acknowledgements

The research undertaken as part of the GRDC-funded Southern Pulse Agronomy project is made possible by the significant contributions of growers through both trial cooperation and the support of the GRDC and the authors would like to thank them for their continued support. The continued assistance in trial management from SARDI Agronomy groups at Clare, Minnipa, Struan and Port Lincoln is gratefully acknowledged and appreciated. The authors would also like to gratefully acknowledge SARDI Plant Pathology and Soil Biology groups for their scientific input and assistance, as well as advisors and grower groups involved in the project.

