



Guidelines to managing key weed species across low-rainfall regions of south-eastern Australia

Practical strategies for effective integrated weed control



Grains industry and natural resource management working together



Foreword

Weed control makes up a significant portion of the total cost of crop production across Australia's cropping regions. The total cost of weeds (revenue loss plus expenditure) to Australian grain growers is estimated at \$3.3 billion*. Reliance on chemicals alone is not a sustainable option due to the inevitability of herbicide resistance.

Effective long-term weed control requires careful planning to maximise production benefits while protecting and enhancing the natural resource base of our farming enterprises. Maximising ground cover (and so minimising erosion risk) is a critical part of any effective weed management plan.

Keeping weed seedbanks to a minimum, using a range of chemical and non-chemical control methods, including careful use of herbicides, strategic burning and cultivation, weed seed destruction and selective grazing is the key to sustainable weed management. A combination of chemical and non-chemical weed management strategies is essential to slow down the onset of herbicide resistance and so preserve herbicides for their best effect.

This practical guide provides a comprehensive, technically-up-to-date overview of integrated weed management (IWM) options growers across the low-rainfall regions of south-eastern Australia can employ to maximise their broadacre crop returns. The practices outlined in the following pages are sustainable and provide environmental benefits as well as offering cost-effective and successful weed control outcomes. The publication will appeal to growers, their advisers and those involved in natural resource management (NRM).

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Production and Environment Partnerships

Delivering multiple benefit messages — A partnership with NRM is an innovative project, which delivered technologies to growers across south-eastern Australia that have increased production and profitability while addressing key natural resource issues.

Working in partnership with seven NRM regions, the project brought together the expertise of the grains industry with natural resource networks in these regions to extend the uptake of new and improved farming practices.

A significant part of the project was developing and delivering four regional extension and communication projects to address high-priority regional issues around IWM and managing sandy soils.

This publication is a legacy of the two IWM projects carried out in partnership with the Northern Yorke NRM region — *A Holistic Approach to Weed Management — All Weeds in All Years*, and the Mallee Catchment Management Authority (CMA) and the Western Local Land Services (LLS) — *Integrated Weed Management Strategies to Manage Brome Grass*.



Ag Excellence Alliance supports farming systems groups across south-eastern Australia, and providing linkages with natural resource management regions.

GRDC Grains Research & Development Corporation
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GRDC are the major funders of this project

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Guidelines for managing key weed species across low-rainfall districts of south-eastern Australia

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More details can be found at www.agex.org.au

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