

Annual grass control in perennial pastures

Enhanced Producer Demonstration Site

Demonstration goal: To demonstrate single or combined methods of reducing annual grass weeds (particularly barley grass) in perennial pasture on PPS members' farms.

Site location: South-west Victoria

Producer group: Perennial Pasture Systems (PPS)

Group coordinator: Robert Shea

Agriculture Victoria demonstration coordinator: Jo Cameron and Tess McDougall

Duration: 2018–2021



Counting barley grass heads in spring 2019

What are we aiming to achieve and why?

Barley grass is a widespread annual grass that has a huge impact on the ability of growers to turn off seed-free meat and wool.

Despite providing useful early season feed, invasions of barley grass and other annual grasses has a deleterious effect on perennial pastures, competing for light and moisture. Furthermore, its sharp seeds penetrate the skin, eyes and the wool of sheep, causing production losses.

Barley grass produces prolific numbers of seeds which establish readily, especially after dry conditions and pasture thinning as the PPS group encountered in 2014–15.

Methods

The demonstration is evaluating three main strategies for managing barley grass. They include:

- early season competition using grazing cereal, annual ryegrass and clover
- conventional and emerging chemical options
- physical removal of seed heads including hay and silage and management through grazing.

Second and third year trials will be determined by the successes and failures of year one.

The following trials are underway:

- **Sowing into existing pasture**
Over-sowing paddocks with highly competitive species such as ryegrass, rye corn and Moby barley.
- **Hard-seeded legumes**
Over sowing paddocks with arrowleaf clover using 50% scarified and 50% unscarified seed. This will be assessed over two years at some sites.
- **Conventional chemical application**
Assessing conventional spray options (gramoxone and glyphosate) including timing of application against seed set.
- **New chemical application**
Assessing other chemical options under agronomist recommendations such as haloxyfop and propaquizafop.
- **Chemical resistance**
Barley grass has been sampled from PPS members' farms to test for resistance to

glyphosate, quizalofop, paraquat and diuron. No resistance has been observed to date.

- **Mechanical removal of hard seeds**

Two methods include making silage and cutting /removing seed matter (using a lawn mower with a catcher) to observe if the removal of hard seeds reduces the amount of barley grass in subsequent years.

- **Grazing management**

Grazing management is also being trialed, focusing on stocking rates and grazing intensity.



*Hay making demonstration in spring 2019.
Left side of fence post- hay was removed spring 2018
Right side of fence post- not mown in 2018 (control)*



Barley grass seed head development stages, November 2019

Partners

This demonstration is conducted by PPS and Agriculture Victoria and co-funded by Meat & Livestock Australia (MLA).

Contacts

Rob Shea

E: yadin@netconnect.com.au

Tess McDougall

E: tess.mcdougall@agriculture.vic.gov.au

Jo Cameron

E: jo.cameron@agriculture.vic.gov.au

More information

agriculture.vic.gov.au/agriculture/livestock/on-farm-demonstrations

Disclaimer

Any recommendations, suggestions or opinions contained in this publication do not necessarily represent the policy or views of Meat & Livestock Australia (MLA). No person should act on the basis of the contents of this publication without first obtaining specific, independent professional advice. MLA takes no responsibility, in any way whatsoever, to any person in respect to the document, including any errors or omissions therein, arising through negligence or otherwise however caused.

© Meat & Livestock Australia 2019 ABN 39 081 678 364

This work is copyright. Apart from any use permitted under the Copyright Act 1968, all rights are expressly reserved. Requests for further authorisation should be directed to the Corporate Communications Manager, PO Box 1961, North Sydney, NSW 2059 or info@mla.com.au.

Published in January 2020.