

Project: Triazine resistant silver grass is a looming treat for mixed cropping systems in central and Southern WA agriculture regions (TAR00005).

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Bio:

Garren is an Agronomy consultant based in Narrogin with ConsultAg. Garren services farming clients over a large geographical area in the great southern and southern central grain belt. Garren and his team regularly undertake research projects (often supported by GRDC) to solve looming issues for growers. Garren was a fortunate recipient of the GRDC seed of light award in 2016.

Trial Progress:

- The project was delayed due to many of the silvergrass populations having strong dormancy.
- The project was successful and the final report has been submitted to GRDC for approval.

Extension Activities:

- As yet there has not been any extension activities. Waiting on approval from GRDC for final report.
- Intend to develop a press release with a Journalist. No field days were held.

Key Points:

- The extensive use of simazine to manipulate clover-based pastures and the growing of TT canola or Lupins has meant that silvergrass is under high selection pressure from group C herbicides.
- The study revealed that 40 high risk sites were susceptible with no resistance detected and two were found to have resistant populations.
- Populations found to be resistant to simazine (Group C – triazine sub group) also showed cross resistance to metribuzin (Group C – Triazinones sub group). However diuron was found to be still effective (Group C – Urea sub group).
- This should be seen as an early warning to growers that selection pressure can accidentally be driven by triazines and exploring alternate modes of action or using multiple spray-top operations may need to be used in crop and pasture rotations.

Further Work Required:

- No additional research is required.
- Communication of the risk of growers being over reliant on Triazine chemistry and further resistance developing.

Photos:



Figure 2: Left untreated, Right metribuzin resistant, Front susceptible



Figure 3: Left Untreated, Right simazine resistant, Front susceptible