



Fact Sheet

Brome Grass: Integrated Weed Management

“Where herbicide susceptible populations of brome grass exist, attempts to achieve control at both harvest and seeding is imperative.”

- Chris Davey

Why is Brome Grass a problem?

- Development of herbicide resistant populations
- No-Till has favoured development of brome grass – no pre-sow cultivation
- Timing of effective spray topping can be problematic
- Vigorous root system competes with crop for nitrogen and carries over root diseases
- Seed heads irritable to sheep and contaminate wool



Recent Grain & Graze 2 funded research findings from Chris Davey and the Northern Sustainable Soils Farmer Group:

- Pre-emergent herbicides provide relatively low levels of control
- Clearfield crops using Intervix® achieved good control but may increase likelihood of Group B resistance
- Some brome grass populations are already resistant to Group A (Fops and Dims) and Group D (trifluralin) herbicides.
- Integrated Weed Management is essential for Brome Grass control
- Rotate herbicides
- Consider crop selection – eg. barley competes better than wheat
- Grow hay
- Chemical fallow treatment in year before crop completely stopped seed set. Yield increased in following crop but must be balanced against no cash crop in treatment year.
- A hot burn prior to cropping can significantly reduce seed set but can increase erosion risk
- Chaff carts and a burned windrow can help but were less effective

Pre-em herbicides are unreliable on Brome Grass. Chemical tolerant crops like Clearfield varieties, managing brome grass seed at harvest time or even taking a nil tolerance approach with chemical fallowing can help reduce numbers to a sustainable level not threatening crops.

Trials on Cultural Practices for Brome Grass Control

Treatment	Timing	Brome Grass (plants/m ² total of 3 assessments)	Percentage Reduction (%)	Yield (T/Ha)
Conventional	Nil	2599	0%	0.80 T/Ha
Chaff Cart	December (harvest)	1243	52.15%	1.07 T/Ha
Narrow Windrow + Burn	December + April	1516	41.69%	1.21 T/Ha
Chemically fallowed	September 2011	155	97.02%	1.43 T/Ha
Hot Burn	April	1840	29.2%	1.20 T/Ha