

Impact of winter cereal herbicides

with Malcolm Taylor, Agropraisals Pty Ltd

RICEFACT

Caution is required when choosing winter crop herbicides in fields destined to subsequently grow rice. Some products persist beyond the winter crop phase and their soil residues can seriously damage following rice crops.

Field trials conducted locally have demonstrated severe reductions in rice biomass, plant counts and grain yield with a number of winter crop herbicide products. Others show no carryover effects. Product labels do not always identify such risks. The table below lists herbicides that have been tested in NSW and shown potential to damage subsequent rice crops.

Active ingredient	HRAC Group	Common product names	Effect on rice	Suggested plantback
pyrozasulfone	15	SAKURA, MATENO PLUS	Severe	21 months
imazapic, imazapyr	2	MIDAS, ON-DUTY, INTERVIX	Severe	10-34 months
metazachlor	15	BUTISAN	Severe	>12 months
chlorsulfuron	2	GLEAN	Moderate	12 months
s-metalochlor	15	BOXER GOLD, DUAL	Moderate	unknown
napropramide	-	DEVRIKOL, ALTIPLANO	Moderate	12 months
atrazine	5	GESAPRIM	Moderate	6-18 months
simazine	5	SIMAGRANZ, GESATOP	Moderate	6-18 months
cinmethylin	30	LUXIMAX	Minor	>5 months
flumioxazin	14	TERRAIN	Minor	unknown

OVERWATCH, CALLISTO, REFLEX, TERRADOR, GALLERY, FREQUENCY, VORAXER, STOMP, TRIFLURX, AVADIX XTRA, ALLY, DIURON and ULTRO herbicides have not shown any significant injury to rice sown 5 months after application. Note, that using multiple Group 2 Herbicides sequentially (eg: GLEAN in wheat followed by LONDAX in rice) may exacerbate injury symptoms.

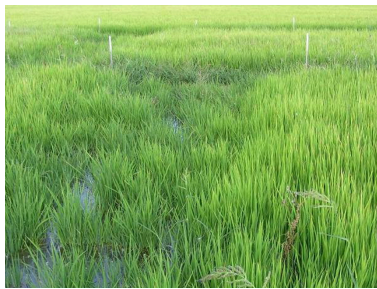


Figure 1 Carryover effect of SAKURA on rice plot (left foreground)



Figure 2 Effect of SAKURA carryover in rice research plots, Jerilderie, NSW

Herbicide breakdown and carryover will be influenced by application rate, temperature, rainfall, soil pH, organic matter and soil texture, thus it is difficult to offer definitive assessments of the risk of damage to a following rice crop. If one of the herbicides identified as presenting a high risk of carryover has been used on your paddock, you may choose to conduct a bioassay in spring prior to committing the field to rice. Consult your advisor to conduct these tests.

Key Messages

- ✔ Reduce risk by talking to your advisor
- ✔ Always check labels for plantback windows
- ✔ Keep accurate records