RYEGRASS CONTROL IN WHEAT.

Richard Brake, Great Northern Rural Services, Geraldton

Your Local Bloke
Great Northern Rural Services

AIM

To assess the new herbicide Sakura on Annual Ryegrass control/ suppression in wheat.

BACKGROUND

Sakura is a new pre-emergent herbicide developed by Bayer for release to the market for the control of annual ryegrass in wheat. Annual ryegrass is an increasing problem in the northern agricultural region due to an assumed metabolic resistance to Trifluralin becoming more prevalent requiring higher rates to maintain control, with some sites having reduced control even when using higher rates. The development of Sakura which is a group k herbicide (pyroxasulfone) provides an additional product with a different mode of action which farmers can rotate with the current herbicides. This enables the enhancement of existing integrated weed management practices.

TRIAL DETAILS

	Site 1
Property	Craig Simkin, Binnu.
Plot size & replication	10 x 3 m, 3 replicates
Soil type	yellow sand
Sowing date	29th May
Seeding rate	Bonnie Rock @ 45 kg/ha
Fertiliser (kg/ha)	60 kg/ha urea post sowing
Paddock rotation	2009 Canola
Herbicides	No knockdown applied 28th of May trial sprayed MCPA LVE 500 ml + Jaguar 500ml + Tilt 100 ml at 60L water rate on the 15/07/2010
Growing Season Rainfall	May to October 183 mm

TRIAL DESIGN.

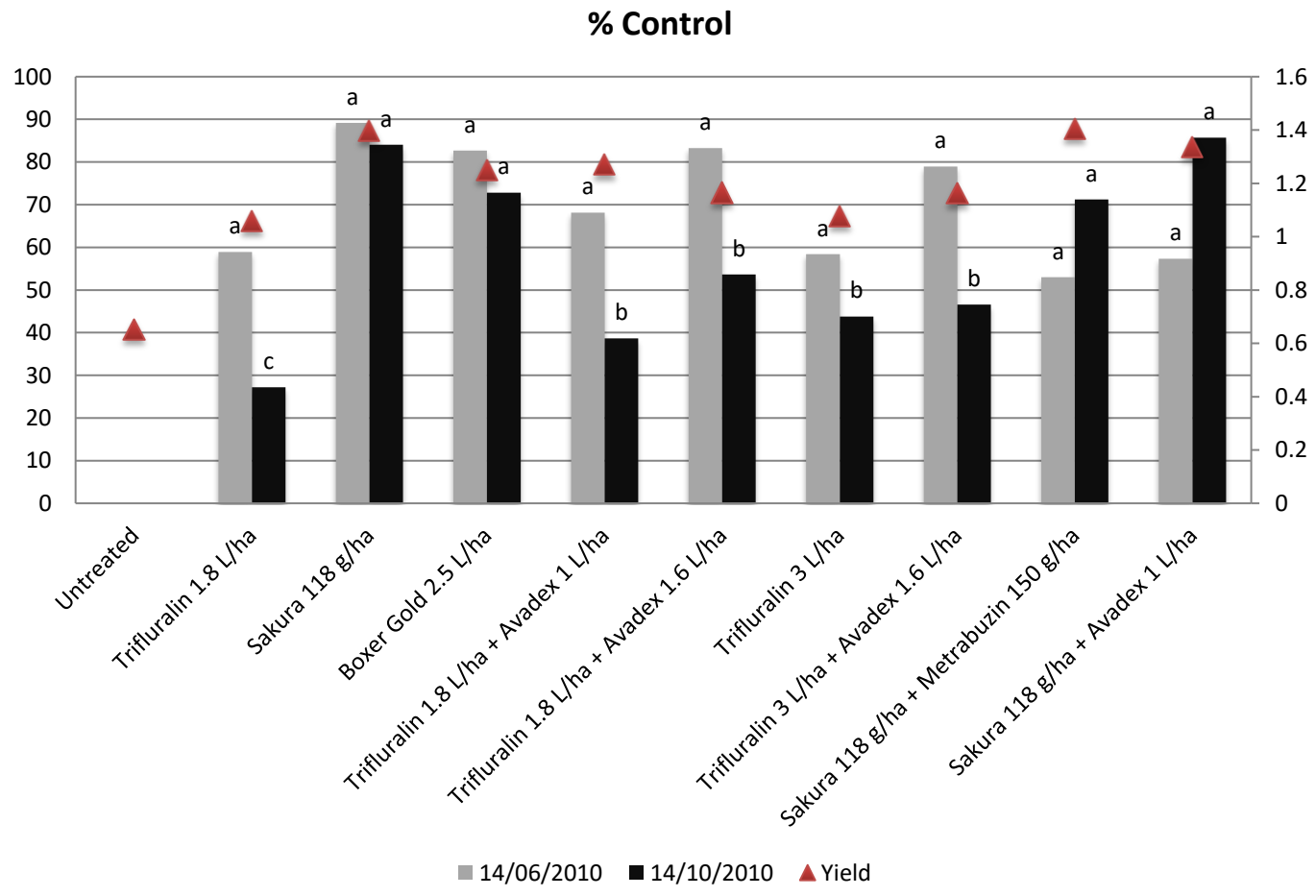
Treatment #	**Pre Emergent Treatment**
1	Untreated Control
2	Trifluralin @ 1.8 L
3	Sakura @ 118 g/ha
4	Boxer Gold @ 2.5 L
5	Trifluralin @ 1.8 L Avadex @ 1 L
6	Trifluralin @ 1.8 L Avadex @ 1.6 L
7	Trifluralin @ 3 L
8	Trifluralin @ 3 L Avadex @ 1.6 L
9	Sakura @ 118 g/ha Metribuzin @ 150 g
10	Sakura @ 118 g/ha Avadex @ 1 L

RESULTS

TABLE 1: RESULTS

Treatment	Cost of Mix $/Ha	Ryegrass/m² 11,06,10	Ryegrass/m² 28,06,10	Ryegrass/m² 14,10,10	Yield T/ha
Untreated Control	0	206	500	474	0.65
Trifluralin @ 1.8 L	9	84	248	346	1.06
Sakura @ 118 g/ha	35	22	76	76	1.40
Boxer Gold @ 2.5 L	35	36	96	129	1.25
Trifluralin @ 1.8 L Avadex @ 1 L	18	66	109	291	1.27
Trifluralin @ 1.8 L Avadex @ 1.6 L	29	34	171	220	1.16
Trifluralin @ 3L	15	86	219	267	1.08
Trifluralin @ 3L Avadex @ 1.6 L	35	43	114	253	1.16
Sakura @ 118 g/ha Metribuzin @ 150 g	36	97	88	137	1.40
Sakura @ 118 g/ha Avadex @ 1 L	47	88	72	68	1.34
P-value		*0.02*	*0.000000007*	*0.000002*	
5% LSD		*90.59*	*120.02*	*140.58*	

GRAPH 1: RYEGRASS COUNTS AT TWO TIMINGS AS A % OF CONTROL WITH YIELD IN T/HA



DISCUSSION

At sixteen days after seeding there is no significant difference between any of the treatments although Sakura had the best control followed by Boxer Gold and the Trifluralin 1.8l/Avadex1.6l mix. Trifluralin at 1.8l/ha struggled to control the ryegrass. The higher rate of Trifluralin didn't perform any better. At one hundred and twenty two days after seeding Sakura was still controlling the ryegrass and Boxer Gold had started to drop away, although statistically there is no significant difference. All the other treatments fell away rapidly apart from the Sakura/Avadex mix which could be due to the residual activity of Sakura giving the mix longevity. However; the difference in control between the straight Sakura treatment would not justify the expense of Avadex in the mix. 3 litres of Trifluralin performed slightly better than the lower rate, but failed to achieve 50% control.

Lack of rainfall throughout the season was an issue, and there were no finishing rains which impacted on the yield; however the Sakura mixes did not suppress the yield.

ACKNOWLEDGEMENTS

Craig Simkin, CA Simkin & Co, Binnu

Peter Burchell, Territory Sales Manager, Bayer Crop Science

PAPER REVIEWED BY: TONY ROSSER