

Kochiavore™ in combination with adjuvants for the control of Russian-thistle in chemical fallow

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A field study was conducted in Douglas County, WA in wheat stubble to evaluate the control of Russian-thistle with Kochiavore in combination with adjuvants. Kochiavore contains the active ingredients 2,4-D, bromoxynil and fluroxypyr in the Mechanism of Action Groups 4, 5 and 4, respectively.

Postemergence treatments were applied on July 24th with a CO₂-powered backpack sprayer set to deliver 15 gpa at 2.5 mph. The applications were made under winds out of the north at 10 mph with an air temperature of 68°F and relative humidity of 32%. Russian-thistle plants were 3 to 6 inches in height and diameter and the average portion of the plot area covered with Russian-thistle was between 20 and 35%.

The initial rating was taken on August 7th, which was 14 days after application. Russian-thistle plants treated with Kochiavore + AG17018 (24 + 16 fl oz/A), Kochiavore + AG16017 (24 + 12 fl oz/A) and (24 + 16 fl oz/A) exhibited significantly more injury than those treated with Kochiavore (24 fl oz/A). At the next rating time, August 17th, Russian-thistle injury from Kochiavore + AG16017 (24 + 12 fl oz/A) dropped off, but the other two treatment were still exhibiting greater Russian-thistle injury than just Kochiavore applied alone at 24 fl oz/A. Proper adjuvant selection can improve the control of Russian-thistle in summer fallow with Kochiavore herbicide.

		8/7	8/17	8/7	8/17
		Mean number of			
Treatment	Rate	Russian-thistle plants/yd ²		Russian-thistle injury	
	fl oz/A			-----0-100%-----	
Nontreated Check		10 c ¹	13 e	--	--
Kochiavore	24	3 ab	4 a-c	81 bc	68 b-d
Kochiavore + AG16017	24 + 8	6 b	8 d	75 c	59 d
Kochiavore + AG16017	24 + 12	3 ab	4 a-c	88 ab	71 bc
Kochiavore + AG16017	24 + 16	2 a	3 ab	91 ab	79 ab
Kochiavore + AG17018	24 + 16	2 a	2 a	95 a	86 a
Kochiavore + AG17017	24 + 12	4 ab	6 b-d	81 bc	66 cd
Kochiavore + AG14039	24 + 8	2 a	7 cd	81 bc	35 e
Kochiavore + AG14039	24 + 12	3 ab	6 b-d	86 a-c	74 bc

¹ Means, based on four replicates, within a column, followed by the same letter are not significantly different at P = 0.05 as determined by Fisher's protected LSD test, which means that we are not confident that the difference is the result of treatment rather than experimental error or random variation associated with the experiment.

Disclaimer

Some of the pesticides discussed in this presentation were tested under an experimental use permit granted by WSDA. Application of a pesticide to a crop or site that is not on the label is a violation of pesticide law and may subject the applicator to civil penalties up to \$7,500. In addition, such an application may also result in illegal residues that could subject the crop to seizure or embargo action by WSDA and/or the U.S. Food and Drug Administration. It is your responsibility to check the label before using the product to ensure lawful use and obtain all necessary permits in advance.