Mayweed Chamomile Control in Winter Wheat with Widematch®

A field study was conducted at the Cook farm near Pullman, WA to determine the efficacy of Widematch (clopyralid + fluroxypyr) for the control of mayweed chamomile in winter wheat. 'Brundage 96' was direct seeded on October 18, 2012 into lentil ground using a Horsch drill set-up with 12-inch row spacing. The soil was a silt loam with a pH of 4.8 and 2.8% organic matter. The experimental design was a randomized complete block with four replications. Herbicide treatments were applied on April 16, 2013 when the wheat had two tillers and was 8-10 inches tall. Herbicides were applied with a CO_2 backpack sprayer set to deliver 10 gpa at 35 psi and 3 mph. Prickly lettuce and mayweed chamomile were the most prevalent and uniformly distributed weeds in this study. Prickly lettuce was about 4 inches tall and mayweed chamomile was in a 1- to 2-inch rosette at the time of application. Other weeds present, but not rated due to uneven distribution or low plant densities, were volunteer lentil, henbit, panicle willowweed, and catchweed bedstraw. The trial was harvested for grain yield on August 19, 2013.

Herbicides containing clopyralid [Widematch, Curtail (clopyralid + 2,4-D), and Curtail M (clopyralid + MCPA)] provide excellent control of mayweed chamomile and prickly lettuce. The decision on which of these three products to use will come down to differences in price, application windows, and recrop restrictions. Goldsky (florasulam + fluroxypyr + pyroxsulam) plus Huskie (pyrasulfotole + bromoxynil) provide very good to excellent control of these two weeds and may be a good choice if the control of certain grass weeds is needed in addition to these broadleaf weeds. Affinity BroadSpec (thifensulfuron + tribenuron) plus 2,4-D ester provided good control of both mayweed chamomile and prickly lettuce. Resistance to Group 2 herbicides have been reported for both of these weeds, so this level of control with Affinity BroadSpec may not be achievable if this resistance is present in a particular field.

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		31-May-13		24-Jul-13	19-Aug-13
Treatment	Rate	Mayweed chamomile control	Prickly lettuce control	Wheat senescence	Grain yield
	oz/a	---------- % ----------			bu/a
Widematch	16	96	96	94	87.2
Curtail	32	96	100	95	87.3
Starane Flex	13.6	51	61	95	93.8
Starane Flex	13.6	63	84	95	99.1
2,4-D ester 4lb	8				
Huskie	11	63	79	94	104.7
NIS	0.25% v/v				
AMS	16				
Affinity BroadSpec	0.4	86	85	91	91.3
2,4-D ester 4lb	8				
NIS	0.25% v/v				
GF-2686	0.71	76	70	94	102.3
NIS	0.25% v/v				
Orion	17	69	71	96	97.2
Huskie	13.5	69	70	96	100.3
Starane Flex	13.6				
Goldsky	16	88	95	94	109.5
Huskie	13.5				
Curtail M	29	99	98	94	89.0
Nontreated check		0	0	94	87.2
LSD (5%)*		21	24	4	21.3

*Treatment differences less than the LSD value are not considered significant because we do not feel confident that the difference is due to the treatment rather than to experimental error or random variation associated with the experiment.