

Preemergence Burndown Combinations for Weed Control in Lentil.

A trial was conducted to evaluate Anthem Flex and metribuzin combinations for weed control and lentil tolerance. Lentil were planted on April 29, 2021. Herbicide treatments were applied on May 5. Lentil emerged on May 15. Rainfall measuring 1.1 inches fell between herbicide application and lentil emergence. Kochia control was 96 to 100% 39 days after emergence with all treatments except pendimethalin (Prowl H2O) where no kochia control was observed. Wild buckwheat control was inconsistent. No herbicide treatment resulted in reduction of lentil height, stand, and yield.

Treatment ^a	Rate oz/A	Kochia		Wild buckwheat		Height cm	Stand No./m ²	Yield LB/BU
		24 DAE	39 DAE	24 DAE	39 DAE			
1 Anthem Flex Roundup PowerMax	3.5 22	100 a	100 a	45 c	38 e	19 -	235 -	1475 -
2 Anthem Flex Roundup PowerMax	4 22	100 a	100 a	69 ab	73 ab	20 -	209 -	1355 -
3 Anthem Flex Metribuzin Roundup PowerMax	3.5 2 22	95 b	97 a	53 bc	66 bc	20 -	216 -	1395 -
4 Anthem Flex Metribuzin Roundup PowerMax	4 2 22	100 a	96 a	56 bc	73 ab	19 -	243 -	1159 -
5 Anthem Flex Metribuzin Roundup PowerMax	3.5 4 22	100 a	100 a	68 abc	80 a	19 -	230 -	1128 -
6 Anthem Flex Metribuzin Roundup PowerMax	4 4 22	100 a	100 a	57 bc	46 de	20 -	235 -	1625 -
7 Anthem Flex Metribuzin Roundup PowerMax	3.5 5.3 22	100 a	100 a	80 a	83 a	19 -	234 -	1311 -
8 Anthem Flex Metribuzin Roundup PowerMax	4 5.3 22	100 a	100 a	71 ab	78 a	19 -	245 -	1239 -
9 Anthem Flex Roundup PowerMax	6 22	100 a	97 a	61 abc	58 cd	20 -	242 -	1424 -
10 Prowl H2O Roundup PowerMax	40 22	0 c	0 b	0 d	0 f	20 -	217 -	1522 -
LSD P=.10		3.8	4.5	22.8	11.6	NS	NS	NS
Treatment Prob(F)		0.0001	0.0001	0.0003	0.0001	0.1216	0.6910	0.6446

^aAnthem Flex, carfentrazone + pyroxasulfone (0.267 + 3.733 lb/gal); Roundup PowerMAX, glyphosate (4.5 lb/gal); Metribuzin (75% DF); Prowl H2O, pendimethalin (3.8 lb/gal).