

**Biennial wormwood control in dry beans (Site 1-2000)**

Dry beans (Maverick) were planted June 2 into 30-inch rows at 60 lb/A in a conventional tillage system. Individual plots were 10 x 30 ft and replicated three times. Treatments were applied preplant incorporated (PPI) on May 30, preemergence (PRE) on June 6, or postemergence on July 15 (POST 1) or July 21 (POST 2). The primary weeds of interest were biennial wormwood (Biww) and kochia (Kocz). We chose this site because of the known biennial wormwood infestation. This site was in sunflower in 1998 and fallow 1999. Soil conditions were dry and not ideal at planting time.

Treatment <sup>a</sup>	Rate	Dry beans		Biww		Kocz		Yield lb/A
		Jul 19	Aug 31	Jul 19	Aug 31	Jul 19	Aug 31	
		—% Injury—		———% Control———				
Untreated		0	0	0	0	0	0	945
<b><u>PPI/POST</u></b>								
Handweeded check <sup>b</sup>		0	0	100	92	100	96	1455
Broadstrike+Dual / Assure II	2 pt / 8 oz	0	0	30	18	10	5	830
Python / Assure II	1 oz / 8 oz	0	0	50	30	10	0	1039
<b><u>PRE/POST</u></b>								
Spartan / Assure II	0.125 lb ai / 8 oz	2	0	100	92	100	99	1631
Spartan / Assure II	0.25 lb ai / 8 oz	0	2	100	95	100	100	1374
Spartan / Assure II	0.5 lb ai / 8 oz	5	2	100	99	100	100	1643
Sencor / Assure II	0.33 lb / 8 oz	0	1	100	100	98	94	1671
Valor / Assure II	1.5 oz ai / 8 oz	57	62	100	100	100	100	761
<b><u>POST/POST 2</u></b>								
Basagran + COC / Basagran + Poast	1 pt + 1 % / 1 pt + 1 pt	0	0	67	90	71	86	1424
<b><u>POST</u></b>								
Basagran + Poast	2 pt + 1 pt	0	0	92	84	89	82	1413
Reflex + Raptor	1 pt + 2 oz	2	1	42	38	77	58	1202
Basagran + Raptor + 28% N	1 pt + 4 oz + 1 qt	1	0	76	56	71	63	1291
LSD		4	5	17	16	9	14	454
CV		50	62	13	14	8	13	21

<sup>a</sup> Poast and Assure II were applied with COC at 1%, and Raptor was applied with NIS at 0.25%.

<sup>b</sup> Treflan at 1.5 pt (PPI) and Assure II at 8 oz (POST) were applied to aid in handweeding.

We evaluated several registered and non-registered products for controlling biennial wormwood in dry beans. Spartan, Valor, Python, Broadstrike + Dual, Reflex, and Raptor are not registered (Section 3) for

use in dry beans. The pH at this site is 5.4 with 3.3% organic matter. Valor was the only product that caused significant crop injury. Broadstrike + Dual and Python did not control either biennial wormwood or kochia. Spartan, Sencor, and Valor effectively controlled both weeds. A split application of Basagran was slightly more effective than a single application. Tankmixes of Basagran + Raptor or Reflex + Raptor provided poor control of biennial wormwood and kochia.