

**POST field pea weed control, Carrington, 2013.** Greg Endres. The trial was conducted in cooperation with BASF to evaluate field pea response and weed control with labeled and experimental tank mixtures of POST bentazon and imazamox plus various adjuvants. Experimental design was a randomized complete block with three replicates. Inoculated 'Bridger' pea was seeded in conventional-tilled loam soil at 300,000 pls/A in 7-inch rows on May 15. Herbicide treatments were applied with a CO<sub>2</sub>-hand-boom plot sprayer delivering 10 gal/A at 35 psi through 8001 flat-fan nozzles on June 24 with 79 °F, 46% RH, 10 mph wind, and 75% clear sky to 10- to 12-inch tall pea, 4- to 5-leaf (1- to 5-inch tall) yellow and green foxtail, and 0.5- to 5-inch tall broadleaf weeds.

Plant height was less and lower leaves also were partially desiccated with NIS or COC as herbicide adjuvants with Basagran, Basagran plus Raptor or Poast, and BAS76201H when visually evaluated 11 days after treatment (Table). Also, physiological maturity was delayed 5 to 11 days with the plant injury compared to the untreated check. Foxtail generally was suppressed (64 to 83% control) with all treatments except Basagran (no control) when evaluated 4 and 6 weeks after treatment (WAT). Pigweed control at 4 and 6 WAT ranged from 77 to 82% with Basagran as the sole broadleaf herbicide while other treatments provided excellent control. Common lambsquarters and kochia control was excellent (91 to 99%) at 6 WAT with NIS or COC as herbicide adjuvants. Weed control was similar at 6 WAT with Basagran plus Raptor and BAS76201H with UAN as the adjuvant.

Table.													
Herbicide		Weed control <sup>1</sup>										Field pea	
		7/8			7/22			8/7				Plant injury <sup>3</sup>	PM <sup>4</sup>
Treatment <sup>2</sup>	Rate	fota	colq	pigw	fota	colq	pigw	fota	colq	pigw	KOCZ	%	Jday
	fl oz product/A	%										%	Jday
Untreated check	x	0	0	0	0	0	0	0	0	0	0	0	208
Bas + NIS + UAN	16	0	99	77	0	96	77	0	99	79	99	14	213
Bas + Raptor	16 + 3	57	47	99	75	48	99	78	40	96	79	0	208
BAS 76201H	16	58	13	99	80	40	x	80	40	92	60	0	211
Bas + Raptor + UAN	16 + 3	72	68	98	75	60	99	83	40	96	79	0	208
BAS 76201H + UAN	16	55	27	99	77	13	99	75	40	96	60	0	210
Bas + Raptor + NIS + UAN	16 + 3	72	90	89	78	95	97	78	91	99	99	16	218
BAS 76201H + Class Act NG	16	45	89	99	72	99	99	70	99	99	99	16.7	218
BAS 76201H + COC + UAN	16 + 1% v/v	73	88	99	72	78	98	72	93	99	99	13.3	219
BAS 76201H + Bas + NIS + UAN	16 + 16	47	89	93	72	90	99	72	99	99	99	17.7	217
Bas + Poast + COC + UAN	31 + 18.3 + 0.125% v/v	72	88	76	64	85	77	72	93	82	99	17.7	215
C.V. (%)		21.3	31.9	9.7	11.4	25.6	8.5	8.0	11.0	12.8	25.9	26.9	1.6
LSD (0.05)		19	35	14	12	29	13	9	13	19	35	4	6
<sup>1</sup> Fota=yellow and green foxtail; colq=common lambsquarters; pigw=redroot and prostrate pigweed; and KOCZ=kochia.													
<sup>2</sup> Bas=Basagran (Arysta); NIS=Preference (Winfield) at 0.025% v/v; UAN at 2.5% v/v; BAS 76201H=experimental herbicide (BASF); Class Act NG (Winfield Solutions) at 2.5% v/v; COC=MSO (Drexel).													
<sup>3</sup> Plant injury=height reduction.													
<sup>4</sup> PM=physiological maturity.													