

Study Name: Effect of adjuvants on efficacy of BAS 800 + glyphosate in summer fallow (0747)

Objectives: Evaluate weed control with BAS 800 tank mixed with different adjuvants

Results:

BAS 800 is a new herbicide being developed by BASF for preplant or preemergence use in several crops, for summer fallow, or for post-harvest applications. This study compared weed control with BAS 800 tank mixed with different adjuvant types. Agridex is a petroleum oil concentrate. Induce and Preference are nonionic surfactants (NIS). Sylgard 309 and Kinetic are organosilicone surfactants. All treatments contained BAS 800 03H, except for the last treatment: BAS 800ADH, which is a new SC formulation. Treatments were applied when weeds generally ranged from 1 to 6 inches tall. All treatments provided good to excellent control of kochia, lambsquarters, and wild buckwheat. Treatments containing Induce or BAS 800ADH tended to provide less weed control. To help confirm these results and check for consistency, this study was repeated on larger weeds (see Study 0747b).

Treatment ^{ab}	Rate	Kocz ^c			Colq ^c			Wibw ^c		
		% control			% control			% control		
		Jun 9	Jun 21	Jul 7	Jun 9	Jun 21	Jul 7	Jun 9	Jun 21	Jul 7
Untreated Check		0	0	0	0	0	0	0	0	0
BAS 800 + Glyphosate + Agridex	2.85fl oz + 32fl oz + 1%	92	96	97	92	100	100	92	100	100
BAS 800 + Glyphosate + Sylgard 309	2.85fl oz + 32fl oz + 0.25%	93	94	94	92	100	100	92	100	100
BAS 800 + Glyphosate + Kinetic	2.85fl oz + 32fl oz + 0.25%	91	92	92	91	100	100	91	100	99
BAS 800 + Glyphosate + Induce	2.85fl oz + 32fl oz + 0.25%	88	89	89	92	100	100	91	100	100
BAS 800 + Glyphosate + Preference	2.85fl oz + 32fl oz + 0.25%	92	93	93	92	100	100	90	98	100
BAS 800 + Glyphosate + Clarity + Agridex	2.85fl oz + 32fl oz + 6.4fl oz + 1%	93	95	94	92	100	100	93	100	100
BAS 800ADH + Glyphosate + Agridex	1fl oz + 32fl oz + 1%	88	85	85	91	96	97	91	91	92
LSD (0.05)		3.6	5.6	5.6	1.2	4.3	2.9	2.5	2.3	1.4
CV		2.6	3.9	4	0.9	2.8	1.9	1.8	1.5	0.9

^a BAS 800 = BAS 800 03H, except for last treatment; Glyphosate = Roundup Original

^b All treatments applied with AMS (17lb/100gal)

^c Kocz = Kochia; Colq = Common lambsquarters; Wibw = Wild buckwheat