

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

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

Results:

This study is a repeat of Study 0747, but was conducted on larger weeds. 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 that contained BAS 800ADH, a new SC formulation. Treatments were applied when weeds generally ranged from 12 to 16 inches tall. All treatments provided good to excellent control of kochia, lambsquarters, and wild buckwheat. Treatments containing Preference or Clarity provided slightly better weed control. In contrast to Study 0747, treatments containing Induce or BAS 800ADH tended provide similar weed control to most other treatments. The herbicide treatments were applied June 22. Weed control was breaking by mid-July. Complete coverage is important. Some weed escaped when growing as a “carpet”, such as kochia.

Treatment ^{ab}	Rate	Kocz ^c		Colq ^c		Wibw ^c	
		Jun 30	Jul 14	Jun 30	Jul 14	Jun 30	Jul 14
Untreated Check		0	0	0	0	0	0
BAS 800 + Glyphosate + Agridex	2.85fl oz + 32fl oz + 1%	96	93	99	97	89	89
BAS 800 + Glyphosate + Sylgard 309	2.85fl oz + 32fl oz + 0.25%	95	96	98	96	88	89
BAS 800 + Glyphosate + Kinetic	2.85fl oz + 32fl oz + 0.25%	95	95	99	99	89	90
BAS 800 + Glyphosate + Induce	2.85fl oz + 32fl oz + 0.25%	95	95	99	100	89	89
BAS 800 + Glyphosate + Preference	2.85fl oz + 32fl oz + 0.25%	97	98	99	99	94	95
BAS 800 + Glyphosate + Clarity + Agridex	2.85fl oz + 32fl oz + 6.4fl oz + 1%	98	99	99	100	93	95
BAS 800ADH + Glyphosate + Agridex	1fl oz + 32fl oz + 1%	95	92	98	96	89	90
LSD (0.05)		3.6	5.8	1.9	5.1	4.5	4.9
CV		2.4	4	1.2	3.4	3.2	3.5

^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