

Comparison of V-10137 with other graminicides in soybean. Li, Jianmei, Jimmy D. Wait, and Kevin W. Bradley. The objective of this study was to evaluate efficacy of V-10137 and clethodim on grass control in a conventional soybean system. This study was conducted at the Bradford Research and Extension Center near Columbia, MO. The soil was a Mexico silt loam with a pH of 6.8 and 2.1% organic matter. 'MORSOY 3881' glyphosate-resistant soybean was planted 1 inch deep on May 7 in 15 inch rows. Treatments were arranged in a randomized complete block design with four replications of 10 by 35 foot plots. Herbicide applications were made with a CO₂ backpack sprayer equipped with XR8002 flat fan nozzles calibrated to deliver 15 GPA at 30 PSI.

Application data are listed below:

Date	June 2
Treatment	EPOST
Temperature (C)	
air	24.4
soil(4 inch)	22.2
Soil moisture	damp
Wind (mph)	5
Cloud cover (%)	80
Relative humidity (%)	56
Precipitation after application	
Week 1 (inch)	1.38
Week 2 (inch)	2.14
Soybean	
leaf no.	2 trif
height (inch)	12
Giant foxtail	
leaf no.	2
height (inch)	2.5
infestation	16/ft ²
Common waterhemp	
leaf no.	5
height (inch)	1.5
infestation (m2)	6/ft ²
Common sunflower	
leaf no.	3
height (inch)	3
infestation	2/ft ²

Crop injury was similar with all treatments 8, 13 and 28 days after application. Giant foxtail, common waterhemp, and common sunflower control was similar with all lactofen-graminicide combinations at 28 days after application. V-10137 provided similar levels of grass and broadleaf weed control as other graminicides available for use in soybean. (Department of Agronomy, University of Missouri-Columbia)

Table. Comparison of V10137 with other graminicides in soybean (Li, Wait and Bradley).

Application	Rate (lb/A)	Weed control											
		Soybean injury			SETFA			AMATA			HELAN		
		6-10	6-15	6-30	6-10	6-15	6-30	6-10	6-15	6-30	6-10	6-15	6-30
Untreated		0	0	0	0	0	0	0	0	0	0	0	0
Lactofen+Clethodim+ COC+AMS	0.188+0.094+ 1%+2.55	30	13	6	98	99	91	99	100	100	98	73	95
Lactofen+V-10137+ COC+AMS	0.188+0.094+ 1%+2.55	23	14	9	96	97	75	99	100	98	97	89	90
Lactofen+quizalofop+ COC+AMS	0.188+0.034+ 1%+2.55	24	15	7	91	94	77	98	100	100	97	79	86
Lactofen+Sethoxydim+ COC+AMS	0.188+0.187+ 1%+2.55	26	11	8	96	97	81	99	100	100	98	85	90
LSD(0.05)		7	4	2	4	6	20	1	0	3	3	26	22