



Demonstration of postemergence herbicides for stinknet control. Kai Umeda (University of Arizona Cooperative Extension, Maricopa County, Phoenix, AZ, 85040). A small plot field experiment was conducted near a desert wash area at the Cave Creek Golf Course in Phoenix, AZ on an infestation of stinknet. Single replicate treated plots measured 8 ft by 8 ft and stinknet ranged in height from 2 to 12 inches with few plants initiating flowering. Sprays were applied with a commercially available 1-gallon hand-pump sprayer with a single nozzle delivering 50 gpa water. Herbicides were applied on 08 December 2020 with air temperature between 60 to 70°F. December-January low temperatures have ranged in the mid-30's to low 40's°F and the average about 50°F. The only rain was about 0.5 inch occurring within 2 days of the application.

Diquat and ammonium nonanoate exhibited rapid burndown within 3 to 7 days of the application (Table and Figure 1, 2). Diquat completely controlled stinknet and no regrowth occurred. Ammonium nonanoate did not adequately control stinknet and regrowth appeared. Glufosinate caused chlorosis at 7 to 10 days and provided acceptable control at 14 days (Figure 3, 4). Glyphosate was extremely slow and with or without methylated seed oil exhibited acceptable control at 35 to 42 days (Figure 5).

Table. Postemergence herbicides for stinknet control, Phoenix, AZ, 2020-21

Treatment	Rate (v/v)	3 DAT	7 DAT	10 DAT	14 DAT	21 DAT	28 DAT	35 DAT	42 DAT
		----- % control -----							
Roundup ProMax ¹	1%	0	5	5	20	50	75	85	95
Roundup ProMax + MSO	1% + 0.5%	0	0	0	20	50	75	85	95
Finale ²	2.3%	5	70	75	85	95	99	99	99
Prizefighter ³	10%	85	85	75	75	70	70	70	50
Tribune ⁴	1.8%	95	99	99	99	99	99	99	99

¹Roundup ProMax = glyphosate potassium salt, 4.5 lb acid equivalent/gallon

²Finale = glufosinate-ammonium, 1 lb active ingredient/gallon, 2.3% = 3 oz product/gallon spray

³Prizefighter = ammonium nonanoate, 3.3 lb/gallon

⁴Tribune = diquat dibromide, 3.73 lb/gallon, 1.8% = 2 qt product/A

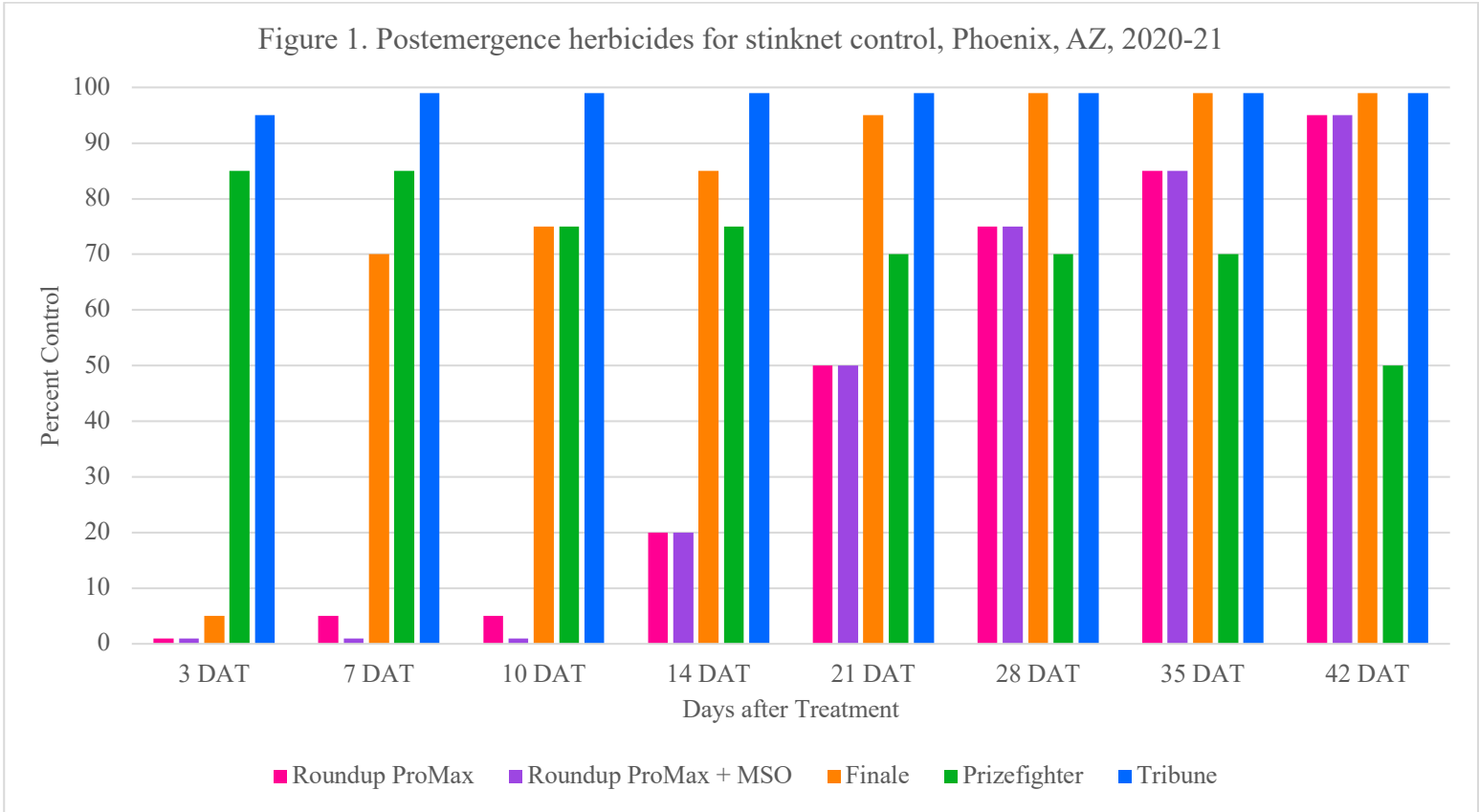
MSO = methylated seed oil

Applications in 50 gpa water or 300 ml/plot

Plot size = 8 ft by 8 ft

Treatments applied on 08 December 2020. Weed control ratings at days after treatment (DAT)

Figure 1. Postemergence herbicides for stinknet control, Phoenix, AZ, 2020-21



Roundup ProMax = glyphosate potassium salt, 4.5 lb acid equivalent/gallon, 1% v/v
 Finale = glufosinate-ammonium, 1 lb active ingredient/gallon, 2.3% = 3 oz product/gallon spray
 Prizefighter = ammonium nonanoate, 3.3 lb/gallon, 10% v/v
 Tribune = diquat dibromide, 3.73 lb/gallon, 1.8% = 2 qt product/A
 MSO = methylated seed oil, 0.5%v/v
 Applications in 50 gpa water or 300 ml/plot
 Plot size = 8 ft by 8 ft
 Treatments applied on 08 December 2020. Weed control ratings at days after treatment (DAT)

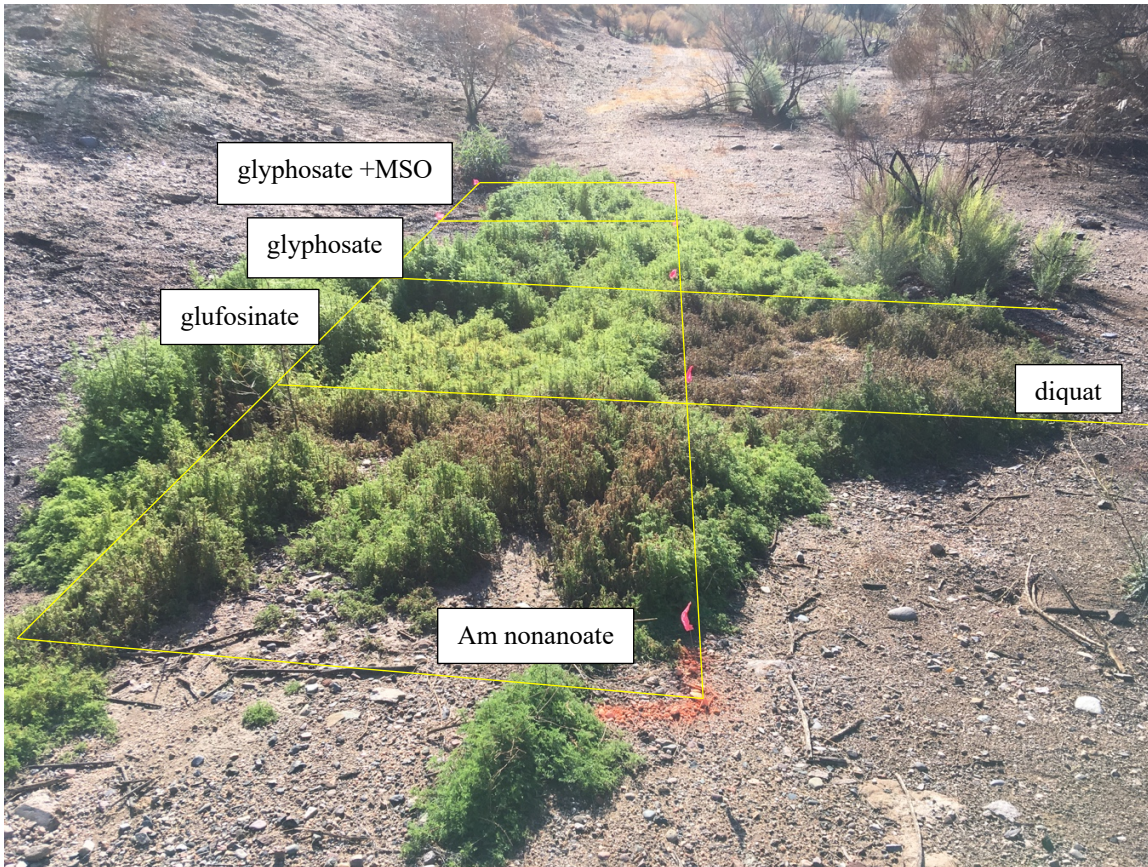


Figure 2. 3 days after treatment



Figure 3. 10 days after treatment



Figure 4. 21 days after treatment



Figure 5. 35 days after treatment