

Herbicide Combinations in Sugarbeets-Mesa-1979/80

C. H. Doty and K. C. Hamilton

Planted: September 6, 1 row of beets on 30-inch beds.  
 Variety: USH9  
 Soil: Clay loam  
 Treated: Preplanting herbicides were applied September 5. The same day the field was furrowed and beds were shaped. Betanal was applied postemergence on September 26 when weeds were 1 to 4 inches tall and sugarbeets had 2 leaves. On October 3, 1 lb/A of Hoelon was applied in a band over the top of sugarbeets in all plots. Sugarbeets had 4 true leaves. The test was cultivated twice and weeds were topped with a stalk chopper twice.  
 Weeds: Watergrass, barley and Southern giant curl mustard were broadcast and disked into the soil preplanting.  
 Harvested: 24 feet of row per plot on June 24, 1980.  
 Plots: 5 beds - 30 feet long - 4 replications.

Treatments						Yield of roots Ton/Acre	Sucrose content %
Preplant		Postemergence					
Herbicide	lb/A	Herbicide	lb/A	Herbicide	lb/A		
Nortron	1.0	Hoelon	1.0			12.3	14.5
Nortron	1.0	Hoelon	1.0	Betanal	1.0	24.7	14.0
Ro-neet	1.0	Hoelon	1.0			11.3	14.7
Ro-neet	1.0	Hoelon	1.0	Betanal	1.0	24.0	14.7
Chem-hoe	3.0	Hoelon	1.0			6.9	14.0
Chem-hoe	3.0	Hoelon	1.0	Betanal	1.0	21.4	14.1
Antor	2.0	Hoelon	1.0			13.4	13.9
Antor	2.0	Hoelon	1.0	Betanal	1.0	24.0	14.9

In this test:

1. Yield of sugarbeet roots was reduced considerably by Southern giant curl mustard in plots where Betanal was not applied.
2. There were small differences in sucrose content between treatments.
3. Weed control data for this experiment are presented in Sugarbeets - A College of Agriculture Report, January 1980.

Recommendations for the use of herbicides on sugarbeets in Arizona are given in bulletin A-1, Chemical Weed Control for the Irrigated Areas of Arizona, available from your County Extension office.