

FRUIT AND NUT CROPS RESEARCH IN TEXAS, 1987

Page	Participating Scientists	Crops
3, 5	David H. Byrne	Peach
3, 5	Terry Bacon	Plums
7	J. Dan Hanna	Apricots
9	Calvin G. Lyons	Grapes
11, 12	T. Lynn Littleton	Pecans
10	G. R. McEachern	
19, 20, 48	Bert Johnson	
12	J. Benton Storey	
48	Berry Tompkins	
15	R. D. Marquard	Pecan
17	L. Austin Stockton	Grapes Apples
19, 20, 21, 23	John A. Lipe	Peach
19, 20	Dusty Menzies	Pecan

COMPILED AND EDITED BY:

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32, 34, 38	Larry A. Stein	Peaches
34, 38	J. W. Worthington	Plums
34, 38	James (Jack) [unclear]	Hickories
34	M. J. McFarland	Apricots
34	Susan Steinberg	Grapes
34	Michael Glenn	Pecans
34, 38	J. S. Newman	Others

The Texas Agricultural Experiment Station, Neville P. Clarke, Director,
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SUBJECT TOPIC: Weed Control

INVESTIGATORS(S): George Ray McEachern - TAEX, College Station

CROP(S):
 1. Pecans
 2. Grapes

ABSTRACT:

Trails have been conducted for 15 years on weed control with the following results.

- 1) 0.95 (1 qt) Roundup.....95% kill
 56.8 l/ha water (15 gal/acre)
 280 KPa (40 psi) and Teejet 8001S tips
 3.2 km/hr (2 mph)
- 2) 0.47 l (1 pt) Roundup.....85% kill
 56.8 l/ha water (15 gal/acre)
 280 KPa (40 psi) and Teejet 8001S
 3.2 km/hr (2 mph)
- 3) 0.35 l (12 oz) Roundup.....95% kill
 23.3 l/ha water (2.5 gal/acre)
 140 KPa (20 psi)
 6.4 km/hr (4 mph) with 4 wheel All Terrain Vehicle
 and Girojet
 0.12 l (4 oz) = 50% kill
 0.24 l (8 oz) = 75% kill
 0.47 l (16 oz) = 100% kill
- 4) 1.4 l (1 1/2 qt) Gramoxone.....100% kill
 113.6 l/ha water (30 gal/acre)
 210 KPa (30 psi) and Teejet 8003 tips
 4.8 Km/hr (3 mph)
- 5) Gramoxone or Roundup + Surflan + Princep
 Combined in vineyard while the vines are dormat
 have given excellent weed control for 60 days with
 Gramoxone + Surflan + Princep, and 120 days control
 with Roundup + Surflan + Princep. Rates used were
 0.95 l (1 qt) of Roundup or Gramoxone + 1.8 kg (4.0
 lbs) Surflan + 0.45 kg (1 lb) Princep. Delivery
 was at 4.8 km/hr, 210 KPa (30 mph) and Teejet 8003.
- 6) Chemical mowing with Roundup was obtained at (8.0
 oz/acre) in 56.8 l (15 gal) of water, 280 KPa (40
 psi), and 3.2 Km/hr (2.0 mph). This is on broadleaf
 weeds and winter grasses.
- 7) Chemical mowing of coastal bermudagrass was not
 obtained after 2 applications in any of 3 years at
 high as 2.3 l/ha (1.0 qt/acre). Although the
 coastal bermudagrass was not affected, all other
 weeds in the grass were killed.

ENVIRONMENTAL FACTORS
Pecan Growth and Development as Influenced by

Future Studies:

- 1) High speed, low volume Girojet application of Roundup will be continued to determine the combination that gives optimum kill at minimum cost.
- 2) Vineyard weed control chemical combinations will be tested.

Other Programs:

- 1) Ethrel (Shuck) Release on Pecan
- 2) Pecan Orchards Establish
- 3) Grape and Pecan Variety Evaluations
- 4) Pecan Spacing
- 5) Pecan Insecticide Evaluation