PUBLICATIONS
1987
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FRUIT AND NUT CROPS RESEARCH IN TEXAS, 1987

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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 dormant
   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.
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