

# Interim Report on Herbicides for Roadsides

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There has been a continuing development of new herbicides to satisfy demands for specific needs of selectivity. Some 48 herbicides are listed by the Research Coordinating Committee of the Northeastern Weed Control Conference in the 1959 report. Fortunately for those who have responsibilities in addition to that relating to the use of herbicides on roadsides; there are comparatively few new materials currently recognized as effective for the three major purposes of herbicide use, woody plant control, broad-leaf weed control and chemical mowing—the control of all vegetation along structures such as guide rails.

Review of this committee's report on herbicides, published in "Roadside Development 1956" and reports of the Northeastern Weed Control Conference for subsequent years, indicates that the materials and practices remain unchanged with few exceptions. These are given in the same sequence of purposes as in the 1956 report.

## BRUSH CONTROL

For the control of ash, cherry, hickory, sumac, black locust, honeysuckle, kudzu vine, oak, poison ivy, poison oak, prickly ash, salmonberry, Western dewberry and Western snowberry, amino triazole is a specific. It is applied as a foliage spray using from 2 to 12 lb per 100 gal of water.

Fenuron in pellet form (25 percent active) has given excellent control of brush when applied at 15 to 40 lb (active) per acre. Application has been made by hand using a teaspoon to a tablespoon per "clump", and also by means of compressed air using a fertilizer blower. It should not be used near desirable plants. Herbicidal action is dependent on the material being carried to the root zone by soil water.

Other materials showing considerable promise have been reported but are not mentioned here because trials have been too limited in scope.

## BROAD-LEAF WEED CONTROL

Amino triazole gives good control of milkweed and Canada thistle. Because it kills grass, spot treatment is indicated.

## CHEMICAL MOWING

Development of new materials and more extensive study necessitates change of the 1956 report. Dalapon + 2, 4-D failed to give satisfactory control for a complete season in 1958 when ample rainfall promoted exceptionally good growing conditions. Weedkiller 7B + oil is no longer considered useful because more effective materials are available. The latest materials and their characteristics are given in Table 1.

TABLE 1  
CHEMICAL MOWING

	Simazine	Monuron	Amitrol + Simazine	Amitrol + Monuron	Amitrol	Dalapon + 2,4-D
% Active ingredients	50 <sup>1</sup>	80			50	65 4 lb/gal
Cost 1 lb, \$ <sup>2</sup>	2.37	2.80	1.54 2.37	1.54 2.80	1.54	1.05 0.905
Lb formula- tion per acre per yr	20	20	6 + 17	7 + 16	8	30 + 2
Cost per acre	47.40	56.00	49.53	55.58	12.32	33.31
Cost per mi, 3 ft wide	17.21	20.33	17.98	20.18	4.47	12.09
No. of Treatments /yr	1	1	1	1	2 <sup>2</sup>	2 <sup>2</sup>
Agitation required	Yes	Yes	Yes	Yes	Not after dissolving	No
Hazardous to other plants	No	Yes	No	Yes	No	24-D fraction
Time of application	Before growth starts	Before growth starts	Early growth	Early growth	Early growth & as neces- sary	Early growth & as neces- sary

<sup>1</sup>Simazine is now sold as an 80 percent active material at a lower price per lb of active ingredients.  
<sup>2</sup>N. Y. State letting, December 1956.

Amitrol, Dalapon, and 2, 4-D are systemic herbicides which control as a result of absorption through the leaves and stems on which the spray is applied. Simazine and Monuron are soil sterilants which control through absorption of the chemical by the roots of plants. The last named materials are relatively insoluble and they remain effective in the soil for at least a year when applied in the amounts shown. Synergism has been observed with the combination of Amitrol and sterilants.

Control for more than one growing season may be expected with the use of Simazine, Monuron and Amitrol plus these sterilants. It has been observed throughout New York that when these chemicals are applied in the spring of one year control lasts until late season weeds and grasses develop in the second year. Control of the latter for the remainder of the year may then be obtained by an application of Amitrol, or, possibly, some even less expensive material.

#### BROAD-LEAF WEEDS AND GRASS IN SHRUB PLANTINGS

Seasonal control of weeds around woody plants is reported to be obtained from application as a directed spray in the spring of 1 lb active amino triazole plus 3 lb active Simazine: