## **Controlling Weeds Under Trees**

The use of the combination of post and pre-emergence herbicides to control weeds under trees in nurseries, park areas, golf courses, and other landscape situations is increasing rapidly.

Herbicide tests designed to evaluate five combinations of post emergence herbicides with Simazine in By Elton M. Smith Extension Specialist Landscape Horticulture Ohio State University

The specific objectives of these experiments were to ascertain the extent of weed control, degree of weed regrowth and to observe any phytotoxicity.

Treatments were sprayed on a  $2\frac{1}{2}$ ' band in a row of newly planted Radiant Crabapples on June 11, 1971 with weeds 6-15" in height. The area

between the rows was maintained in

sod and mowed periodically. Results

were evaluated on July 15 and

TREATMENT - RATE AIA	RATING	COMMENTS
Daconate 4# + Simazine 2#	Poor	Extensive smartweed and Flower-of- An-Hour present
Amitrol T 2# + Simazine 2#	Good	Lambsquarters present
Amizine 7#	Good	As above with lambsquarters and smartweed recovering
Phytar 560 2# + Simazine 2#	Good	Lambsquarters recovering
Paraquat 2# + Simazine 2#	Excellent	Nearly complete control

the control of weeds beneath trees were conducted in a commercial nursery in New Carlisle, Ohio during the summer of 1971.



The observations in July were rated as indicated below with the following values:

Excellent—Nearly all annual weeds controlled.

Good—Acceptable control, 1 or 2 species uncontrolled.

Fair—Acceptable, with several species uncontrolled.

Poor-Unacceptable weed control.

Two months following application the Simazine in all plots was continuing to effectively control the growth of annual weeds. Those existing weeds which were not completely killed with the post-emergence spray had regained vigor and were quite large, particularly the lambsquarters and smartweed.

There was no evidence of damage to the foliage or trunk of the Crabapples with any of the treatments. The leaves of the suckers which were sprayed were injured or defoliated, however, the woody stem growth remained.

The most effective treatment in this study for the control of weeds beneath trees was the combination of Paraquat and Simazine. The Phytar 560 + Simazine combination was slightly more effective than the combinations of amino triazole and Simazine.

## USDA Scientists Study Air Pollution

Everybody talks about how air pollution affects people, but polluted air also injures crops and other plant life. With a view to reducing or eliminating this damage to plants, scientists in the Agricultural Research Service are making intensive studies of the ways in which pollution injury occurs and in finding ways to reduce grower losses.

The need for such studies is becombing critical. Air pollution injury to vegetation is increasing across the United States, according to Dr. Howard E. Heggestad, plant pathologist and Head of the ARS Plant Air Pollution Laboratory in Beltsville, Md. It is currently causing losses estimated at more than half a billion dollars annually . . . and these losses are rising.

In 1969, 281 million tons of pollutants were released into the air over the United States. Many Americans — most notably the 150 million urban residents — have to live with this polluted air for most of the year.

Although the problem is a general