Stump Treatments With Tordon 10K On Union Electric Test Plots Near Wright City, Mo., Showing Results of 6th Recount Made October 4, 1966

Check Strip D-1 (Treated at 60 Pounds Per Acre)

Species	Collar Sprouts by Stump Diameter 0-2	2-4	4-6	6-8	8-10	12+	Total	Root Sprouts	Total Sprouts
Oak	4	2				1	7		7
Hickory	3						3	3	6
Ash		1					1		1
Elm	1						1		1
Wild Cherry								2	2
Total	8	3				1	12	5	17

Check Strip D-6 (Treated at 60 Pounds Per Acre)

Species	Collar Sprouts by Stump Diameter 0-2	2-4	4-6	6-8	8-10	12+	Total	Root Sprouts	Total Sprouts
Oak	3	1				2	6	3	9
Hickory	2		1				3	1	4
Elm	3	1			1		5	1	6
Wild Cherry								3	3
Total	8	2	1		1	2	14	8	22

Check Strip D-2 (Treated at 80 Pounds Per Acre)

Species	Collar Sprouts by Stump Diameter 0-2	2-4	4-6	6-8	8-10	12+	Total	Root Sprouts	Total Sprouts
Oak	3	1				5	9	5	14
Hickory	3						3	3	6
Total	6	1				5	12	8	20

Check Strip D-7 (Treated at 80 Pounds Per Acre)

Species	Collar Sprouts by Stump Diameter 0-2	2-4	4-6	6-8	8-10	12+	Total	Root Sprouts	Total Sprouts
Oak	4	2				1	7	1	8
Elm		1					1	3	4
Hickory	1						1	2	3
Total	5	3				1	9	6	15

Check Strip D-3 (Treated at 100 Pounds Per Acre)

Species	Collar Sprouts by Stump Diameter 0-2	2-4	4-6	6-8	8-10	12+	Total	Root Sprouts	Total Sprouts
Oak		2		1		3	6	3	9
Wild Cherry								3	3
Total		2		1		3	6	6	12

Check Strip D-8 (Treated at 100 Pounds Per Acre)

Species	Collar Sprouts by Stump Diameter 0-2	2-4	4-6	6-8	8-10	12+	Total	Root Sprouts	Total Sprouts
Oak						1	1		1
Elm	2						2		2
Wild Cherry								1	1
Total	2					1	3	1	4

both chemicals and methods will continue to be the rule in the industry. Much has already been learned about kill and more will come. Research is being done by both public institutions and by private industry throughout the nation. Bruns believes this to be necessary. Because of variations in climate, soil, land use, terrain and species, test results with chemicals have not always been reliable in all areas. Bruns points out that these same variables exist within the service area of Union Electric which covers parts of Missouri, Illinois and Iowa. Answers to specific problems, he feels, must be solved sectionally. For example, he personally favors company tests on a field basis rather than those by technical personnel under controlled conditions.

In light of this, he believes it will be necessary for Union Electric and others to continually reappraise vegetation control methods and do considerable experimenting to keep costs in line and at the same time handle the job adequately on their ever-expanding facilities.

A WTT staff report based on vegetation control chemical tests of Union Electric Company, St. Louis, Mo. Supplying data for the company were Raymond R. Bruns, Union Electric Forester, and Donald J. White, Union Electric Assistant Forester.

Fast Herbicide Residue Test

Certain herbicide residues can be measured in only 48 hours.

Purdue University research horticulturists use a new type of buckwheat root-growth test. Called a bio-assay, it involves growth of the roots under controlled temperature. The test is sensitive to 50 parts per billion.

Purdue scientists have used the new method to study rate of decomposition of two weed killers, IPC and CIPC. Their tests showed no evidence of either within 4 weeks following application.