CHEMICAL WEED-CONTROL PROGRAM in MICHIGAN

E. C. Eckert, Chief Forester Michigan State Highway Department

The chemical weed-control spraying done along Michigan highways is based on a repeat spraying program. Initially, all sections of roads were sprayed in two consecutive years, the time of application being altered each year so as to control weeds present at varying times of the year. Having accomplished this, the program is now based on respraying one-third of these sections each year.

During 1955 between May 17 and July 22, August 17 and September 30, 2,108 miles of trunk lines were sprayed. This amounted to 14,452 acres of roadsides (spray on both sides), which were sprayed with an expenditure of 5,500 man-hours. This spraying was accomplished at a cost of \$3.36 per acre, or \$27.34 per mile (see chart for results of previous years). Two separate spray periods were used in 1955 in order to apply the herbicide at a time of active weed growth when weed mor-

MICHIGAN STATE HIGHWAY DEPARTMENT CHEMICAL WEED-CONTROL PROGRAM

Year	Miles	Acres	Date	Man- Hours	Cost per Acre	Cost per Miles	Material
1952	2,832	16,243	May 26 to Oct. 8	6,535	\$2.94	\$16.63	7,222 gal. 2,4-D #40 Amine. Mix 1 gal. 2,4-D to 100 gal. water. Spray mixture at rate of 50 gal. per acre (2 lb. per acre)
1953	2,881	15,744	May 18 to Sept. 26	6,738	\$2.61	\$ 13 . 76	7,751 gal. 2,4-D #40 Amine. Same mixture as 1952
1954	2,822	13,748	May 10 to Sept. 8	5,791	\$3.04	\$15.32	7,550 gal. 2,4-D #40 Amine. Same mixture as 1952
1955	2,108	14,452	(1) May 17 to July 22 (2) Aug. 17 to Sept. 30	5,500	\$3.36	\$27.34	(1) 3,960 gal. 2,4-D #40 Amine 1,100 gal. 2,4,5-T Mix 1 gal. 2,4-D and 1 qt. 2,4,5-T to 100 gal. water (2) 2,775 gal. 2,4-D ester #10-10 Mix 3 qt. 2,4-D to 100 gal. water Spray both mixtures 50 gal. per acre to give minimum of 2 lb of active ingredient per acre