

Title: 2014 Dow ROW Knotweed Control – Full vs Half Treat

Personnel: Mark Renz, Tony Summers

Location: SE Wisconsin

Plot information:

Plot size: 600 – 6250 ft sq

No. reps: 4 populations per treatment

Herbicide application data:

A. Application equipment: handheld sprayer, GPA=40

B. Chemicals used: Milestone @ 14 fl oz/ac +NIS

C. Date treated: 9/26/2014, 9/18/2015

D. Treatment: A B

E. Soil moisture (top): dry dry

F. Air temperature (F): 70 72

G. Wind, MPH: 2-4 4-6

H. Cloud cover (%): 60 25

Site info: Study takes place on 8 populations of Japanese knotweed ranging in size from 600 ft sq to 6250 ft sq along roadsides in SE Wisconsin. Site conditions varied from full sun to 50% sun. 2 populations occur along an interstate, 1 along a county road, and the remaining 5 on small rural roads. 3 populations occur in ditches and 5 are located on mostly flat areas.

Notes: County road Y population was mowed by road crews at some point in both 2014 and 2015 in addition to mowing prescribed by this study design.

Project design: This study addresses the long term cost of managing Japanese knotweed along roadways, specifically the cost/benefit of treating an entire population with herbicide vs only treating the portion that occurs on ROW property. The goal is to determine whether or not it is a net savings long term to spend the extra effort to obtain property owner permission and treat an entire population of Japanese knotweed. 8 populations were identified along roadsides in SE Wisconsin and mowed in summer 2014. Milestone was applied at the spot treatment rate of 14 fl oz/ac +NIS in September of 2014 and again in September 2015 for those populations with >50% cover of knotweed. Costs associated with labor and herbicide as well as % cover for each population were collected and analyzed.