

Herbicides for Vegetation Control on Roadsides
Ask Laura, Steve Tjosvold
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Question:

What herbicides exist for vegetation control along roadsides or other areas where low impact management is needed?

Answer:

Nurseries and farms may benefit from research that we recently completed for the County of Santa Cruz Public Works where we evaluated the effectiveness of several herbicides for roadside vegetation control. We tested organic and conventional herbicides as alternatives to the traditionally-used Roundup (glyphosate) herbicide. Several of these alternative herbicides could be considered for use on nursery and farm roadsides or other areas where low impact vegetation management could be useful.

Question:

How was this testing done and what were the results?

Answer:

The trial was established along Empire Grade Road near Bonny Doon, California. The site was heavily infested with French broom. There was a single application of herbicide on May 4, 2010 in replicated and randomized plots, followed by evaluations of weed control 2 weeks, 1-, 2-, and 4- months after the application. As expected, Roundup was found to be very effective in controlling French broom and many other weeds. Products that had some systemic activity, Milestone (aminopyralid and triclopyr) and Finale (glufosinate), were effective in killing some smaller French broom plants (basal diameters less than 9 mm) and inhibiting growth of larger plants. The organic and other contact herbicides (Greenmatch EX (lemongrass oil), Weed Pharm (20% acetic acid), Matran (clove oil), and Scythe (pelargonic acid) did not kill French broom. French broom and other perennial weeds recovered quickly, in almost all cases, just 2 weeks after herbicide treatment. The applications were repeated on May 5, 2011 to the same experimental plots, and showed similar but more profound results. For example, desirable native California bunch grasses started to establish in the plots treated with Milestone, a broad leaf herbicide, while the plots treated with Roundup were almost devoid of vegetation. The French broom in the organic Greenmatch EX plots were very similar to those plots that were left untreated.

Of the contact herbicide group we tested, Scythe and Matran desiccated foliage most effectively and therefore showed the greatest promise for management with repeated applications. We therefore established another trial using Scythe with multiple applications, each application timed after there was some regrowth of French broom (Sept. 7, Oct. 27 and Dec. 7, 2011). The trial is still ongoing, but so far we have demonstrated that at least 3 successive applications might be needed for killing French broom.

Question:

Where can I get more information.

Answer: Contact Steve Tjosvold to obtain a complete report of the findings and/or obtain information of ongoing vegetation management research.