

Vinegar Herbicide Studies

Different concentrations of commercially available acetic acid formulations were tested for the control of annual and perennial weeds. Young, newly-emerged annual weeds at the 4- and 5-leaf stage were treated with a 6% and a 10% solution of acetic acid (food grade vinegar from the grocery store is only 5% acetic acid.)

Both 6% (Burn-out) and 10% (Dead-eye) formulations reduced annual weed cover by about 50%.

Burned-back annual weeds did not grow back. There was no statistical difference between the 6% and the 10% concentration formulations.

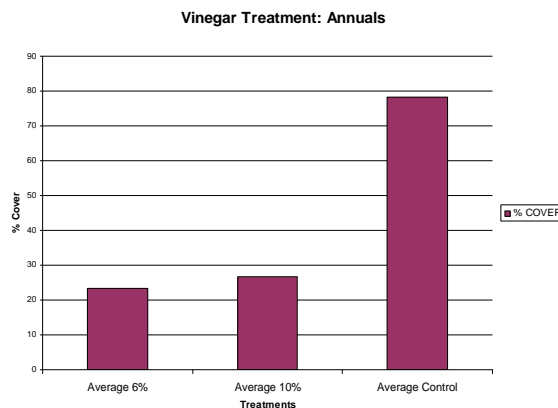
A more complex study of perennial weed management in turf was begun with Missoula Parks and Recreation. Treatments included compost, aeration, sand, and vinegar applications alone and in combination. All treatments, including the first vinegar application, were applied in April. Perennial weeds (dandelions for

ennial weeds in treated plots overnight. Perennial weed re-growth occurred in seven to nine weeks.

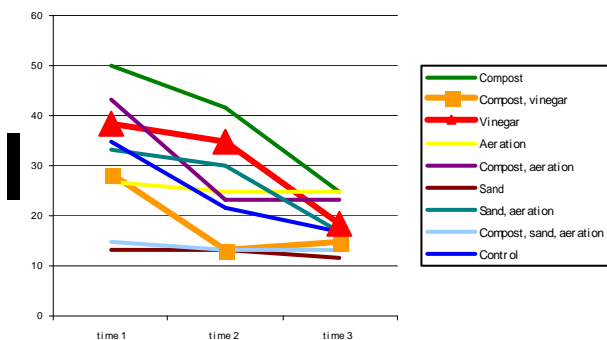
In July, the 25% solution again burned back 100% of treated perennial weeds. The 10% solution burned back 70% of treated perennial weeds.

Weeds put out new leaves by October.

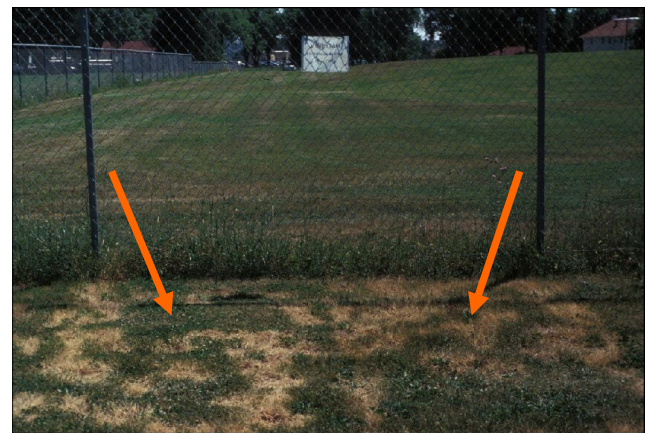
There was no statistical difference between any of the treatment plots and the control plots (no treatment) when change in weed cover from April through October was evaluated. However, numbers of weeds decreased most in the vinegar, compost, and control plots. Weeds also decreased in compost plus aeration, compost plus vinegar, and sand plus aeration plots. Clearly, another year or two of data collection will be necessary to sort out what is happening in this perennial weed experiment with multiple treatments.



Vinegar Treatment: Perennials



the most part) were treated with a 25% solution formulation of acetic acid in April and again in July. In July, the vinegar plots were split and the 25% solution was applied to one half. The other half of the plot received a 10% acetic acid solution formulation. The treatments will be repeated in 2004. The 25% vinegar burned back 100% of per-



Left Arrow = 25% formulation

Right Arrow = 10% formulation

In general, the 25% (Nature's Glory) and 10% (Dead-eye) formulations set weed growth back for approximately 7 to 9 weeks. Repeat treatments were necessary for season long burn back of perennial weeds. It's important to note that these vinegar formulations also burned back the turf grass, but grasses recovered more quickly (3 to 5 weeks).