

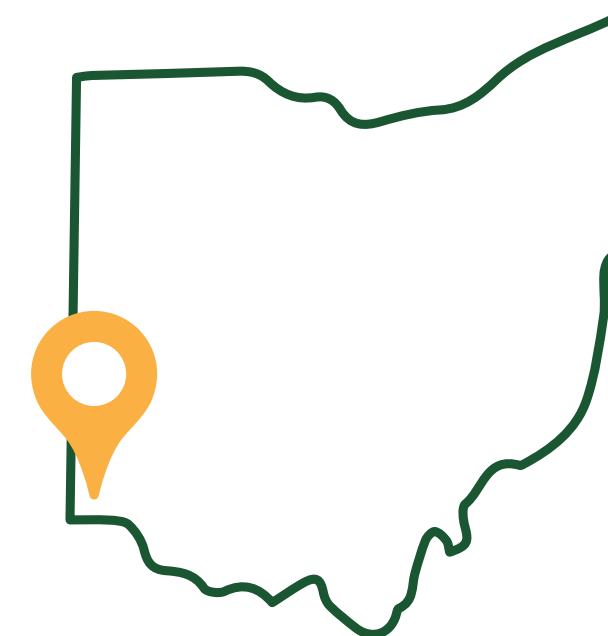
# GREENACRES

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# Effectiveness of Foliar-applied Herbicides on Privet and Burning Bush

## BACKGROUND

- Privet (*Ligustrum* spp.) and burning bush (*Euonymus alatus*) are invasive shrubs that have invaded southwest Ohio forests
- Privet was declared an invasive plant by the Ohio Department of Agriculture in 2023. Propagation and sale will be prohibited beginning in 2026.
- Burning bush was recently recognized as an invasive species by the Ohio Invasive Plant Council in 2019
- Effective foliar herbicide control is not well understood for these species

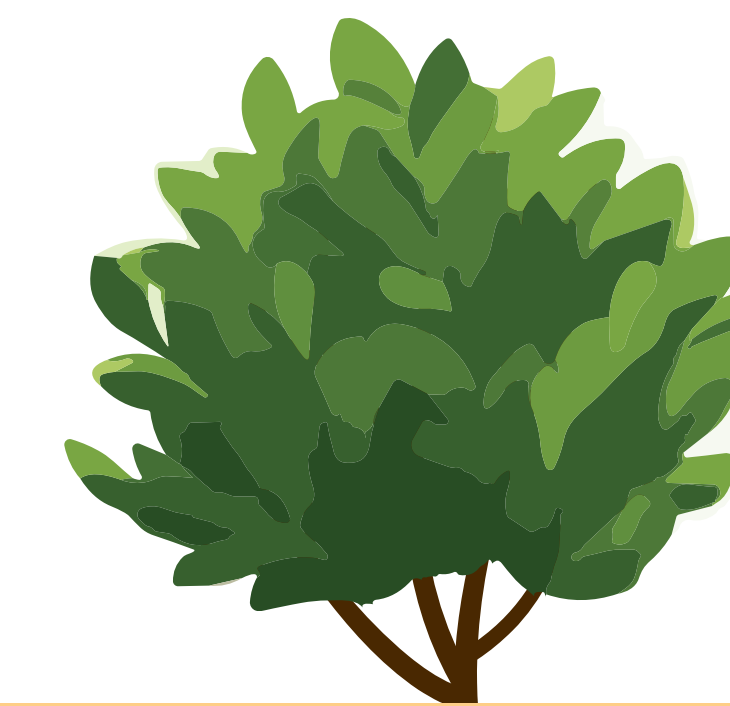


## TREATMENTS

- Individual plants (n=15) were assigned a random treatment:
- 2% glyphosate (Roundup Custom)
  - 2% triclopyr (Vastlan)
  - 2% 2,4-D (Weedar 64)
  - 1.5% glyphosate/1.5% triclopyr tank mix
  - Control

## DATA COLLECTION

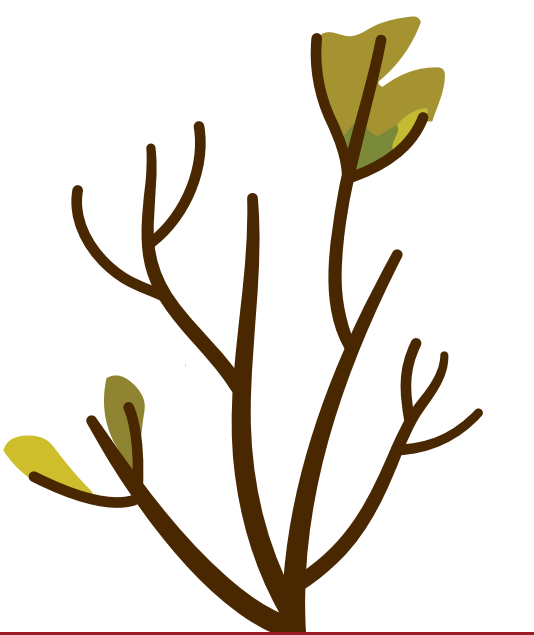
- Plants were assessed for vigor 2 and 4 weeks post-treatment
- Plants were categorized as healthy, damaged, or severely damaged (including dead)



**Healthy**  
 Mostly green leaves, little to no yellowing, withering, or leaf loss.



**Damaged**  
 Significant yellowing, localized withering and leaf loss. Many damaged plants maintained a few green leaves.



**Severely damaged**  
 Widespread yellowing to browning of leaves and extensive leaf loss. Includes dead plants.



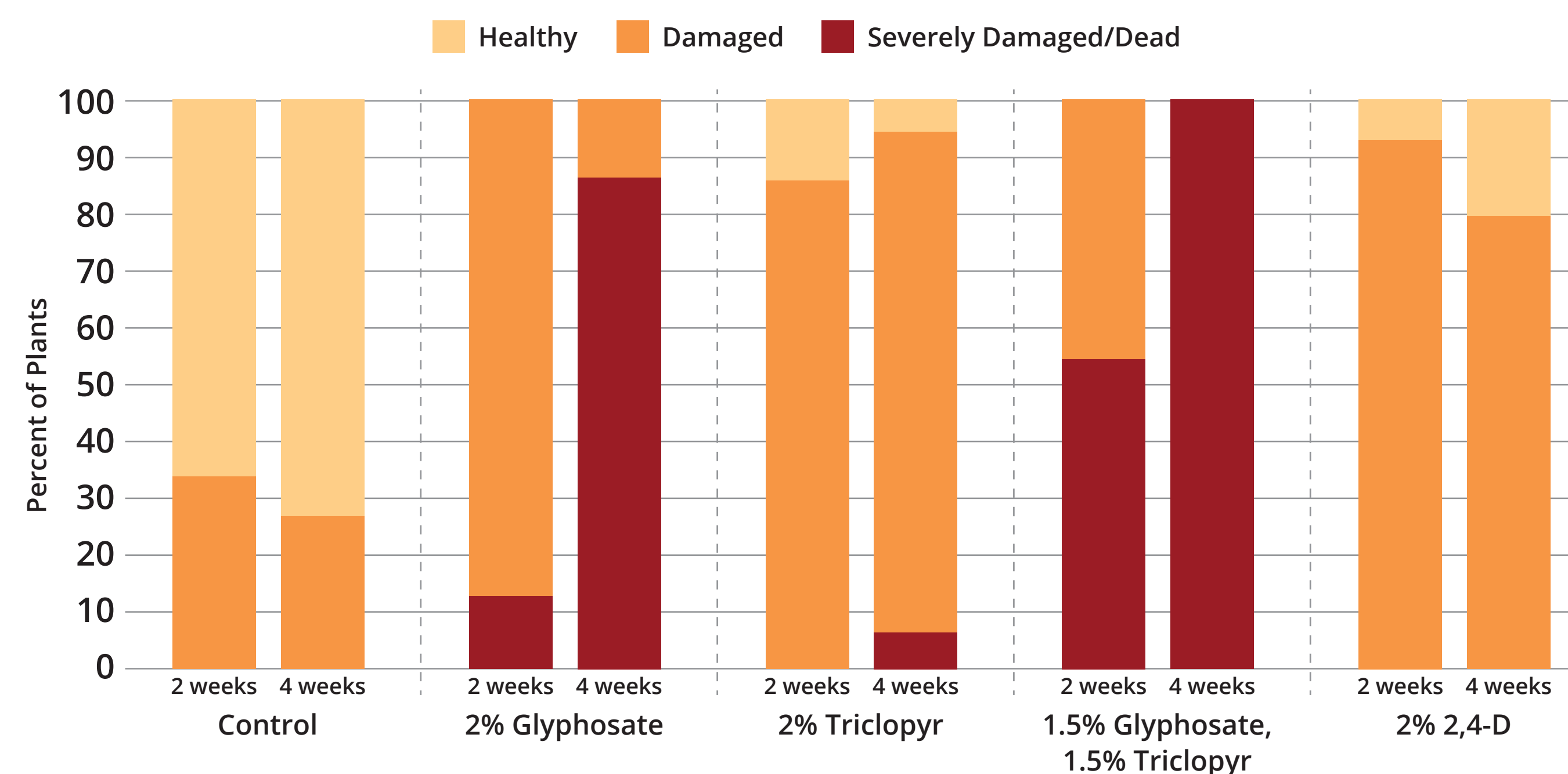
Privet Photo: Karan A. Rawlins, University of Georgia, Bugwood.org



Burning Bush Photo: James H. Miller, USDA Forest Service, Bugwood.org

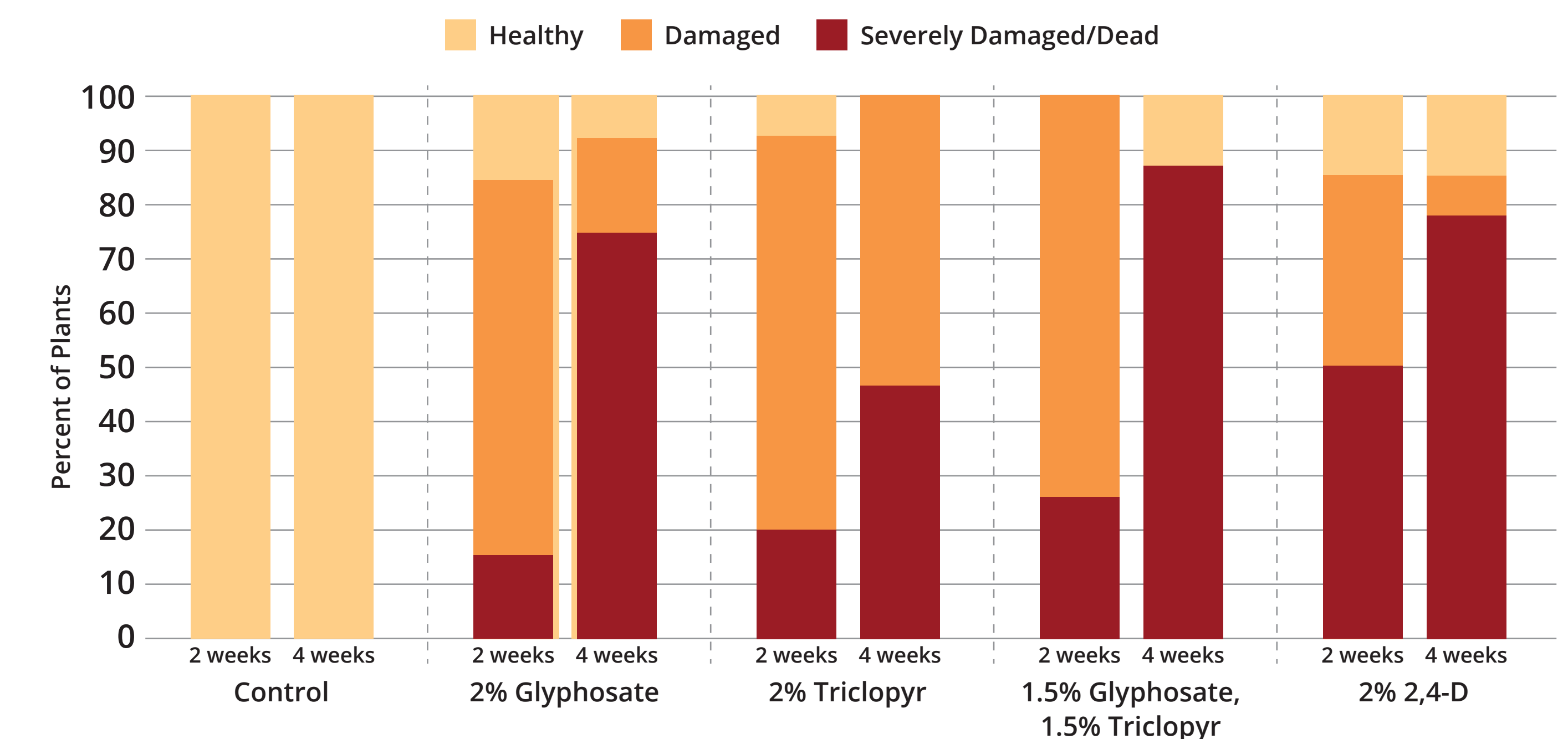
## Results: Glyphosate/triclopyr tank mix was most effective. Killed 100% of privet and 87% of burning bush.

### PRIVET



Glyphosate killed 87% of plants after 4 weeks.  
 >80% of plants in the triclopyr and 2,4-D treatments were damaged after 4 weeks.

### BURNING BUSH



Glyphosate and 2,4-D both killed >75% of plants. Healthy plants remained after these treatments, however.  
 Triclopyr left no healthy plants, but only killed 47%.

## Discussion

This trial took place during a dry period in September. Results may differ when treating these plants in more favorable conditions.

Tank mix is an effective herbicide for both plants.

Privet:  
 Glyphosate alone may be more economical and ecologically friendly than tank mix. Triclopyr and 2,4-D are not recommended.

Burning Bush:  
 Glyphosate and 2,4-D were slightly less effective than tank mix. More data needed to determine effectiveness of triclopyr treatments.