

## Introduction and Objectives

Kudzu is difficult to control and typically requires annual herbicide applications repeated over many years to eradicate.

Some commonly used herbicides labeled for kudzu control are expensive and only moderately selective.

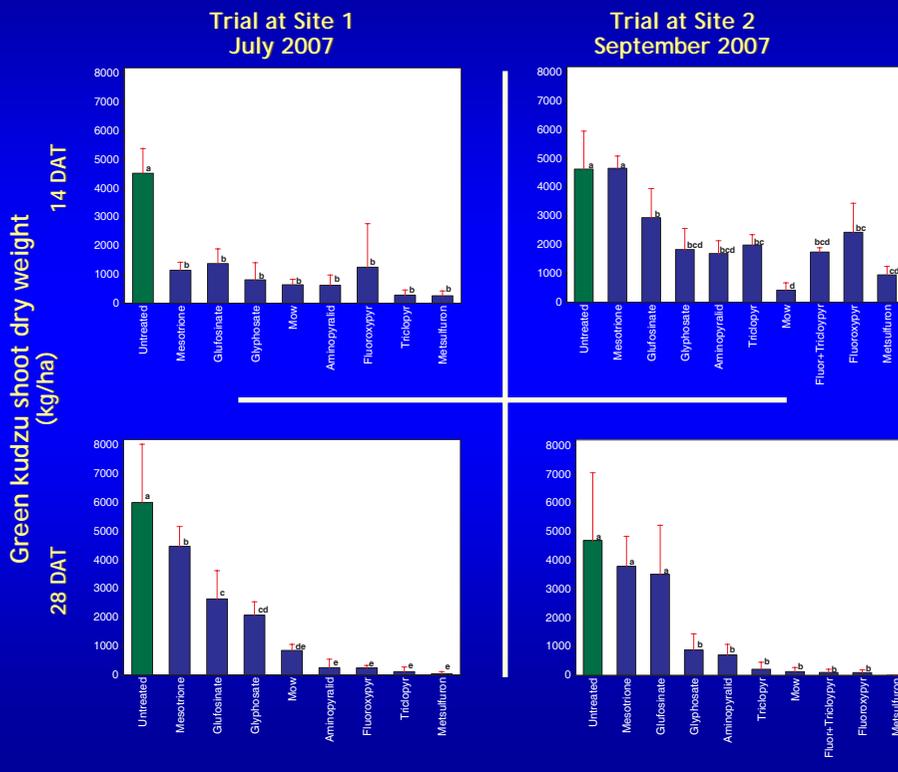
The efficacy of new, kudzu-labeled herbicides is unknown and other herbicides have not been tested against kudzu. Some of these formulations may be useful in co-application with kudzu pathogens as bioherbicides.

This study evaluated the efficacy of herbicides for kudzu control through greenhouse and field experiments.



Foreground: Carol Benson beside an untreated (l) and a mowed (r) kudzu plot. Background: Treated kudzu plots

## Kudzu Control in Field Trials



## Application Notes

Field applications were made with an ATV-mounted boomless spray rig using a TFW-12 turbo floodjet nozzle and with 0.2% Silwet L-77 adjuvant.

Field tests of herbicides used commercially available formulations at their maximum labeled rates. Greenhouse trials evaluated herbicides at additional rates (noted on handout).

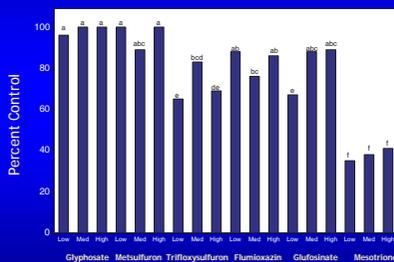
Site 1 was treated on July 25, 2007. Site 2, 100km north of Site 1, was treated on Sept. 21, 2007, near the end of the bloom period.

14 and 28 days after treatment (DAT), green kudzu above-ground biomass was collected from 0.3m<sup>2</sup> subplots in the treated areas.

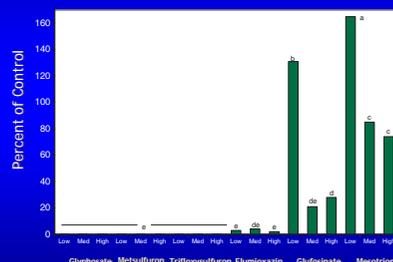
The greenhouse trial was on kudzu seedlings with 7 to 8 nodes and a length of ~45cm.

## Kudzu Control in Greenhouse Trials

### Green Biomass Reduction



### Axillary Shoot growth



## Conclusions

- Commercial formulations of aminopyralid, fluoroxypyr, triclopyr and metsulfuron methyl provided good kudzu control in both field trials.
- Glyphosate, fluoroxypyr-triclopyr mix and mowing provided good control in at least one field trial.
- Mesotrione and glufosinate were not effective at the application rates and application times evaluated.
- Greenhouse trials have identified other herbicides that may be useful for kudzu control.
- Mesotrione caused release of kudzu axillary buds, but new growth was bleached.

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