

# Kudzu suppression by herbicides in two-year field trials

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## Introduction and Objectives

Kudzu is among the most important exotic invasive weeds in the southeastern USA. Herbicidal control of this perennial weed can require up to 10 years to achieve.

We have previously reported on the in-season efficacy of several selective kudzu herbicides, but it is known that regrowth occurs in the year following application.

This field study evaluated herbicides over two growing seasons at three locations for the control of kudzu.

## Methods

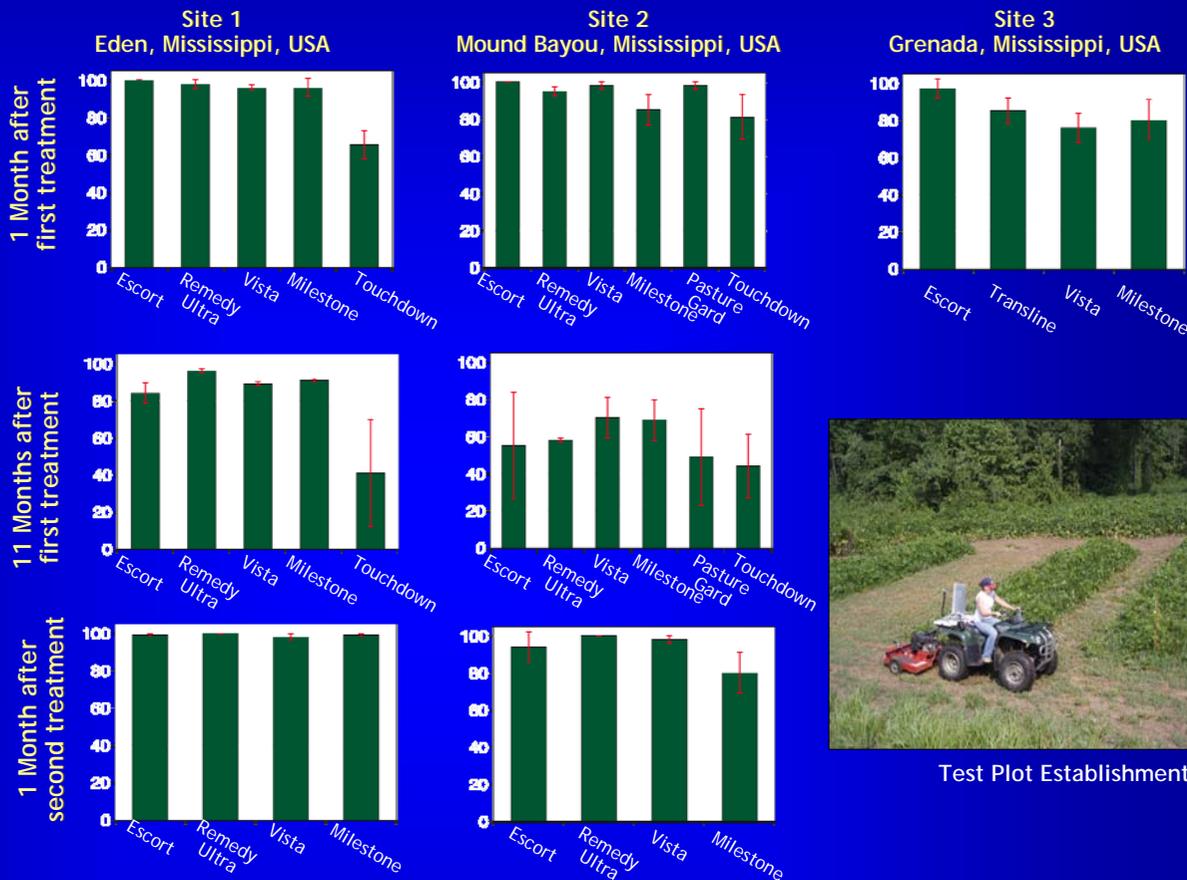
Field plots were established at 2 locations in 2007 and in a third location in 2008. Test locations spanned ca. 100 km in western Mississippi, USA.

Each plot was 200cm wide and 10 to 20m long. Plot boundaries were maintained by mowing 200cm buffers around each plot.

Herbicides were applied once per year at the maximum labeled rate in a volume of 374 L / ha.

Green kudzu was removed from 0.3m<sup>2</sup> subplots, dried and weighted to determine the level of control.

## Kudzu Control in Field Trials



Test Plot Establishment

## Conclusions

- A single application of Milestone, Vista, RemedyUltra or Escort provided  $\geq 85\%$  control in the first season at two or more study sites.
- Milestone and Vista provided  $\geq 70\%$  control 11 months after application at both sites. Escort, RemedyUltra, Vista and Milestone provided  $\geq 90\%$  control 11 months after application at one site.
- The probability of kudzu regrowth necessitates continuous monitoring and management.

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Active Ingredient	Product name	Supplier	Mode of action	Max Use Rate	Application rate*
Glyphosate - diammonium salt	Touchdown <sup>®</sup> *	Syngenta	EPSP synthase inhibitor	9.34 L ha <sup>-1</sup>	2.5%
Aminopyralid	Milestone <sup>®</sup>	Dow AgroScience	Synthetic auxin	0.51 L ha <sup>-1</sup>	0.14%
Triclopyr	RemedyUltra	Dow AgroScience	Synthetic auxin	9.35 L ha <sup>-1</sup>	2.5%
Fluroxypyr	Vista <sup>®</sup>	Dow AgroScience	Synthetic auxin	3.12 L ha <sup>-1</sup>	0.8%
Clopyralid	Transline <sup>®</sup>	Dow AgroScience	Synthetic auxin	1.56 L ha <sup>-1</sup>	0.4%
Fluroxypyr	PastureGard <sup>®</sup>	Dow AgroScience	Synthetic auxin	9.35 L ha <sup>-1</sup>	2.5%
Metsulfuron methyl	Escort <sup>®</sup>	DuPont	Acetolactate synthase inhibitor	242 g ha <sup>-1</sup>	0.03%