Weed Science Research

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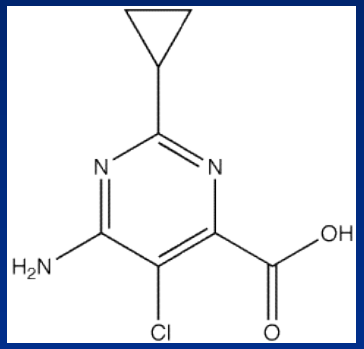
Introduction

- Aminocyclopyrachlor (ACP) is a new herbicide growth regulator (similar to aminopyralid).

- ACP will be sold as a premix:
  - Metsulfuron (Rejuvra)
  - Triclopyr (Invora)
  - Chlorsulfuron
  - 2,4-D amine



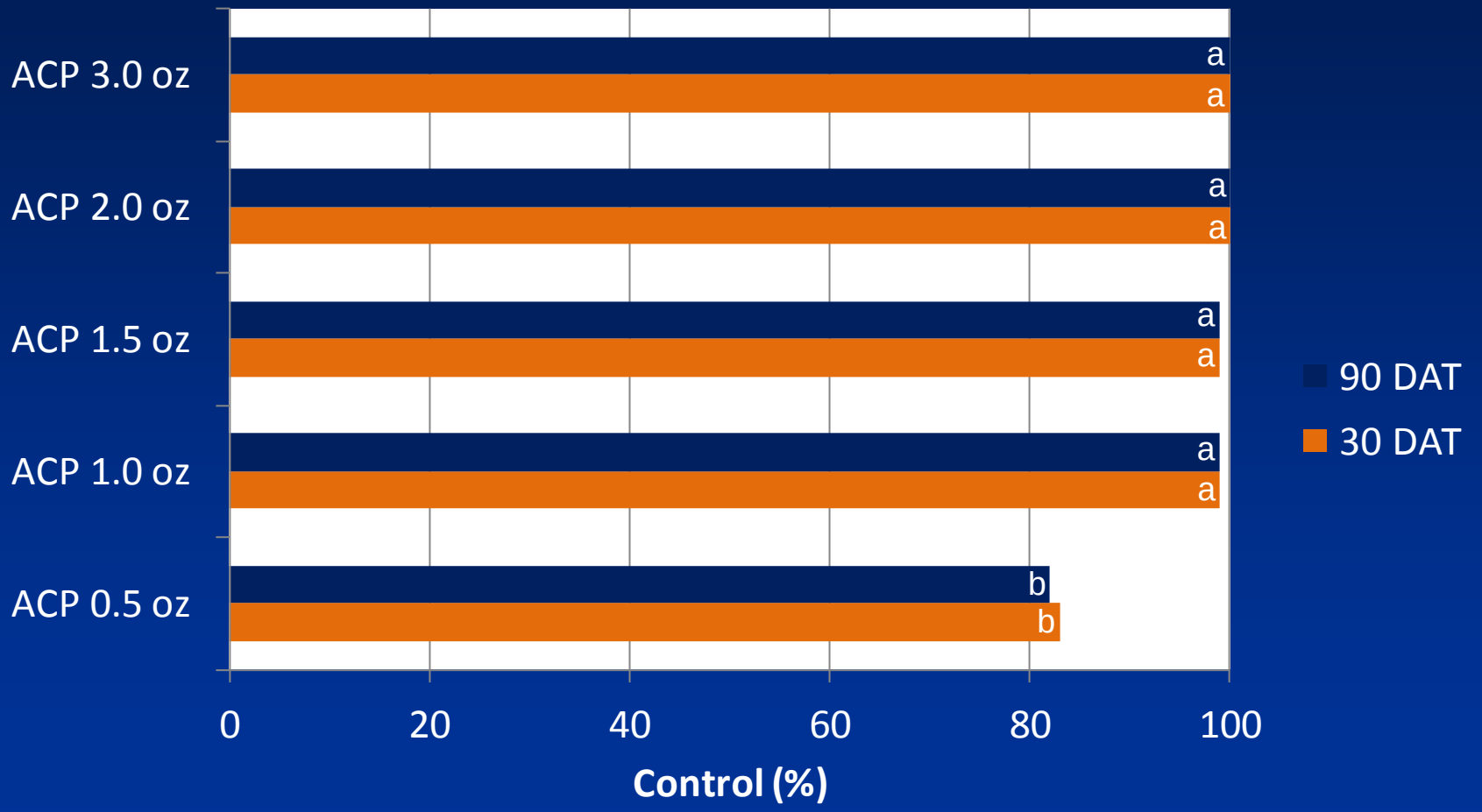
General Methods

- Plot size: 20 by 50 ft
- RCBD, 4 replications
- Air pressurized ATV system
- 30 GPA

Dogfennel

- Most problematic species in pastures
- Relatively easy to control

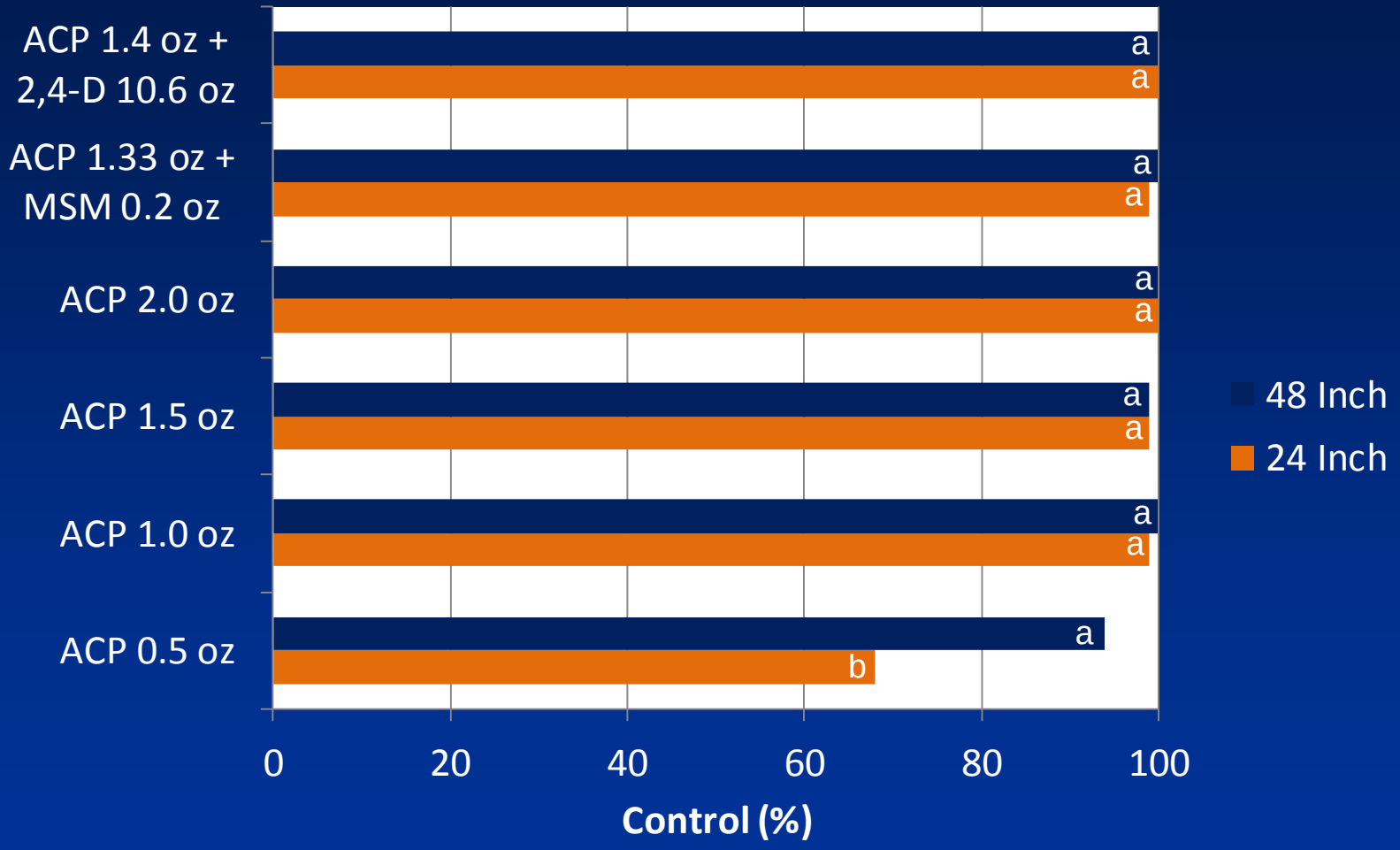
Dogfennel with ACP Alone



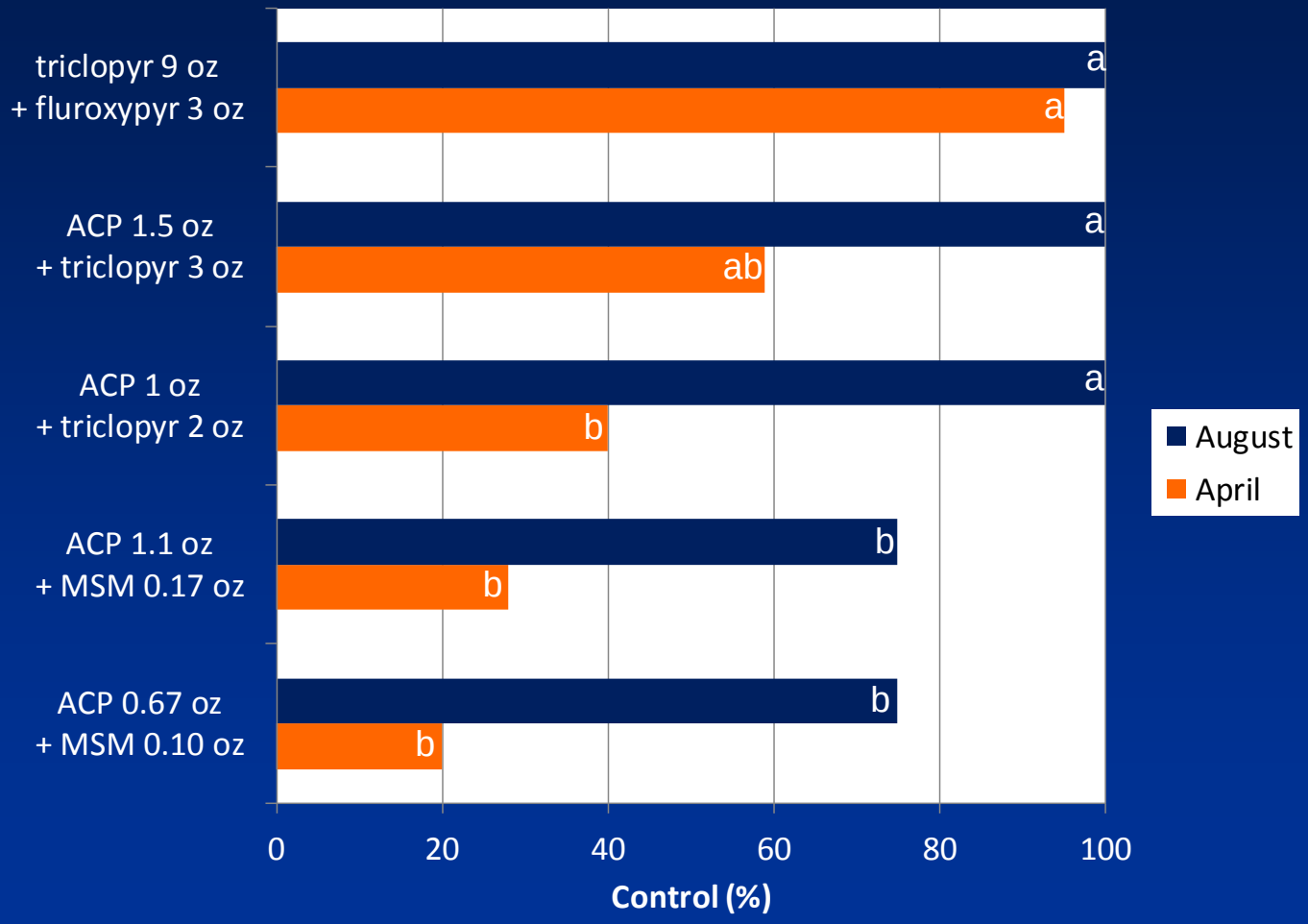
0.5 oz ai

1.0 oz ai

Influence of Application Timing



ACP Premixes 365 DAT



Tropical Soda Apple

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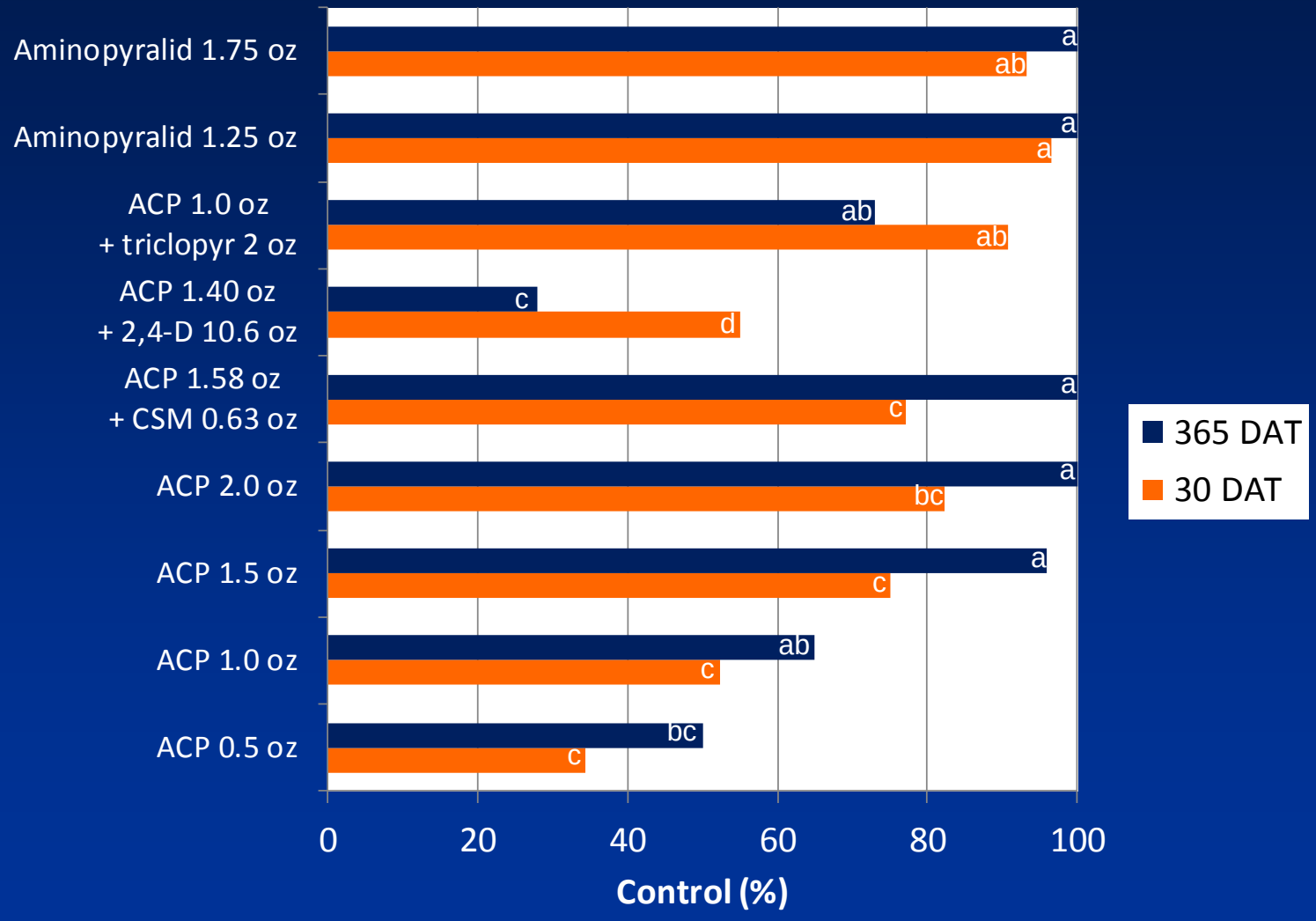

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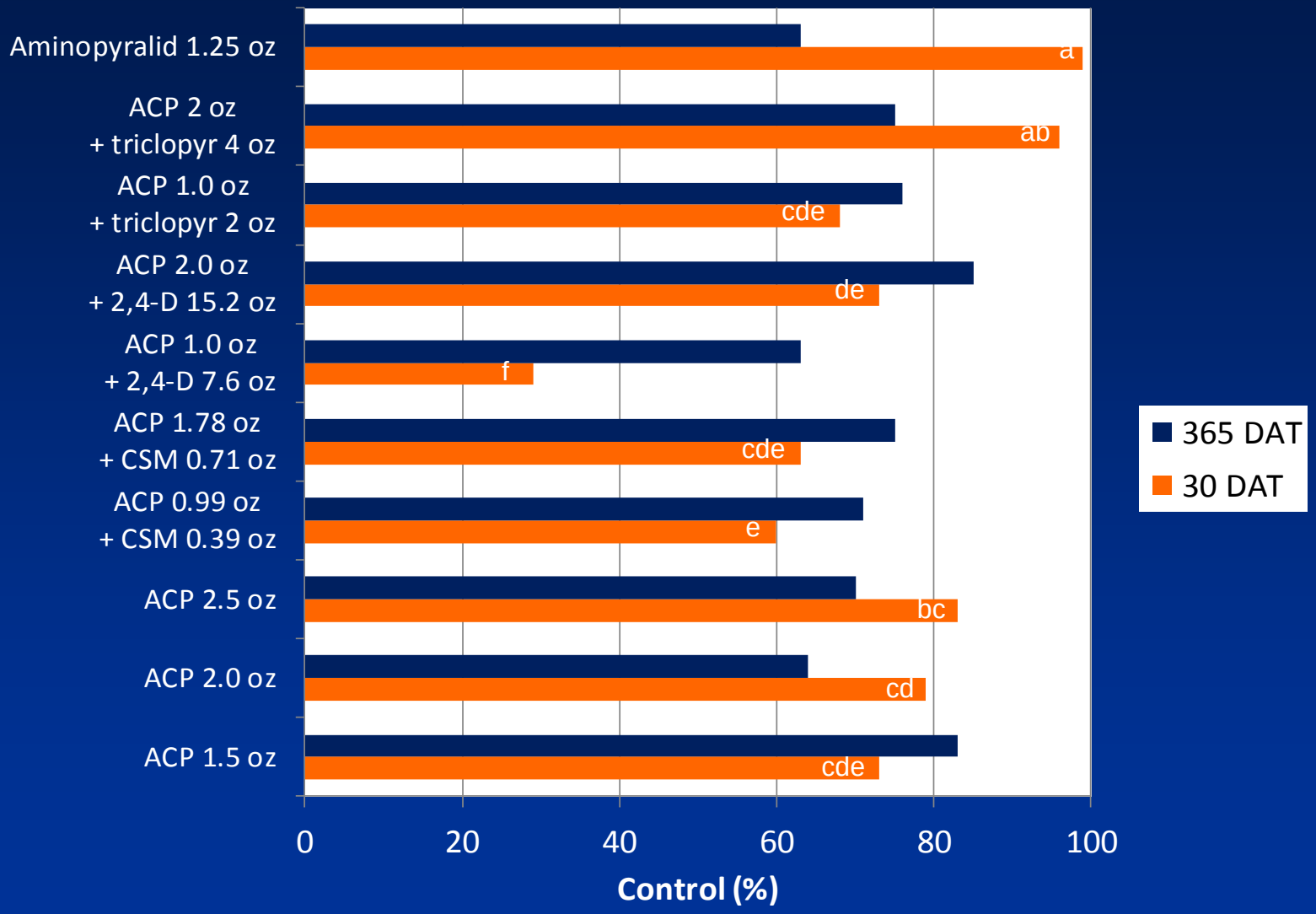
Tropical Soda Apple



untreated

1 oz ai

2 oz ai

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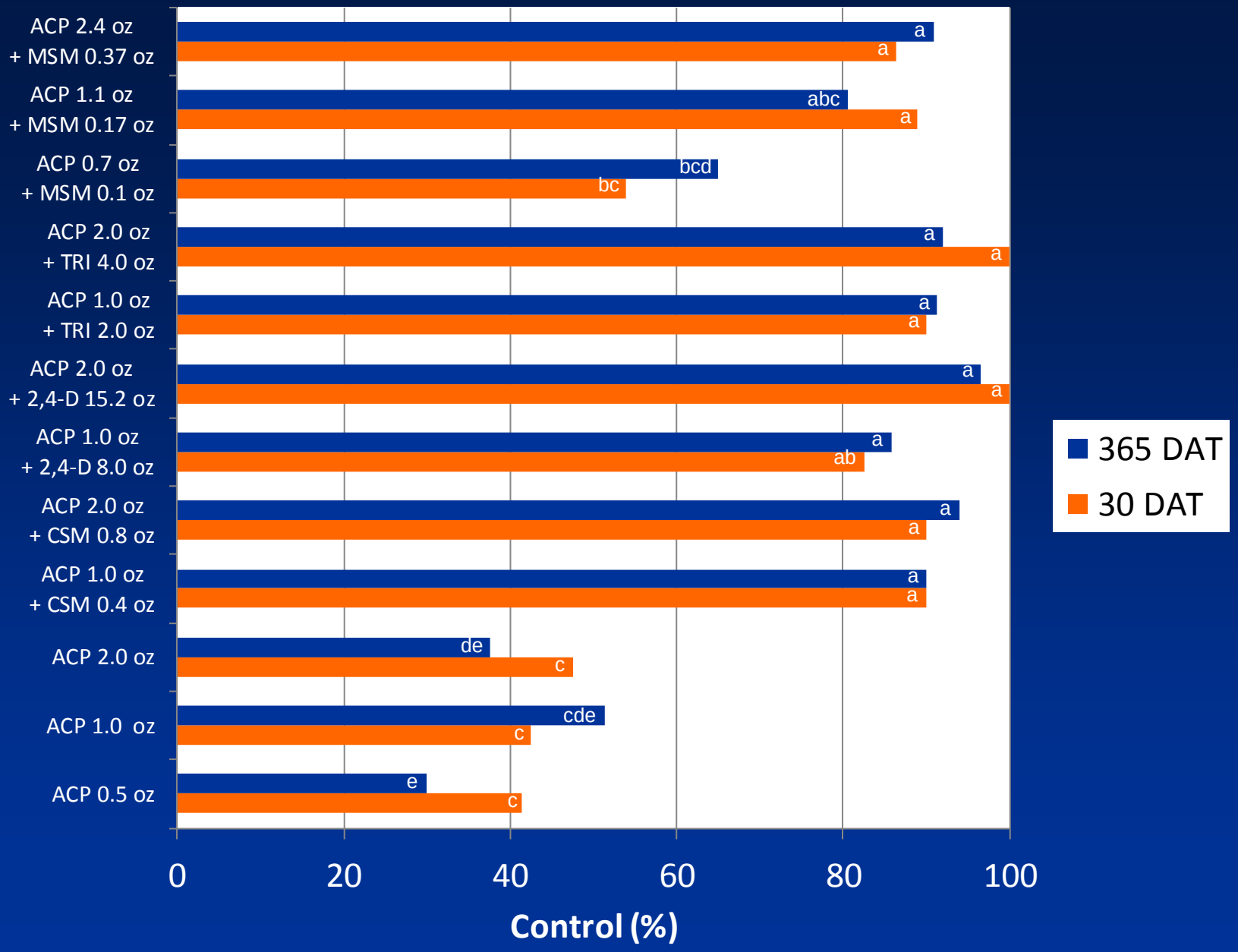
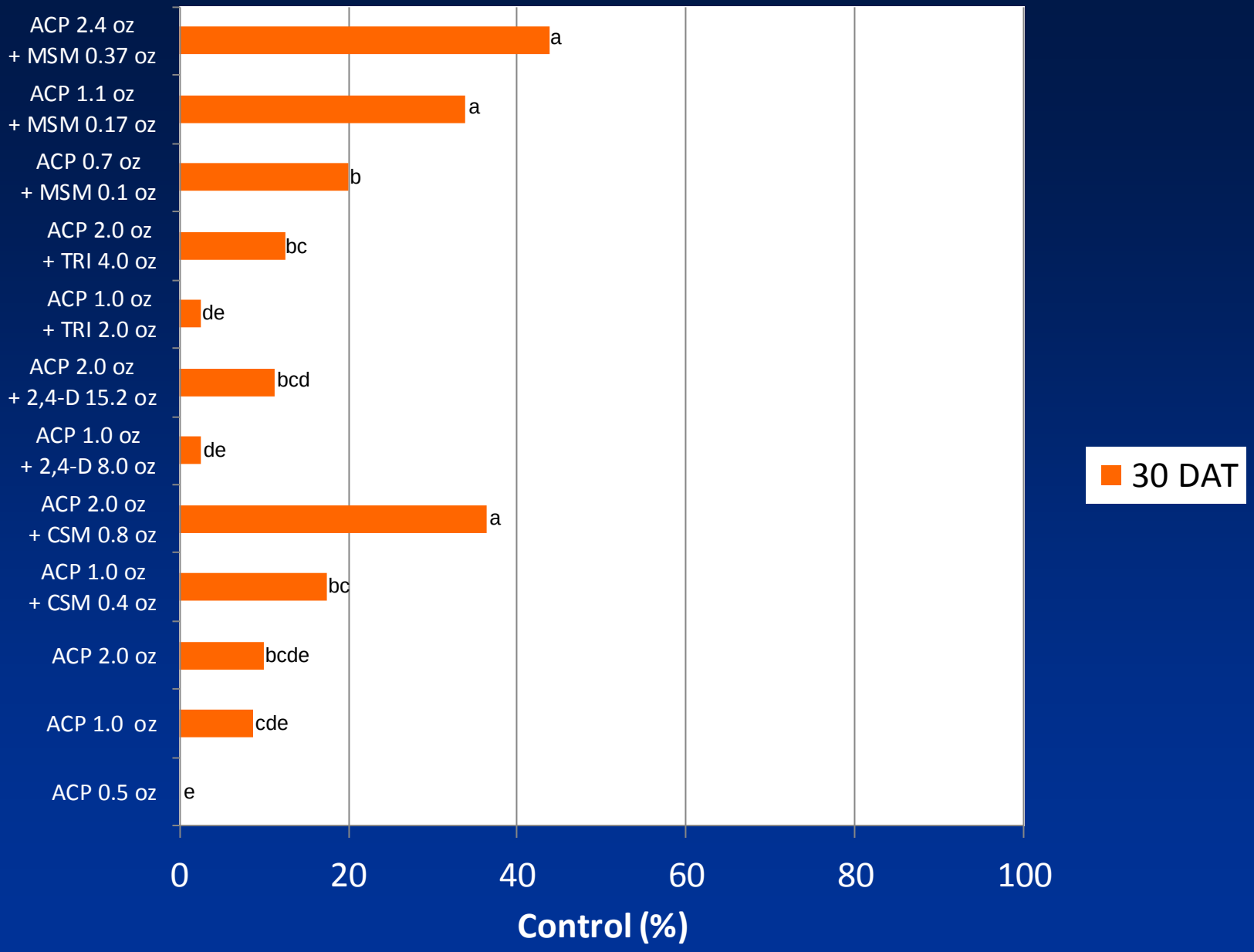
St. John's Wort

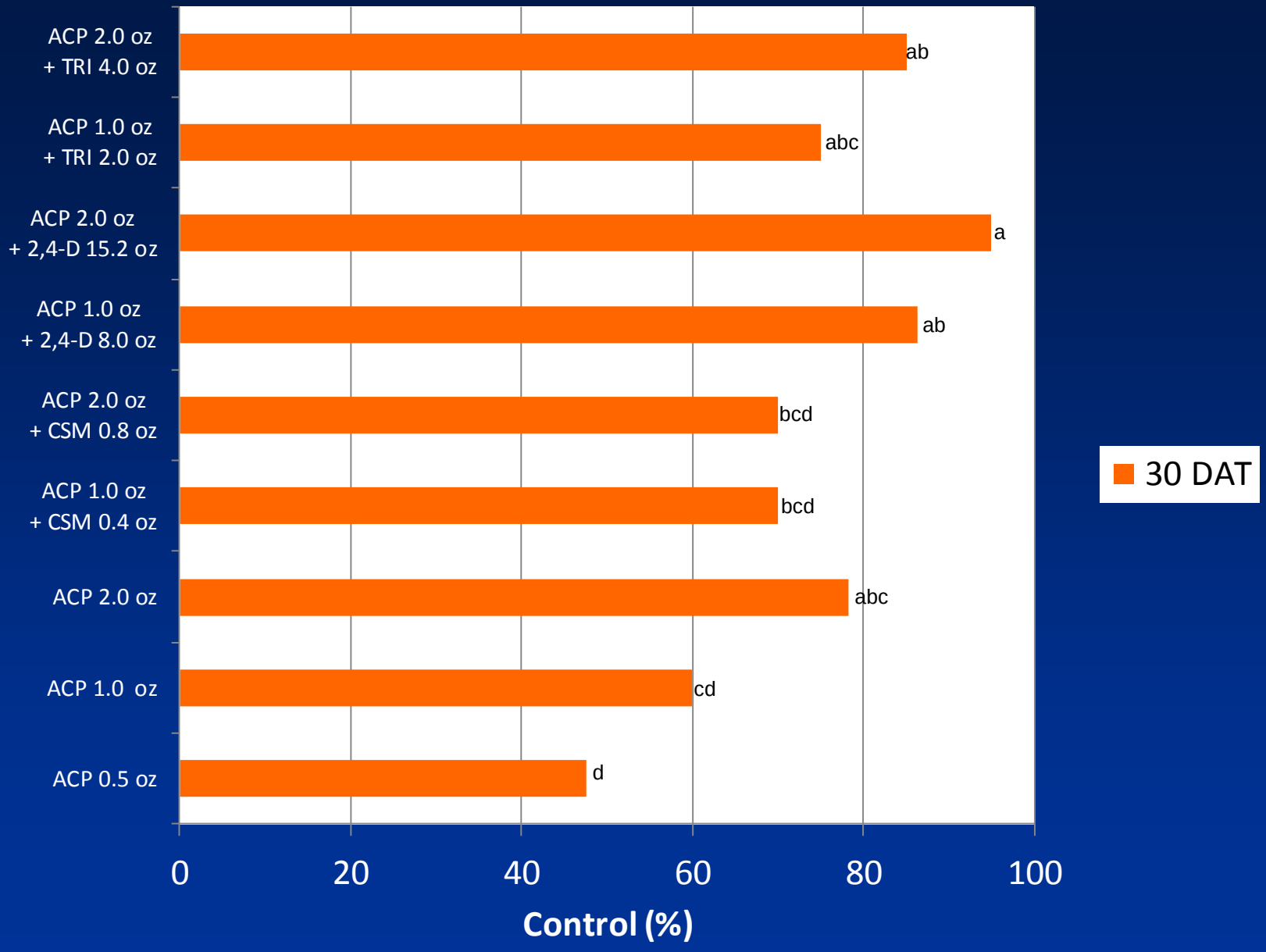


White Head Broom

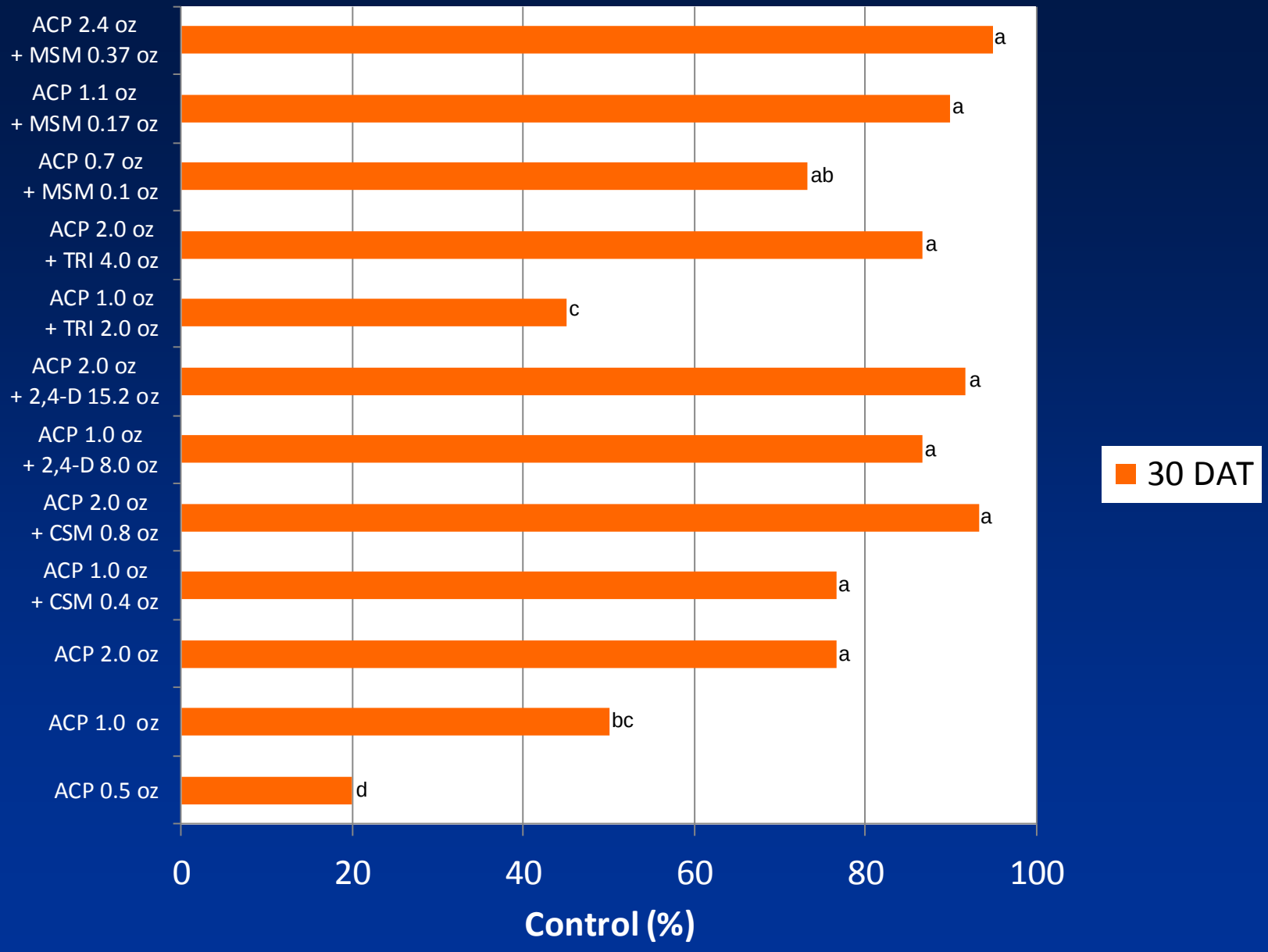


Milkpea

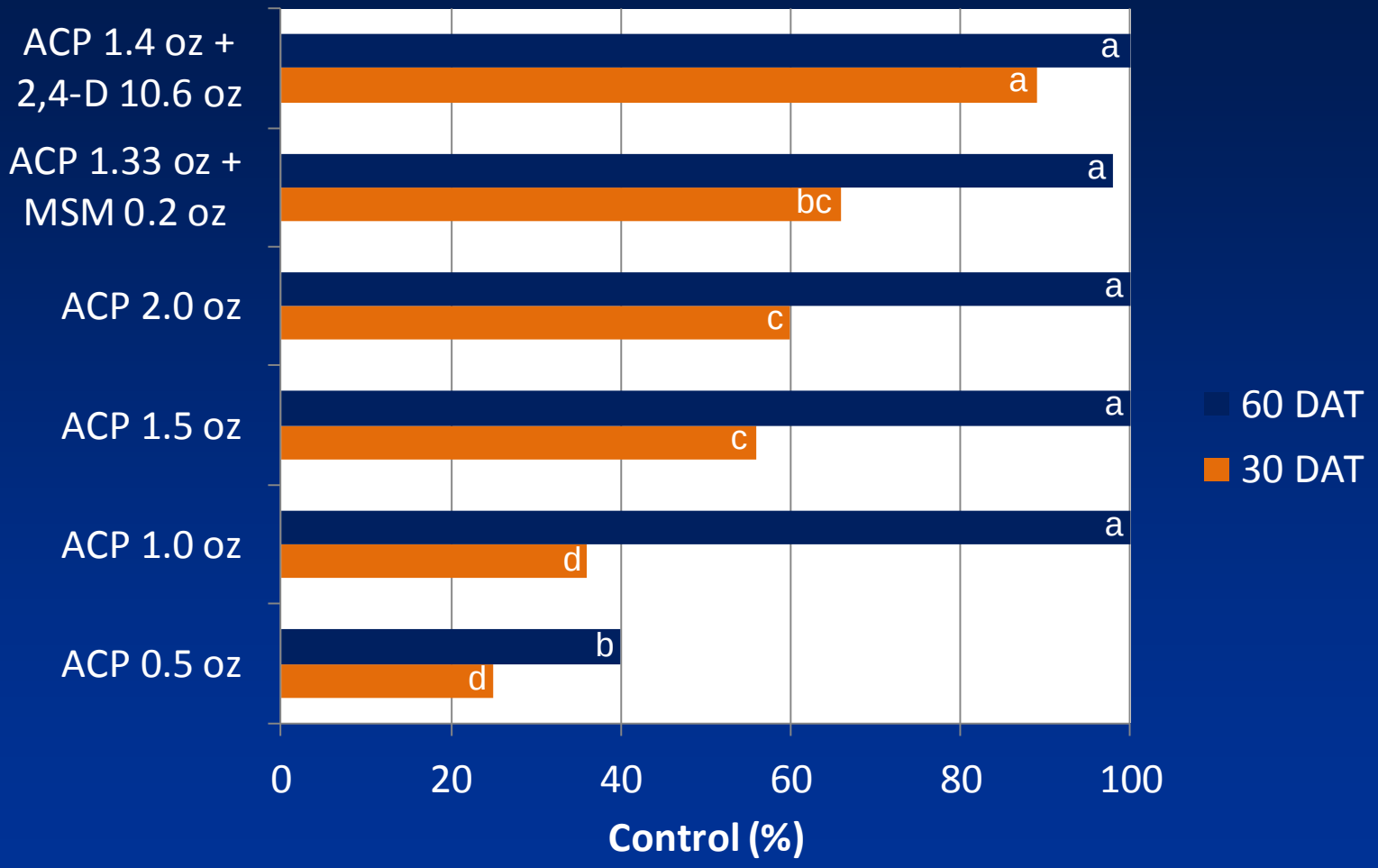
Carolina/flat-top goldenrod



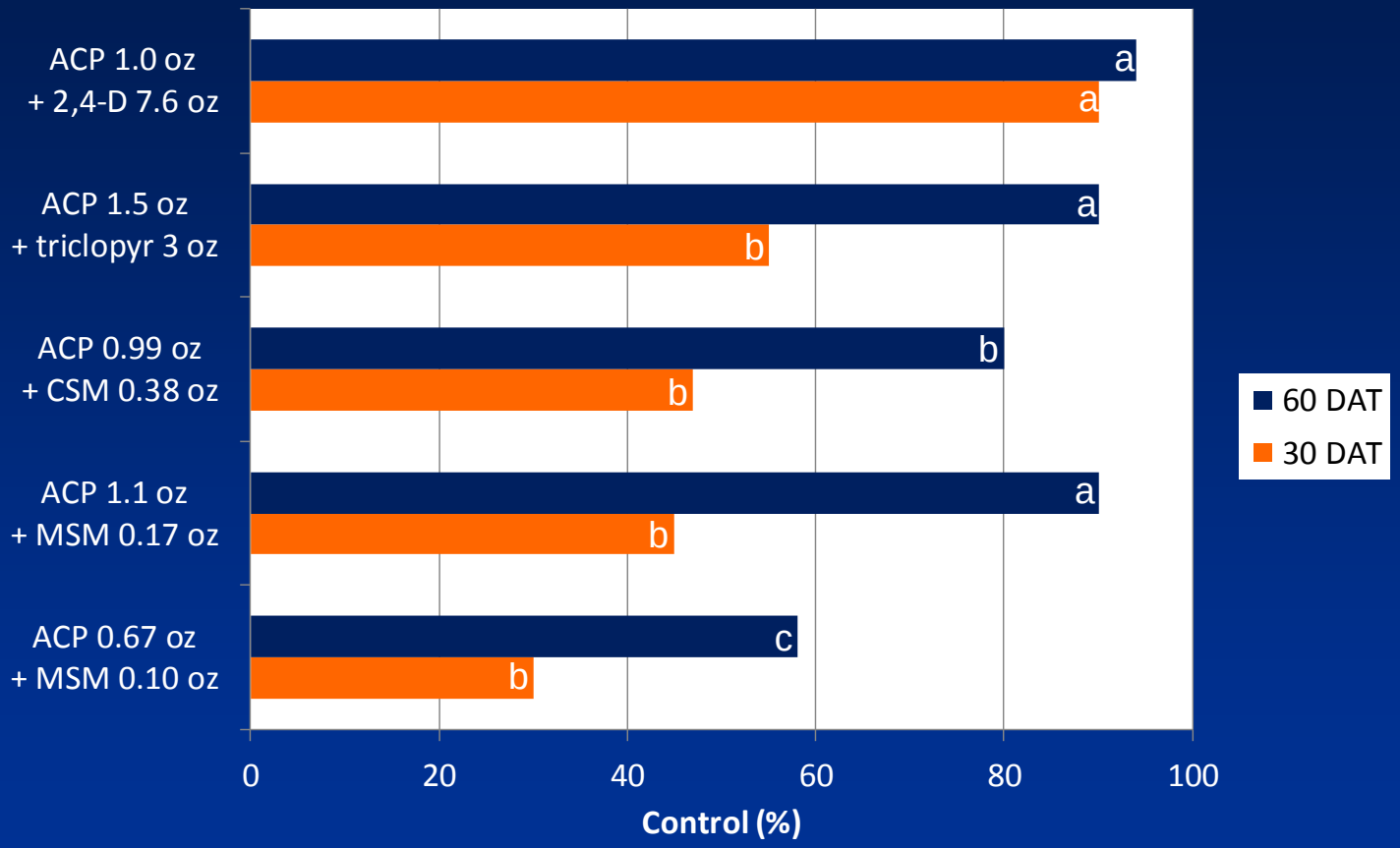
Ragweed Parthenium



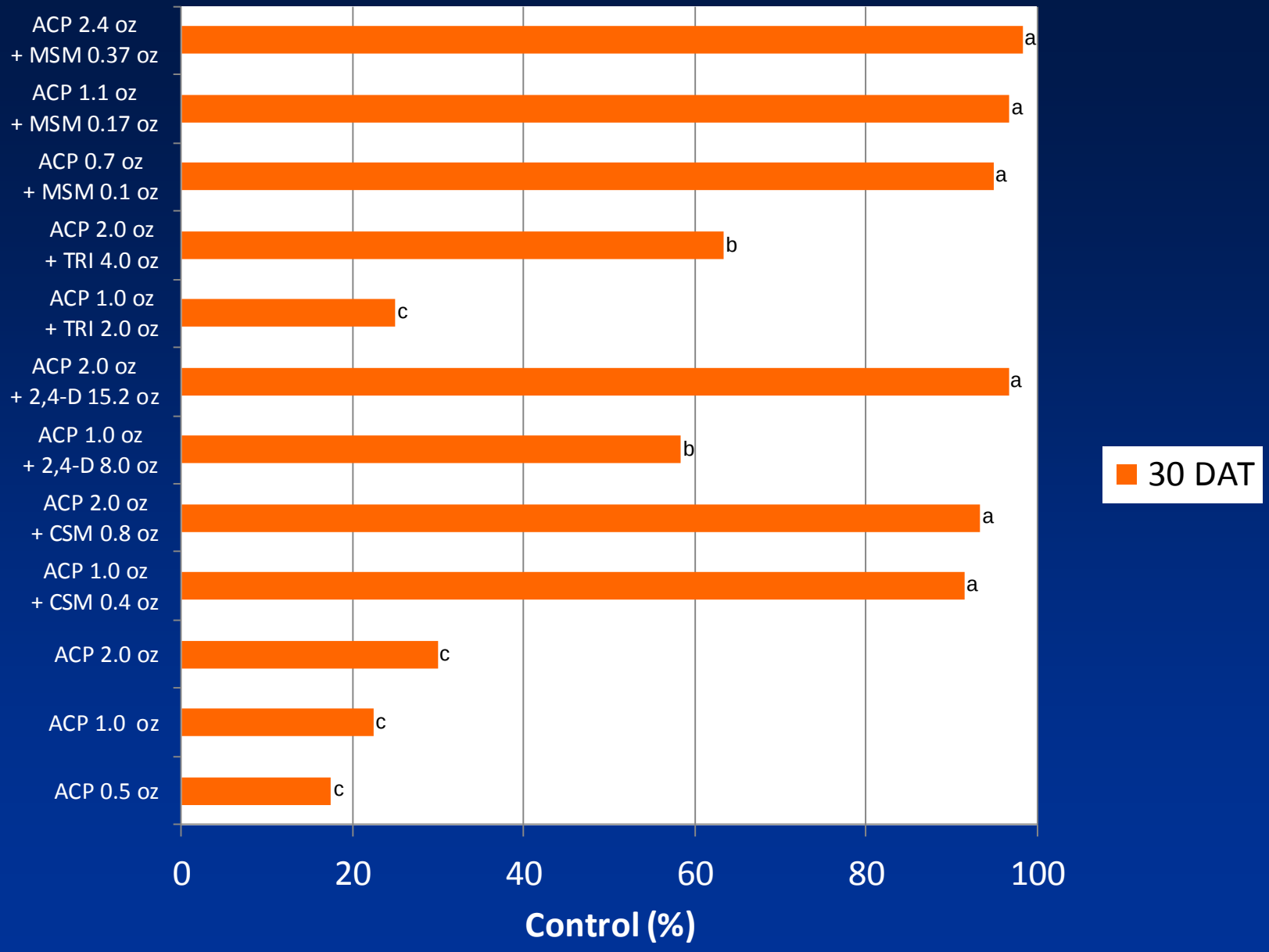
Common Ragweed



Common Ragweed

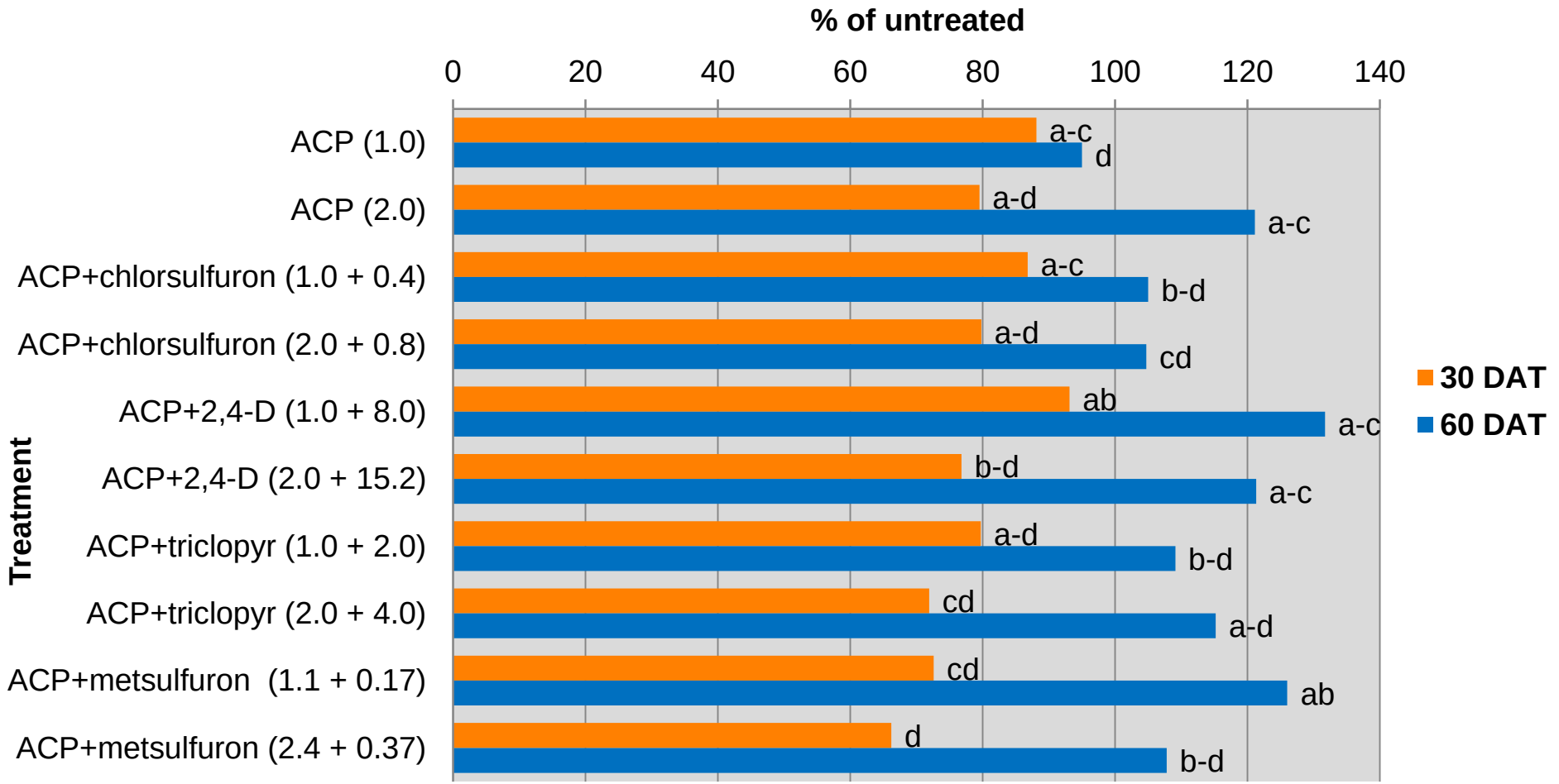


Spiny Amaranth



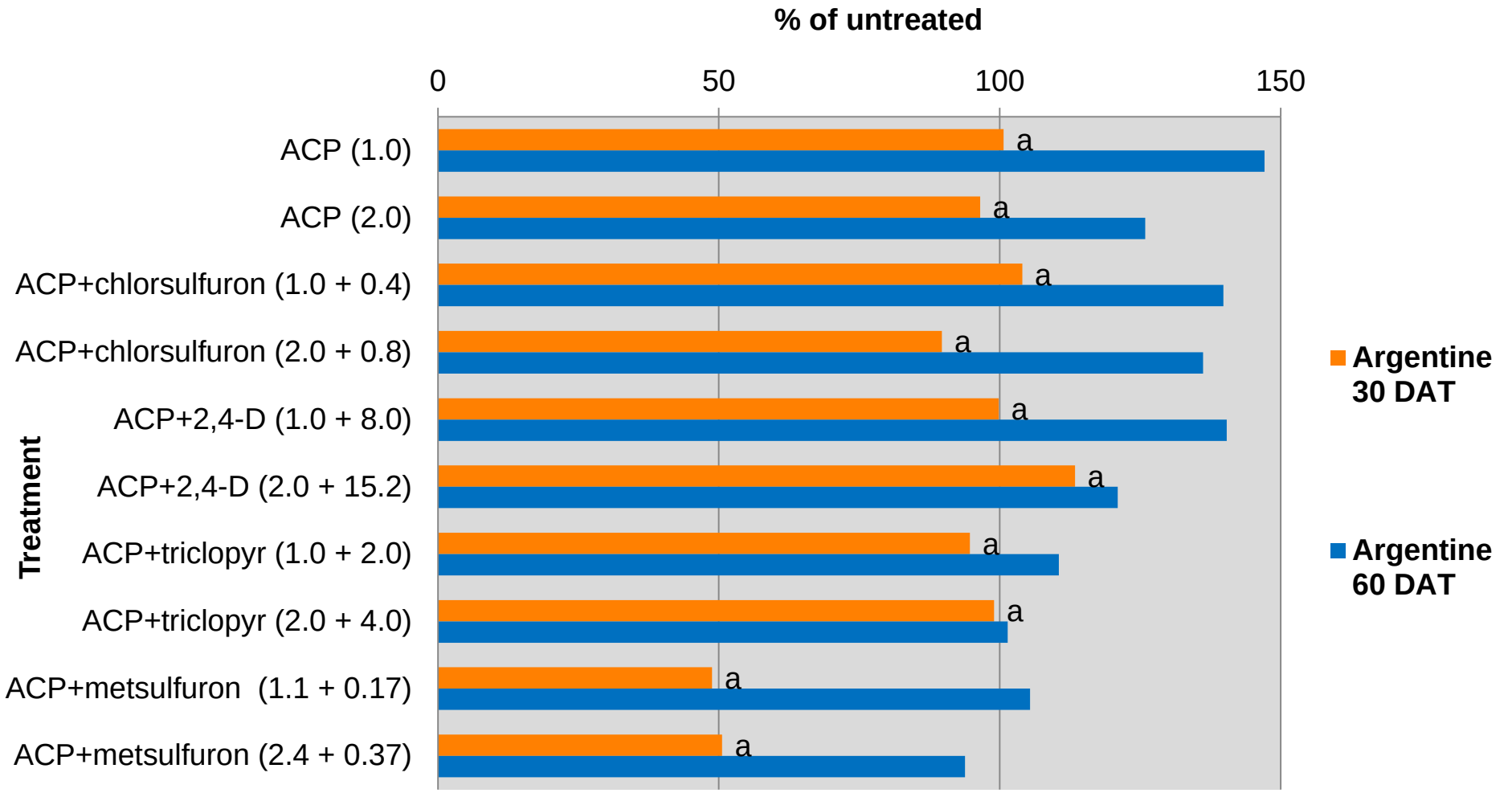
Forage Tolerance

Response of bermudagrass to ACP and ACP premixes at 30 and 60 DAT.



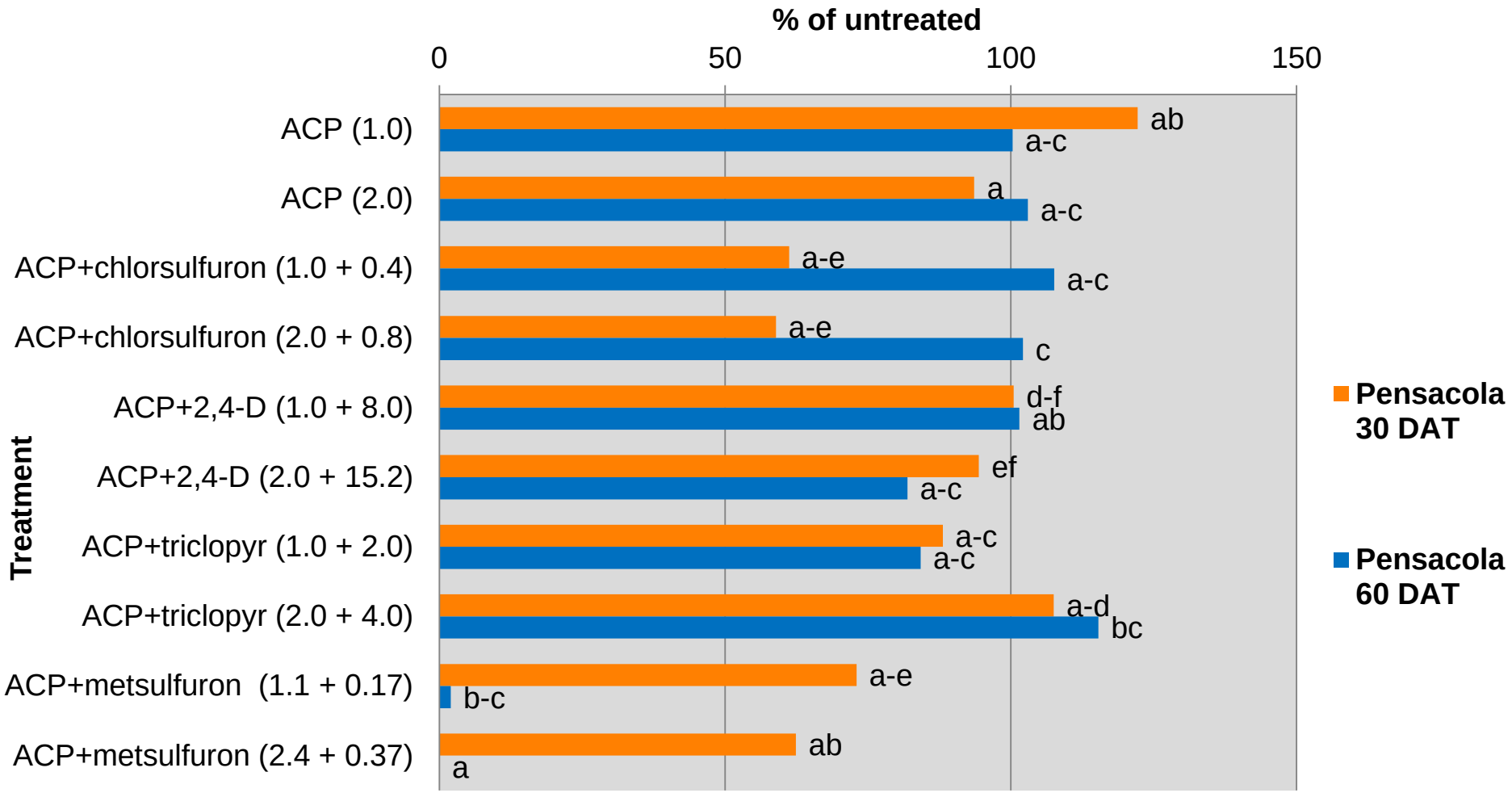
Visual representation of Bermudagrass injury at 30 DAT

Response of ‘Argentine’ bahiagrass to ACP and ACP premixes at 30 and 60 DAT

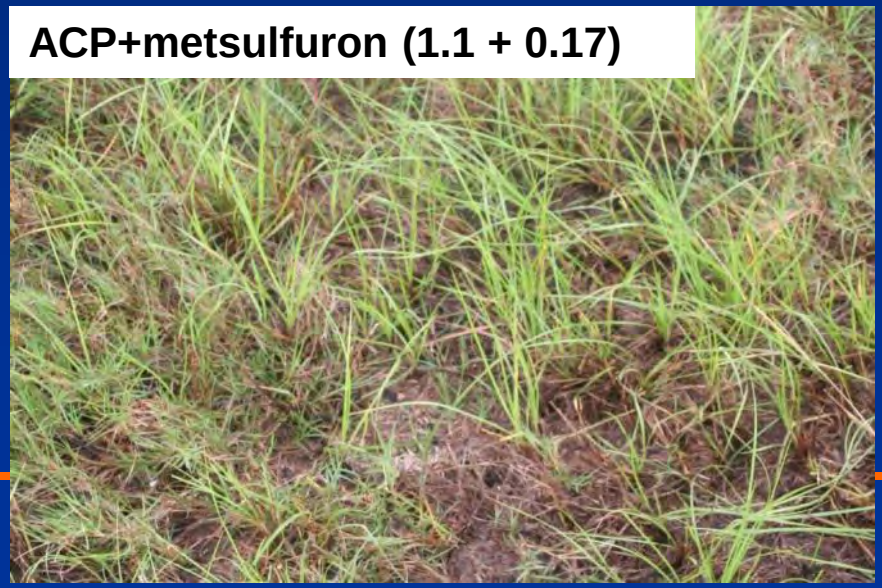


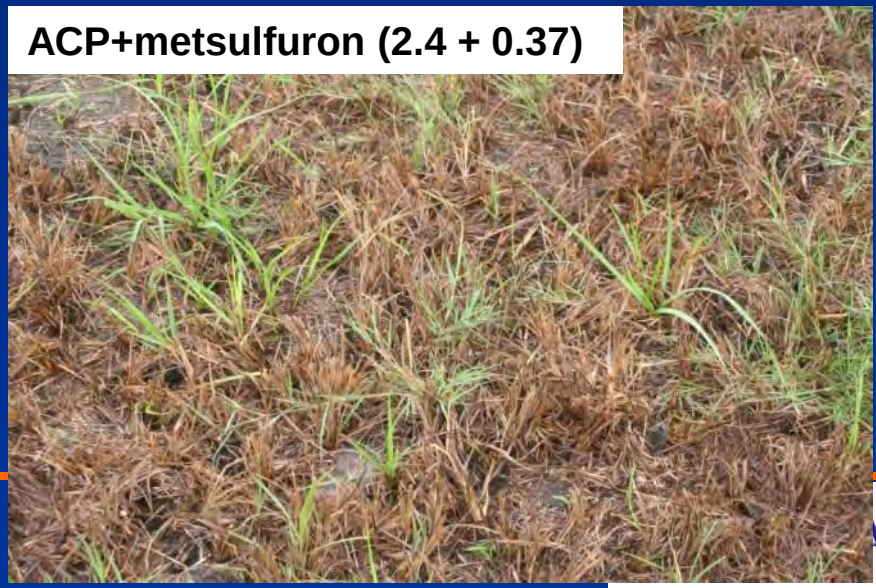
Visual representation of ‘Argentine’ bahiagrass injury at 30 DAT

Response of ‘Pensacola’ bahiagrass to ACP and ACP premixes at 30 and 60 DAT



Visual representation of ‘Pensacola’ bahiagrass injury at 60 DAT





Conclusions

- ACP at 1 oz needed for consistent dogfennel control;
  - MSM premixes=antagonism?
  - Triclopyr premix will likely be the best option
- TSA control is erratic under 2 oz ACP;
  - control appears more consistent with 2 + 4 oz ACP + triclopyr.
  - Possible antagonism with 2,4-D?
- ACP alone is not effective on St. Johns Wort, spiny amaranth, parthenium ragweed, Carolina goldenrod, but premixes tend to help.
- ACP is highly effective on common ragweed and milkpea.

Conclusions

- ‘Argentine’ bahiagrass is among the most tolerant forage species;
- ‘Pensacola’ is tolerant to most premixes, except those containing metsulfuron, and is initially sensitive to the chlorsulfuron premix.
- Bermudagrass appears to be more tolerant to ACP premixes than stargrass.
- Bermudagrass and stargrass yields will likely recover within 60 DAT.

Closing Thoughts

- ACP products are going to be effective on legume species
- Dogfennel control is superior with ACP, but TSA control inferior to Milestone “family”
- Other common species for control will include lantana and paw paw
- Forage tolerance may be an issue in some circumstances
- The premixes containing triclopyr and 2,4-D amine may be most useful for Florida