

# Investigating the distribution and presence, and potential for herbicide resistance of UK brome species in arable farming



# Introduction



- 5 main arable brome species in UK, last full survey in 1989
- ALS, ACCase and glyphosate resistant populations outside UK

## Aims and objectives

- Assess distribution of UK arable brome populations and understand how herbicide resistance may evolve
  1. Survey UK farmers for the presence of bromes
  2. Investigate range in herbicide sensitivity within and between brome species

# Survey results

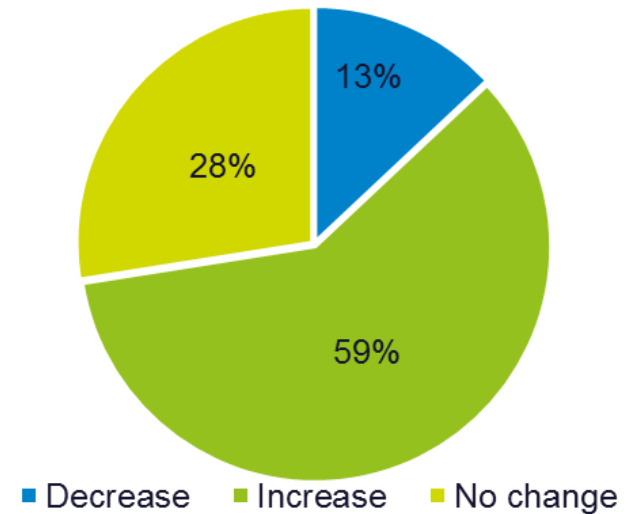
- Bromes present across all UK cereal growing areas
- *Anisantha* species more problematic than *Bromus*
- Brome ID poor
- 60% respondents reported an increase in presence of brome



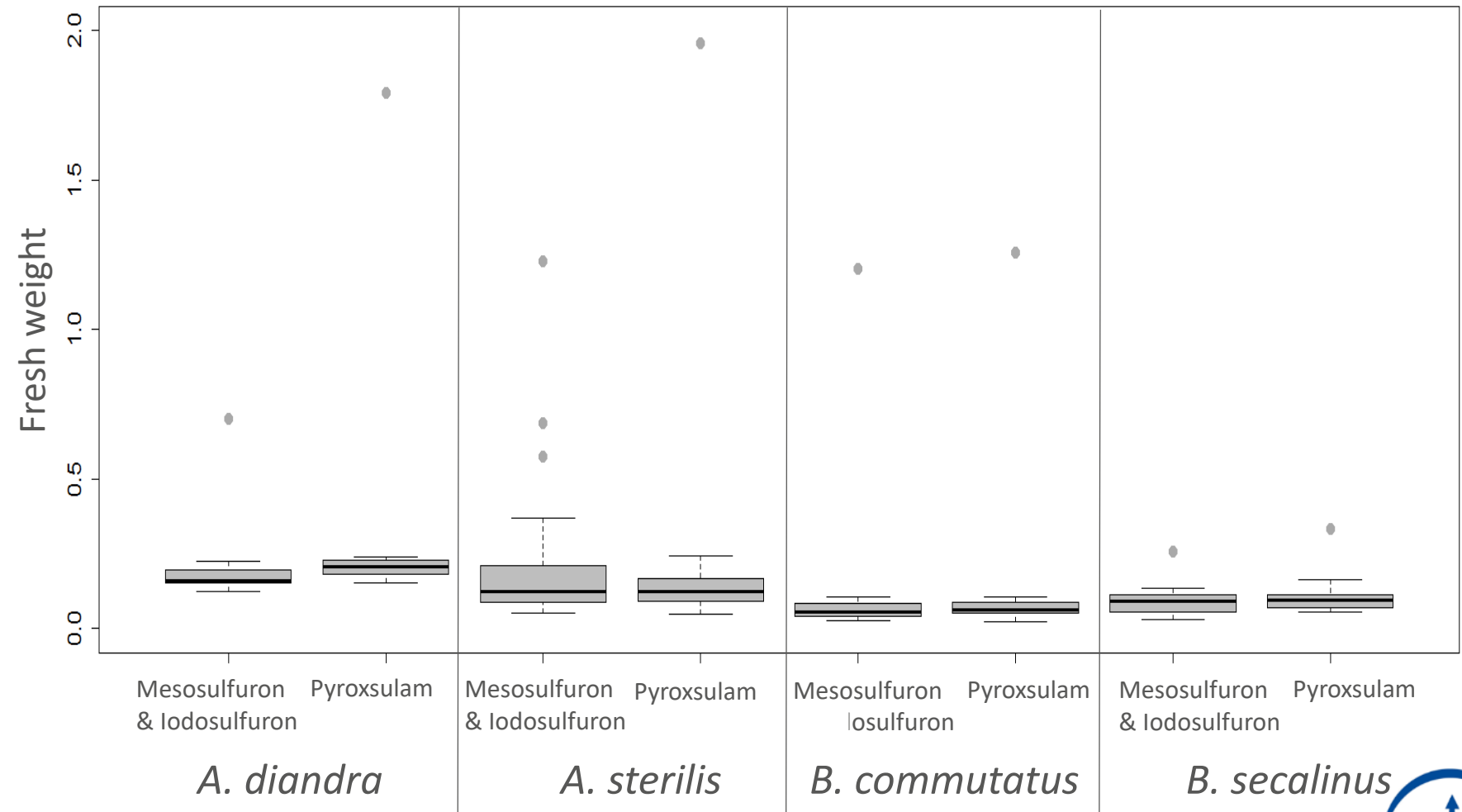
*Anisantha*



*Bromus*



# ALS herbicide screen results



Brome species and herbicide treatment

# Summary and conclusions

- Bromes are wide-spread in UK arable farming with populations present across all cereal growing areas
- Herbicide control problems are developing
- Less sensitive populations will be further studied in glasshouse dose-response tests

