



Bugs, Dirt, and Microbes

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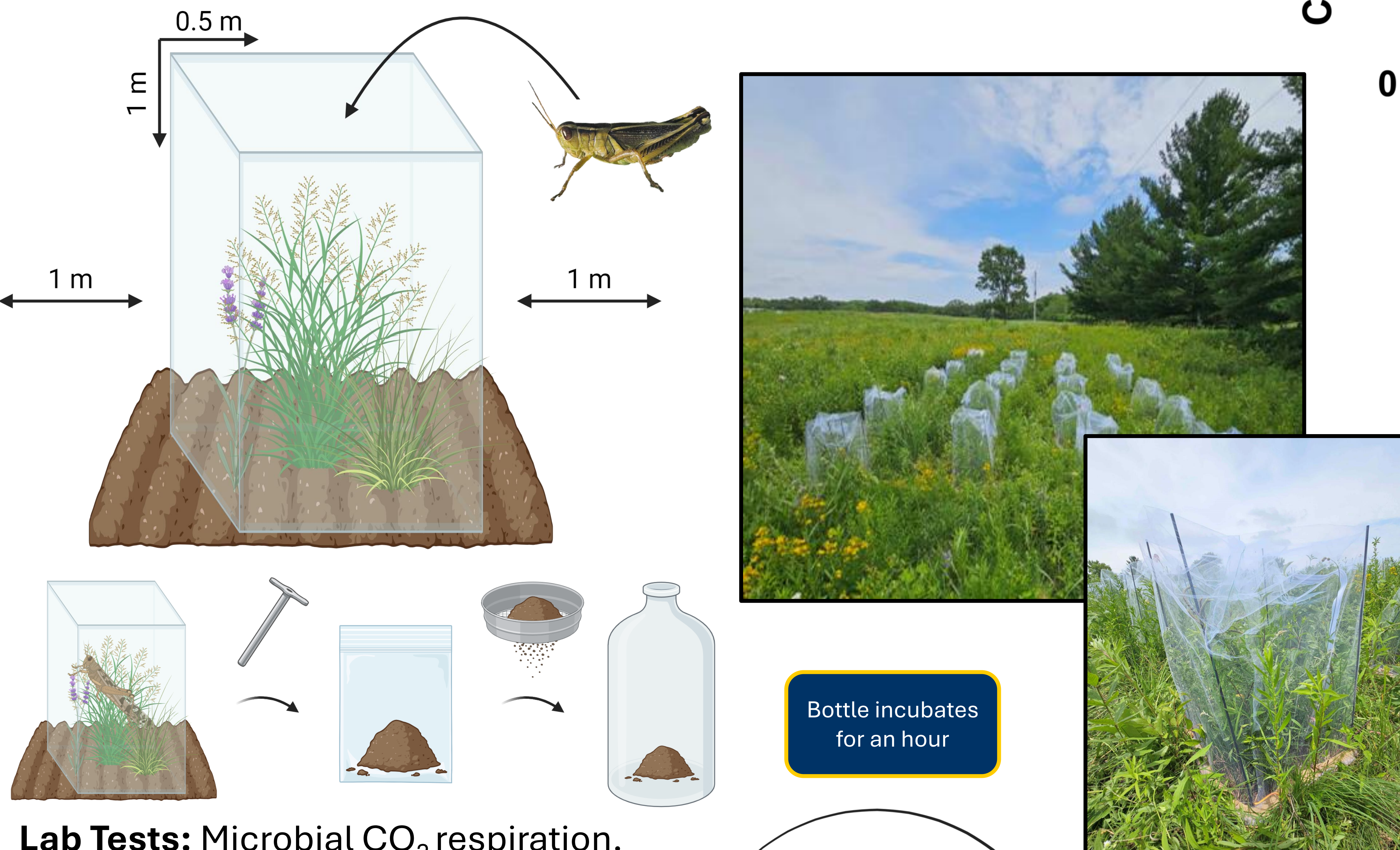
Introduction

Research Question: How do grasshoppers effect the carbon sequestration of soil microbes?

- Microbial Respiration - how active soil microbes are.
- Decomposition Rate - how microbes are interacting with their environment.

Methods

Field Experiment: 20 cages were set up in a 4x5 grid at the UW-Milwaukee at Waukesha Field Station.



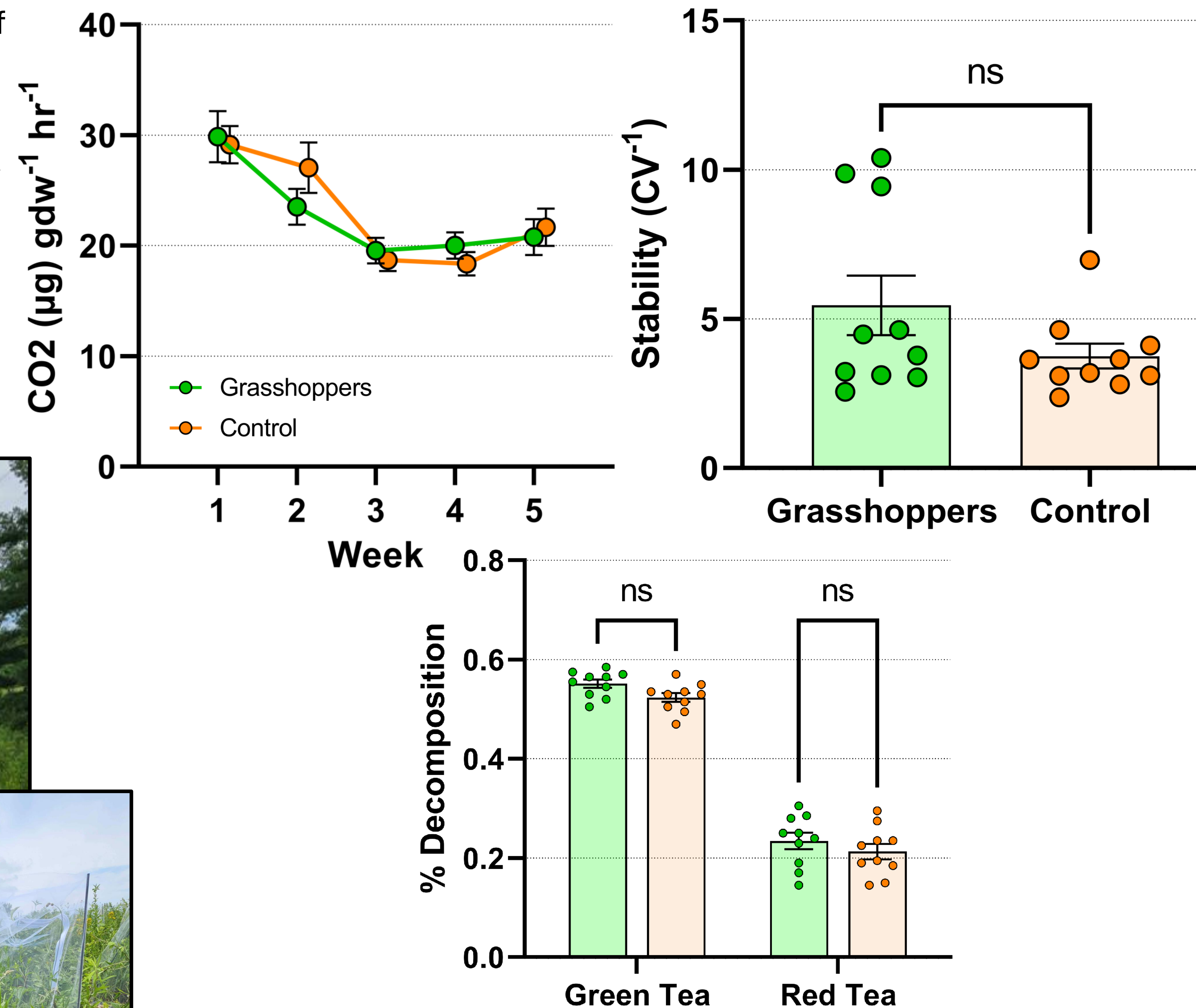
Lab Tests: Microbial CO₂ respiration.

Soil Analysis: Soils samples were weighed wet, dried, and after combustion.

Tea Bags: One bag of red and one bag of green tea was buried in each cage.

Acknowledgements

Results



Discussion

- Grasshopper do not affect soil microbial respiration, or the stability of soil respiration
- Grasshoppers do not affect decomposition rate
- Interpreting outliers and variation between grasshopper species

Moving Forward

Soil DNA: Analyze the DNA profile of microbe communities.