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Effects of enemy community composition and drought on defence trait selection in woodland strawberry along a latitudinal gradient

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Human induced changes are affecting both biotic and abiotic environment. For instance, composition of natural enemy and pollinator communities are changing at an unprecedented rate which is likely to have far reaching ecological and evolutionary consequences for their host plant. Furthermore, these changes and the ecological and evolutionary consequences they impose interact with abiotic stressors, such as summer droughts, which are predicted to increase in frequency and severity due to climate change.

STUDY SYSTEM

Woodland strawberry
Fragaria vesca

METHODS

16 *F. vesca* genotypes (●) replicated to five common gardens (🍓)
two treatments: drought and control

STUDY QUESTIONS?

- How does enemy community complexity relate to selection on the plants' defenses?
- Is there a latitudinal cline in defenses against different enemy species?
- What is the relative contribution of genes and environment to this variation in defenses?
- Are certain genotypes preadapted to remain defended under summer drought?
- How does the effect of drought on plant defense vary along the latitudinal gradient and
among plant genotypes? How do these factors interact?

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