**\*CLIMATE CHANGE\***

**Effects of Climate Changes**

[ Expected effects of climate change on food security]

* Parameter of food security
* Food security projections in the context of climate change
* pest pressure, degree days, crop yield as points

[ Expected effects of climate change on ecological diversity]

* Parameter of diversity
* Diversity as a function of reliability of seasons
* Population, location, and gradient of diversirty and specialists

**Ecological Result of Climate Change**

[ How organisms/insects adapt to climate change]

* Removal of resources/hosts
  + Seasonally or permenantly
* migration
* “host switching?”
* plasticity

**Adaptative Plasticity** [ How plasticity can mitigate effects of climate change]

* Parameters of plasticity: types and functions
* Limits of phenotypic plasticity
  + Diapause as an example
* ECB as an example

**ECB as a model** [ Importance of ECB to food security and ecological diversity]

* Agricultural importance
  + Cost to protect
  + Ability to destroy
  + Current range and projections
* Latitudinal distribution
  + Climate seems to have distributed these species. This is a chance to make interesting science
  + Clines are distributed latitudinally and are separated genetically
* Predictive power of model
  + Diapause phenotype and genetic differences