

Do flowers of a color bloom together?

Exploring emergent patterns and drivers of floral color in Eastern North American wildflowers

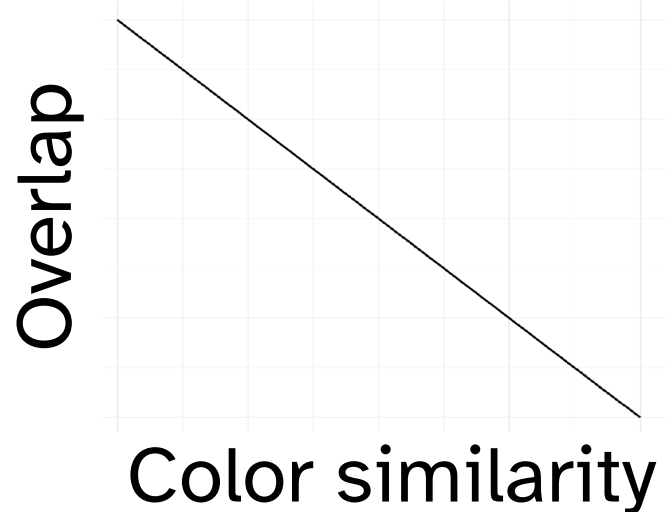
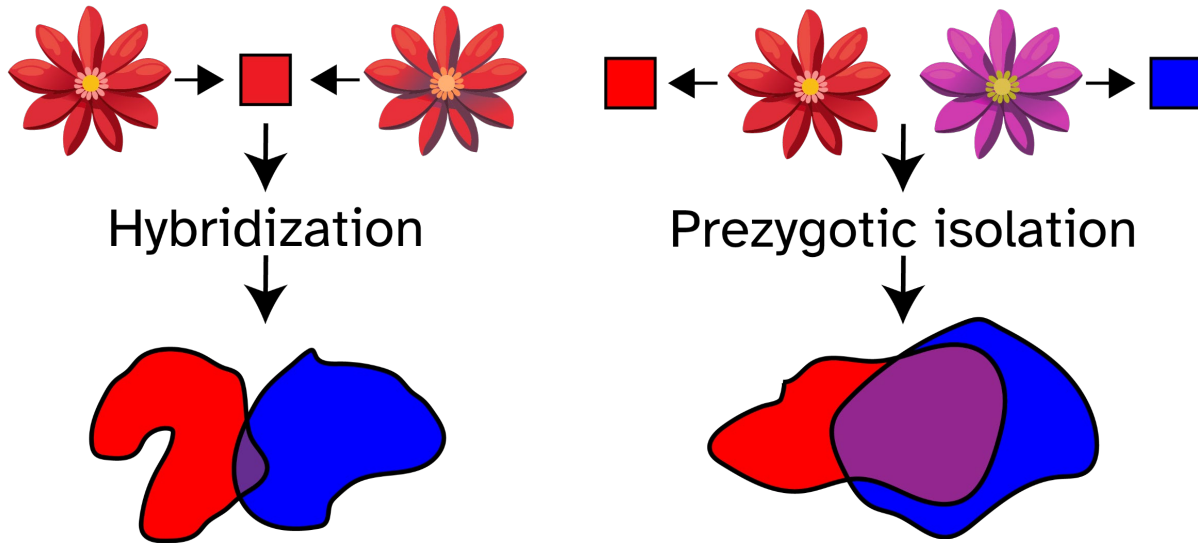
Chris Talbot (*Weber Lab*)

M
EEB



Co-occurrence may be impacted by floral color differentiation, thus shaping emergent floral color patterns, through myriad processes.

Close relatives



All species

Reproductive interference?

Dominant pollinators?

**Emergent
patterns???**

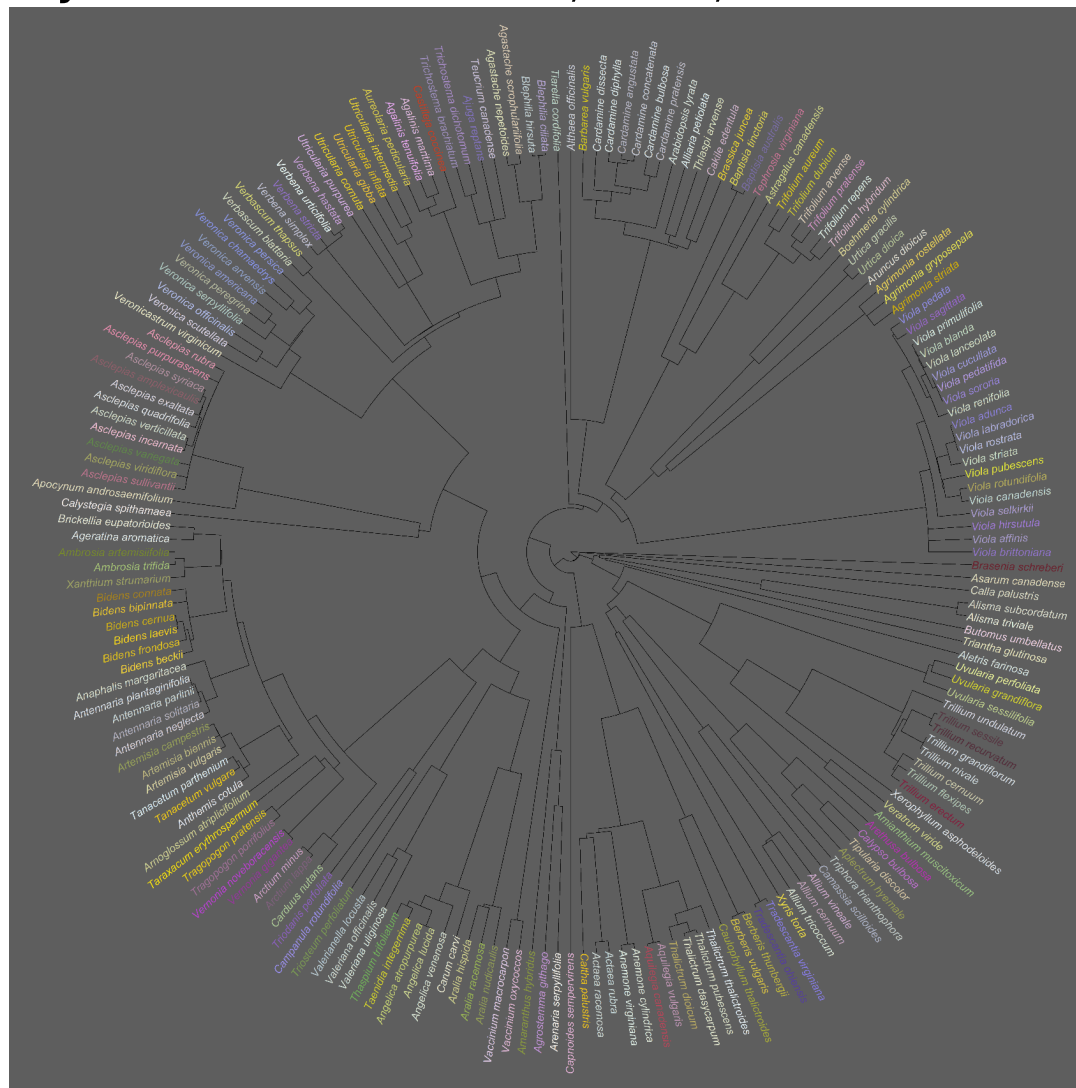
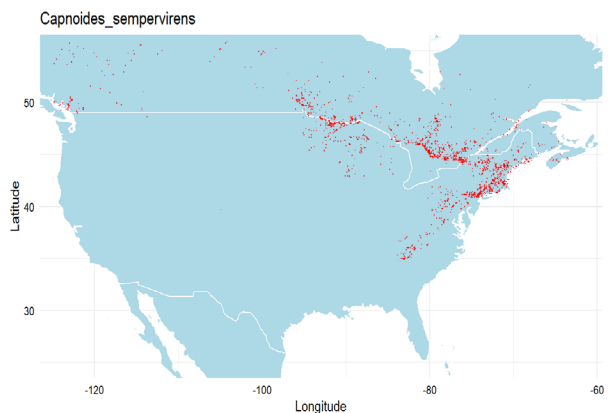
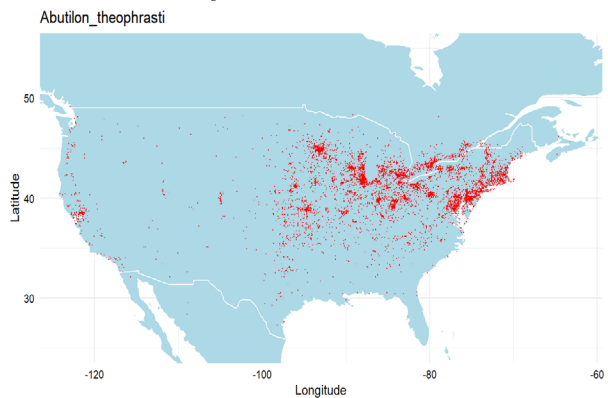
Competition for pollinators?

Hybridization?

We gathered data on range, phenology, phylogeny, and floral color for common Eastern North American wildflower species.

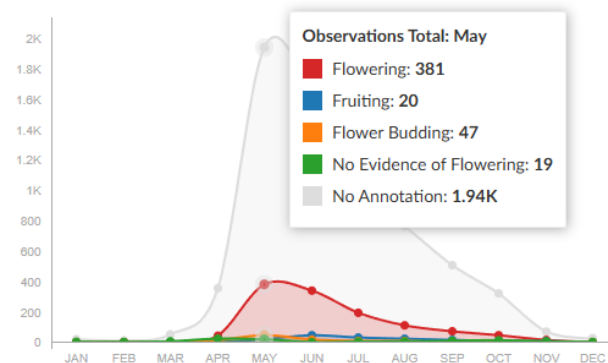
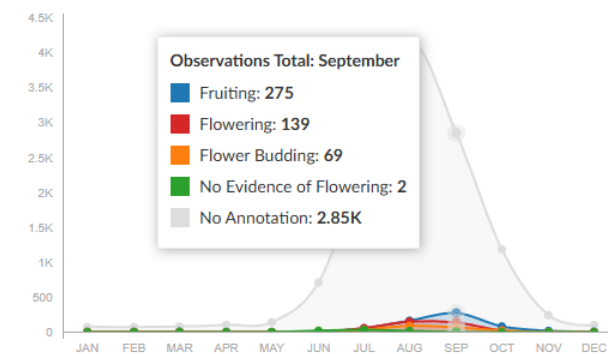
Phylogeny from Smith & Brown, 2018; Color from iNaturalist

10km² cells w/
GBIF presence data



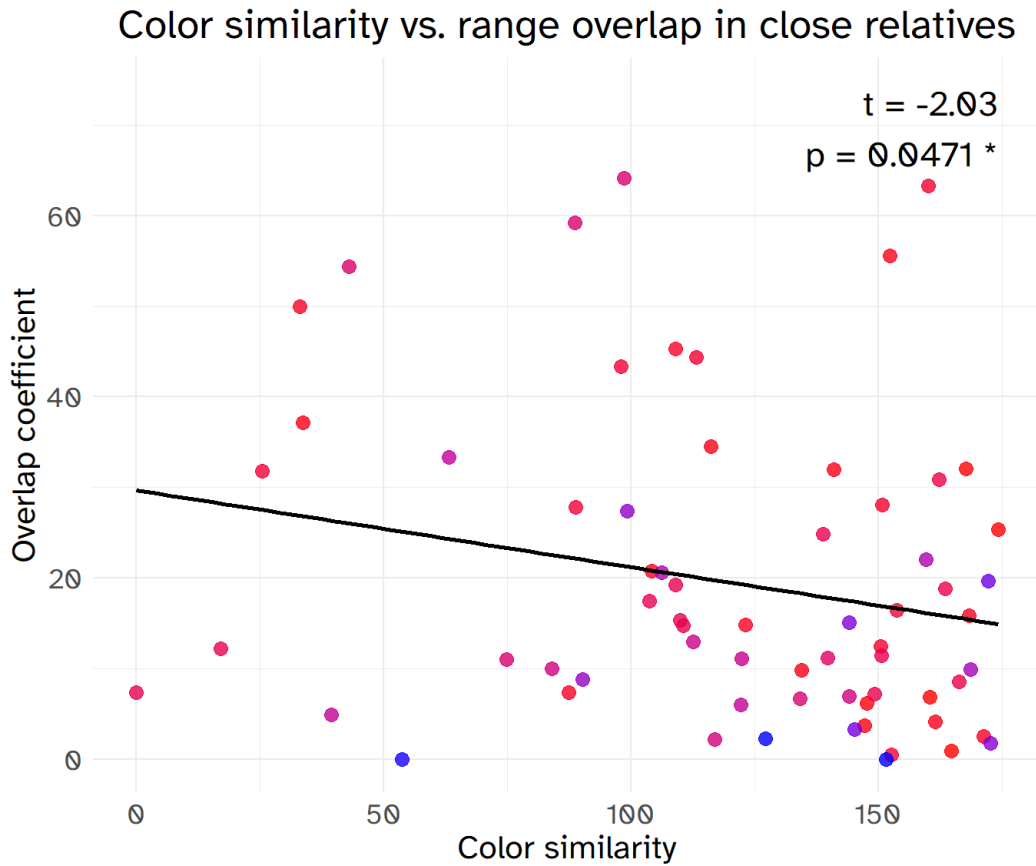
899 species in final data

Phenology from iNaturalist

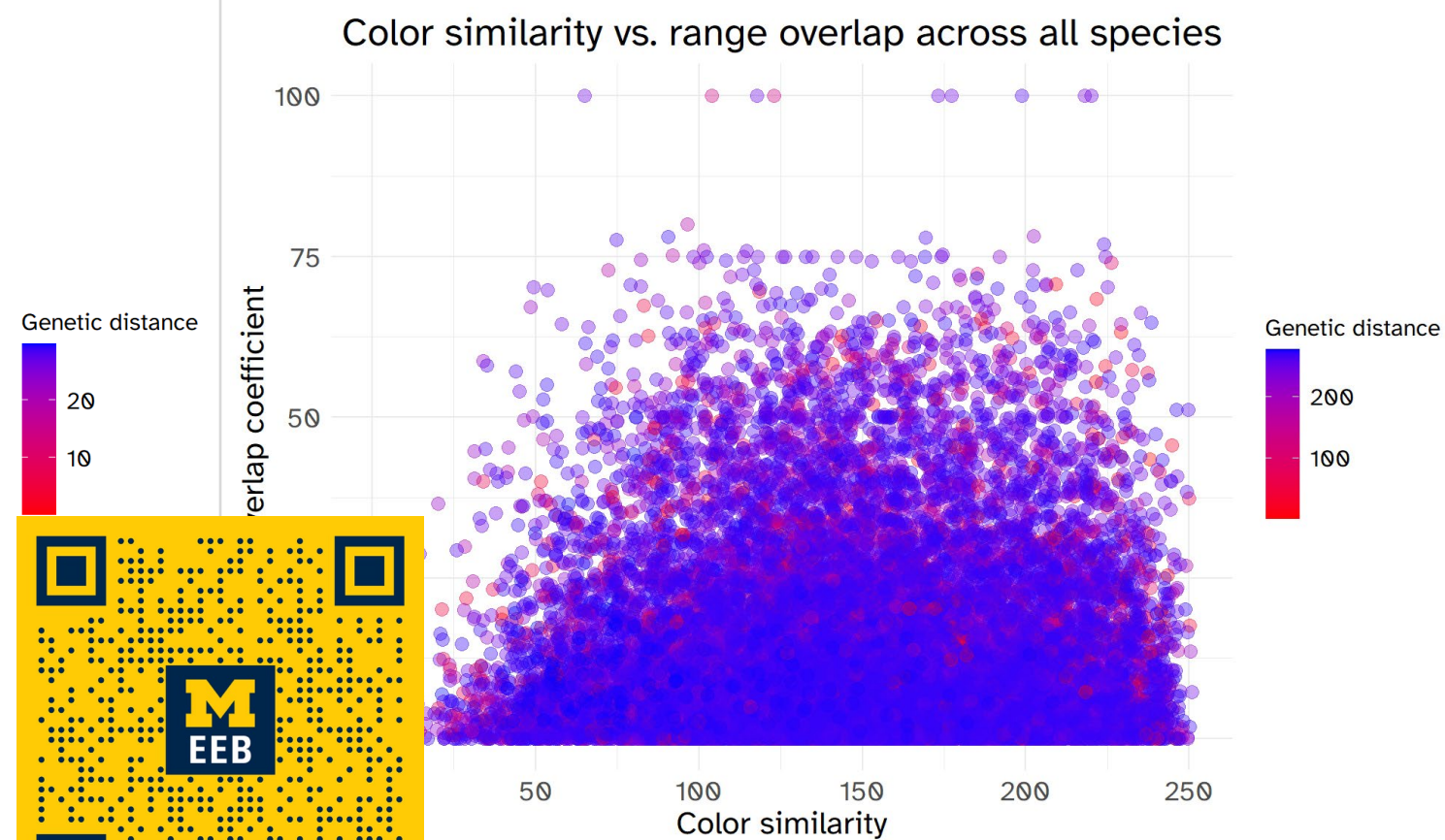


Color similarity is negatively correlated with overlap in close relatives, but the pattern breaks down across phylogenetic scales.

In close relatives:



Across all species:



Acknowledgements: Thanks to my honors thesis committee (Marjorie Weber, Nate Sanders, and Ben Winger), Joseph Robinson for data collection, and Matthew Hack, Stephen Smith, and the Weber Lab for their continued support in the design and authorship of this work.