

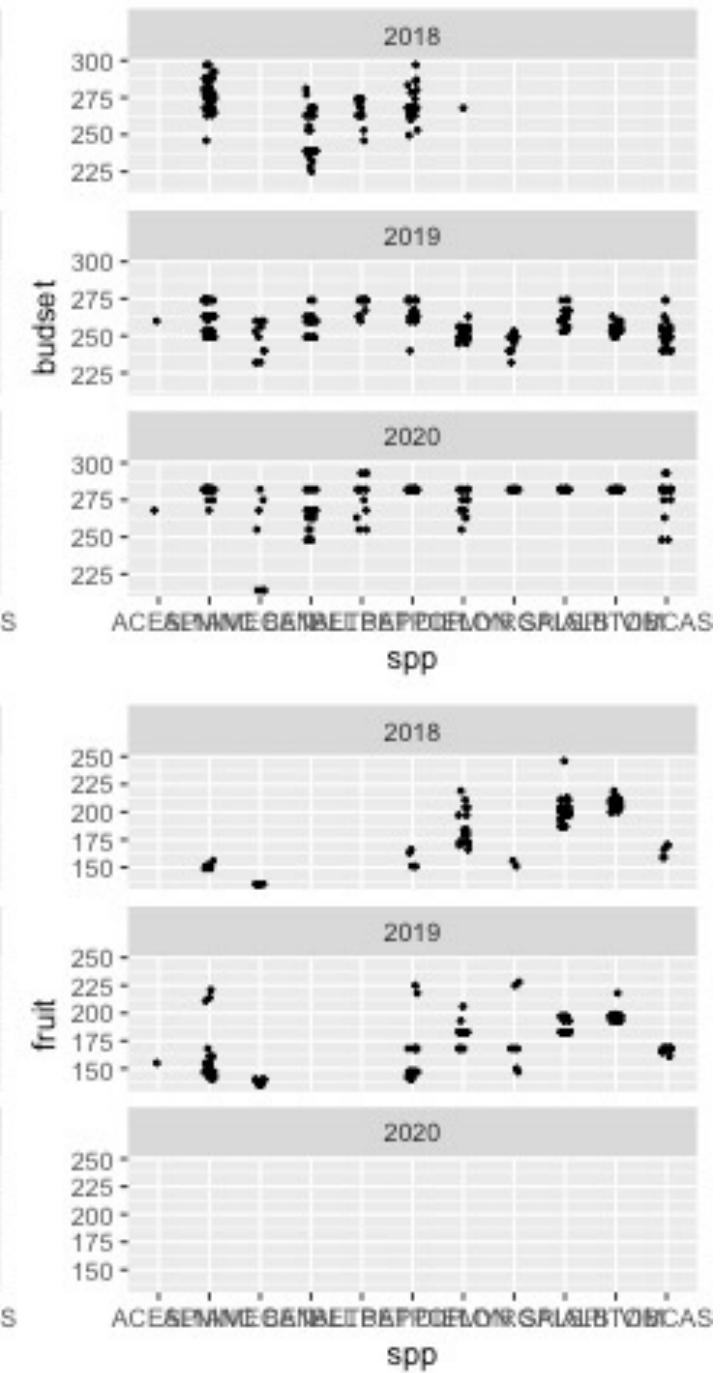
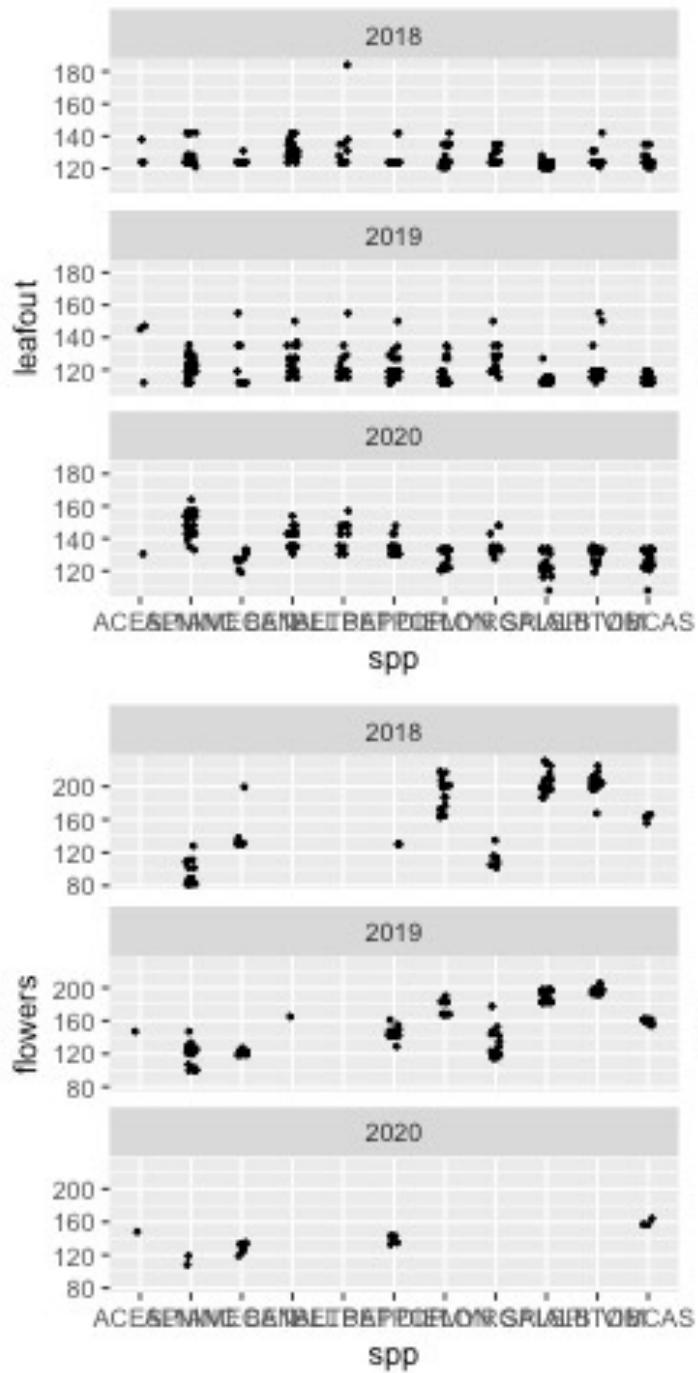


Wildhell Common Garden Phenology & Survival

Partitioning inter- and intra-specific variation

Take 1

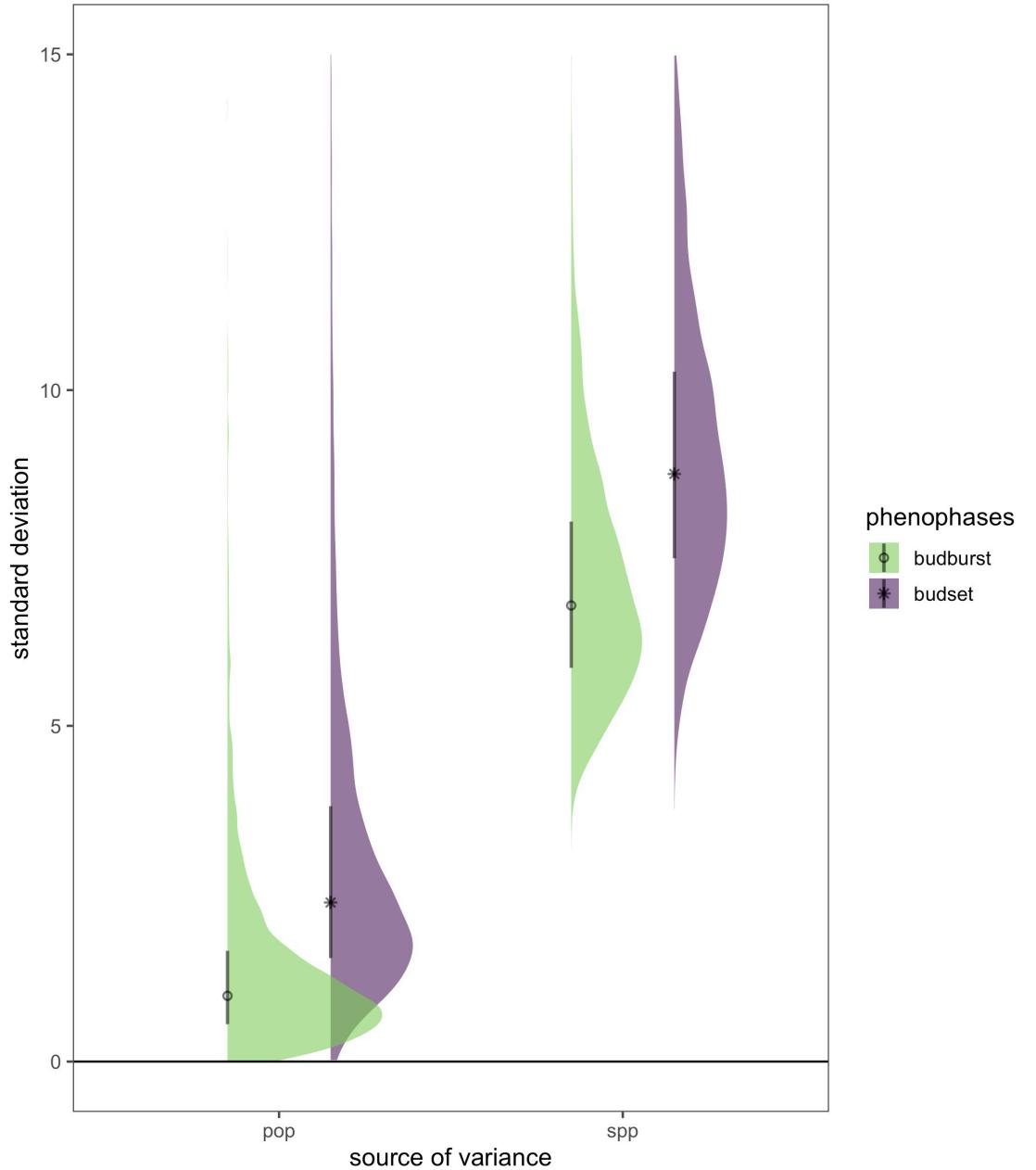
Data is patchy, but much better for vegetative phases



- General model: brms
- $\text{response} \sim \text{year} + (1 | \text{site}) + (1 | \text{spp})$
- Crossed-random effects with year as an ignorable covariate
- Responses include (survival (Bernoulli), doy phenophase, length growing season)

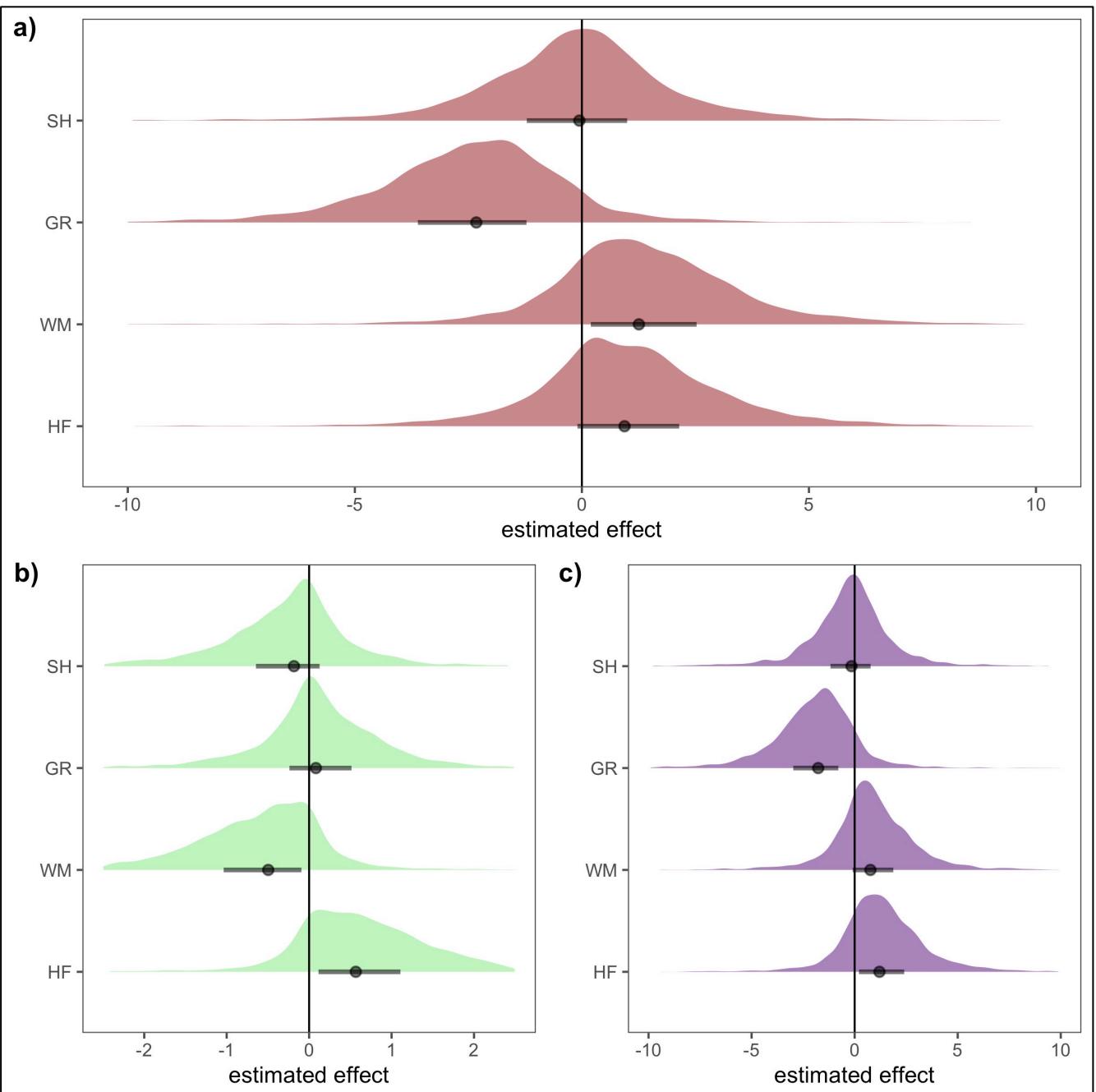
interspecific variation>intraspecific

locale adaptation: budset>budburst

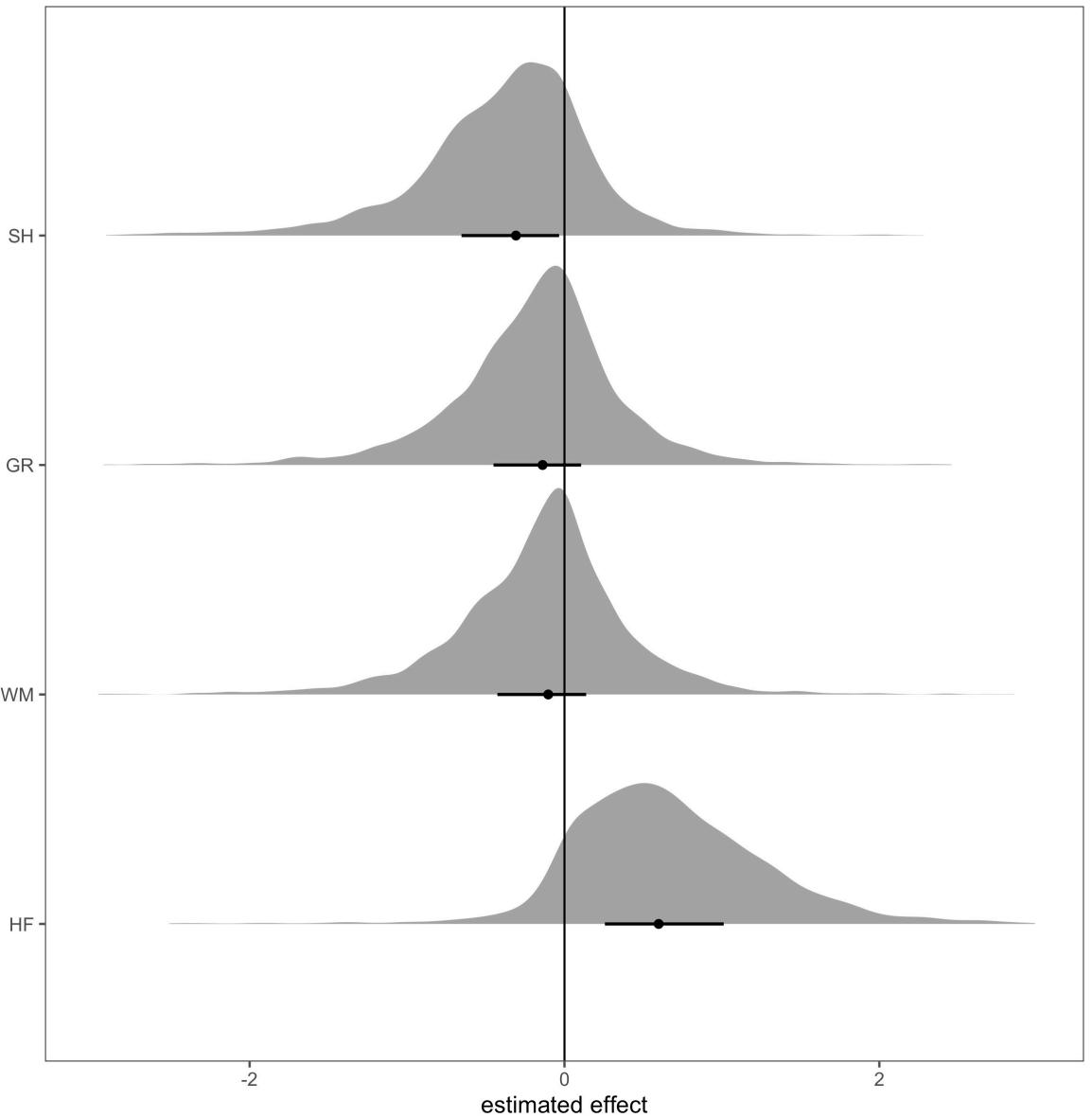


Southern-ish sites have longer growing seasons than northern ones
(a)

But due to different responses in budburst vs. budset (b, c)



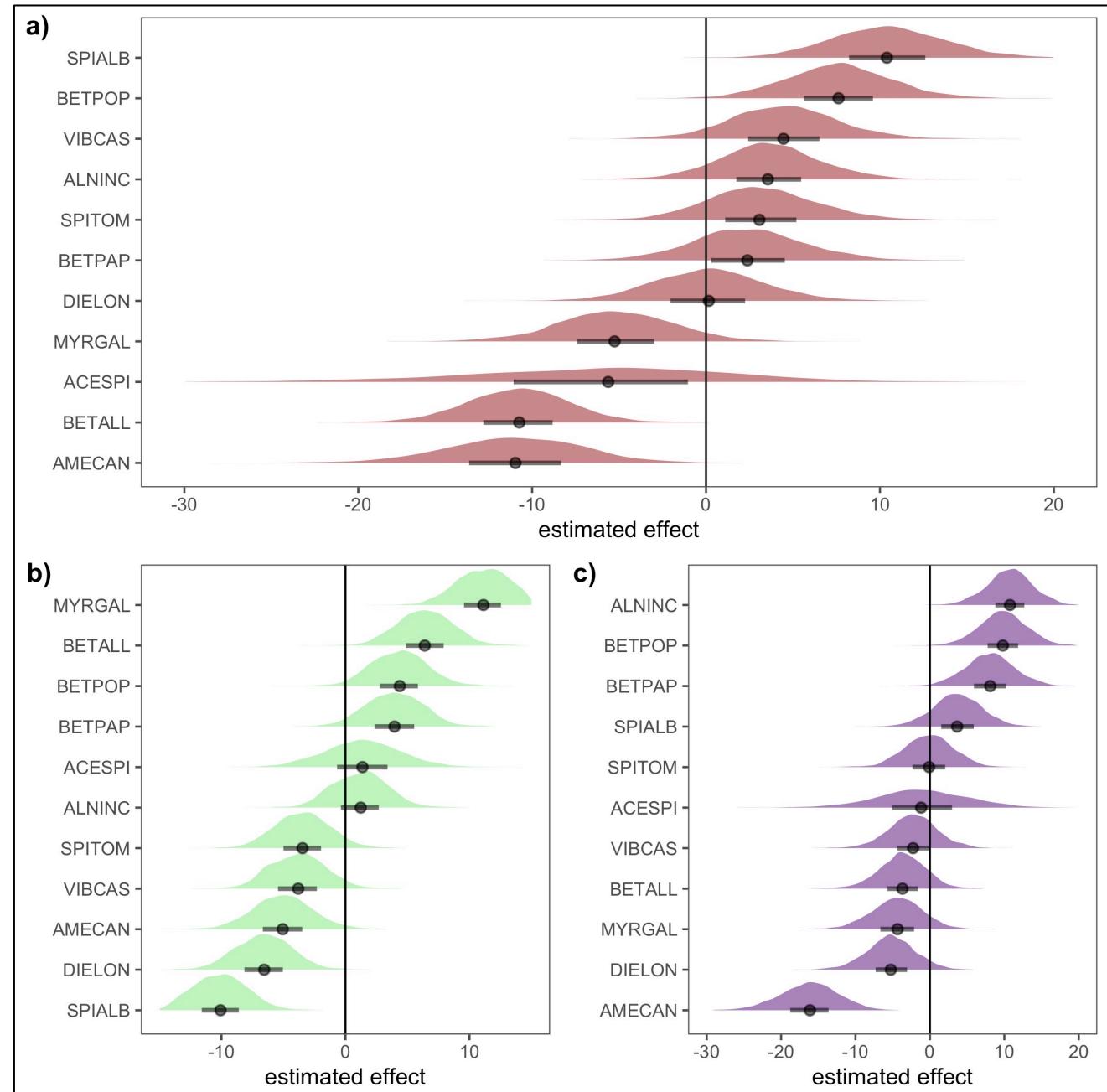
Survival was best at Harvard Forest, and
worst from St Hipp. (latitudinal cline
yay!)

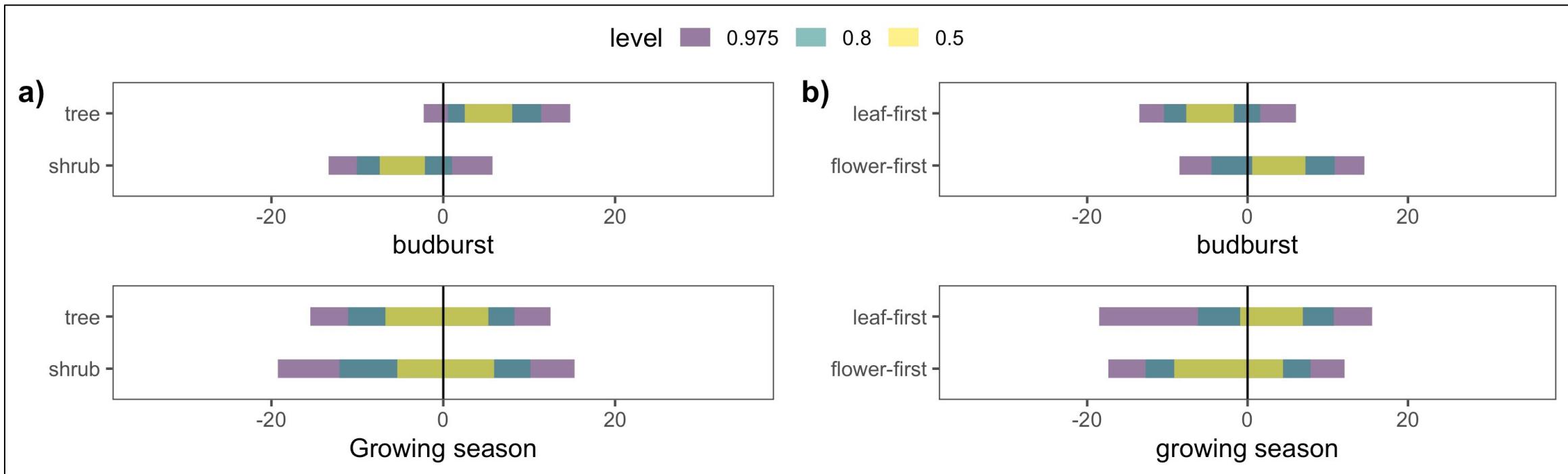


Strong species level differences in growing season a), budburst b), and budset c)

The latest budbursting species are all hysteranthous (b) suggesting there might be a trade off see next slide

alternative strategies for growth season extension: e.g. SPIALB, VIBCAS due to precocious budburst , BETPOP, ALNINC due to delayed budset.





Shrubs and seranthous species burst bud earlier, but this doesn't translate into a longer growing season

Strong species level differences in survival

No off the cuff diagnoses from me

