

# Supplementary Material

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## Extended methods

## Additional results

## Tables and Figures

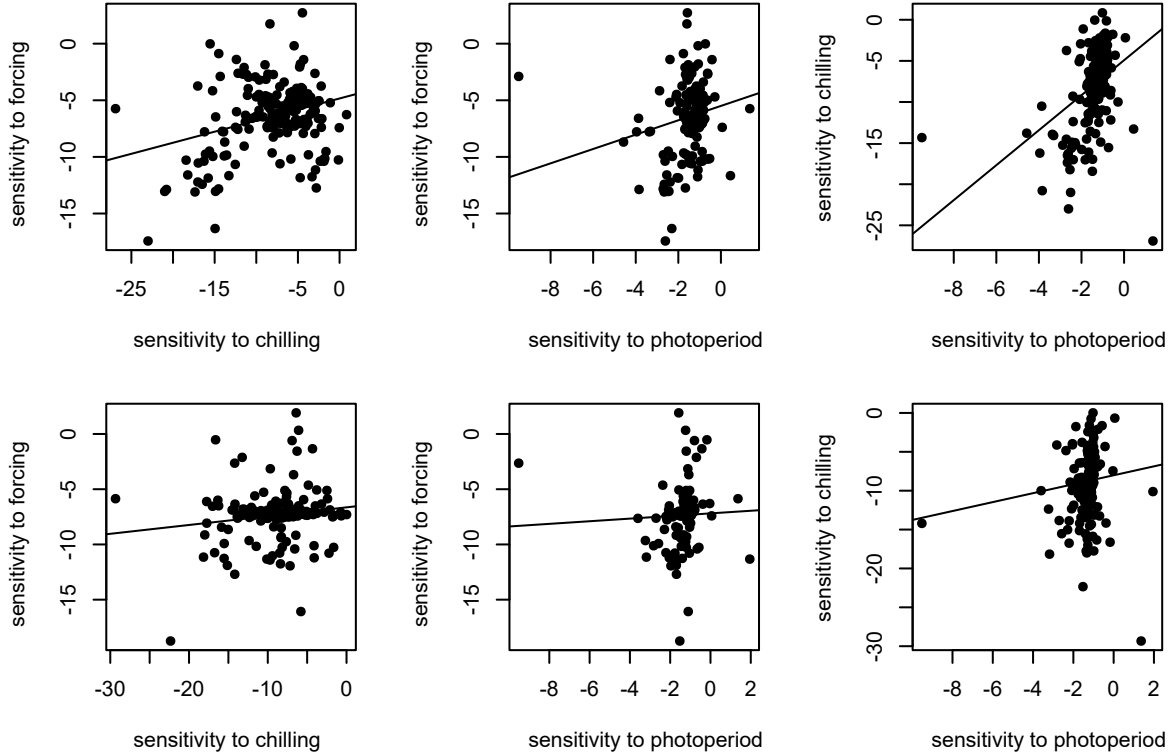


Figure 1: Correlations among estimated sensitivities to the environmental cues comparing forcing vs. chilling (a,d), forcing vs. photoperiod (b,e) and chilling vs. photoperiod (c,f). Note that the color scale varies in each panel. Total tree depth is 81. My.

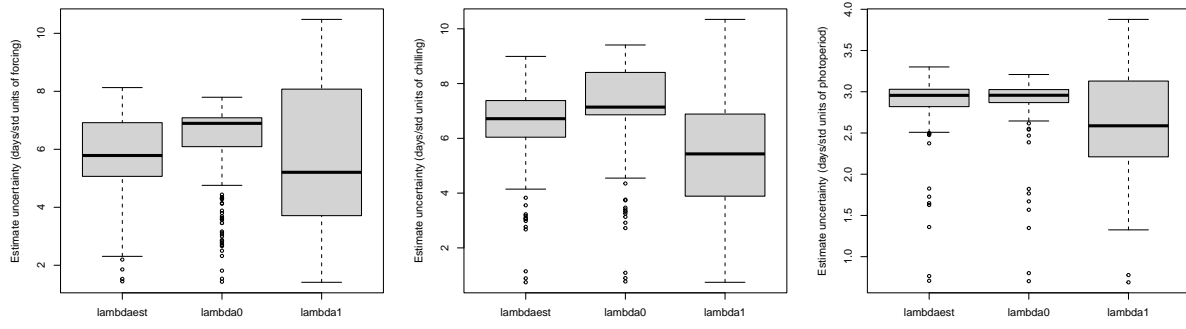


Figure 2: Phenological sensitivity to thee environmental cues, forcing (a), chilling (b) and photoperiod (c) measured in change in days to budburst per standardized unit (z-transformation) of the cues across 19 gymnosperm species. The same phylogenetic tree is shown in each panel, colored according to an estimation of ancestral character states, being the states at the tips the model slopes of our hierarchical phylogenetic model. Note that the color scale varies in each panel. Total tree depth is 81. My.

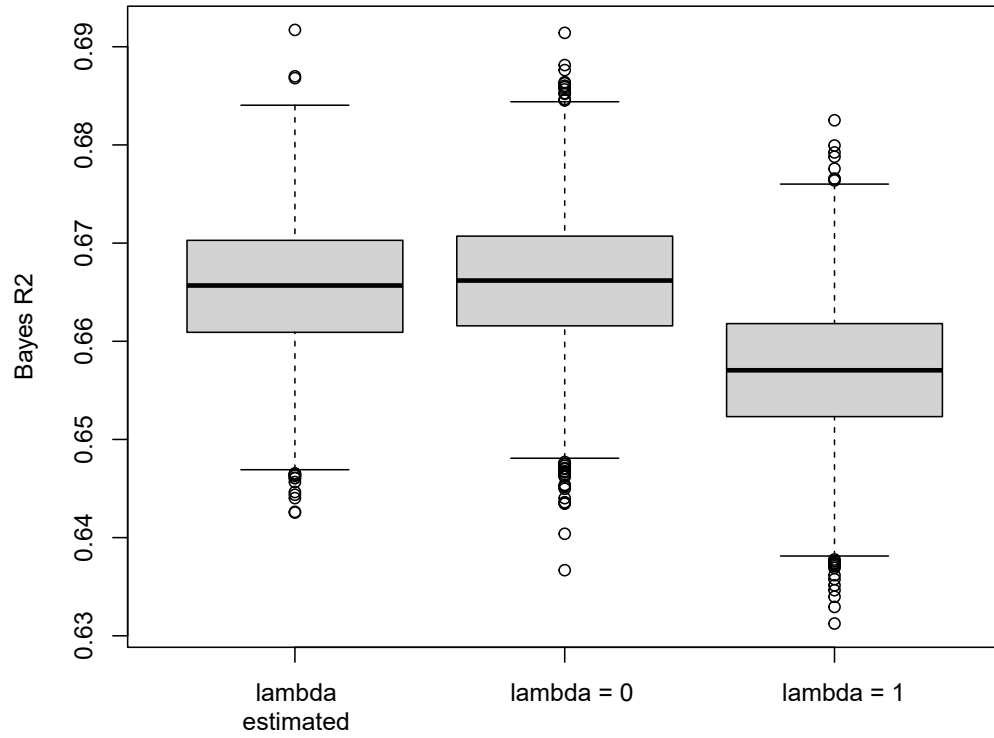


Figure 3: Density plots for the posterior distribution of phylogenetic signal measured by lambda for each cue included as a predictor in the model for angiosperms: forcing (red), chilling (blue), photoperiod (orange) and for the model intercept (grey). Panels correspond to angiosperms (a-d) and gymnosperms (e-h). Note that lambda estimations corresponding to panels c-d and g-h as they are constrained to be either equal zero or equal 1.