Within individual woody plants are flower and leaf phenophases initiated by the same cues? If so, we would expect to see the lag between leaf and flower pheonophases remain relatively constant even as cues change.

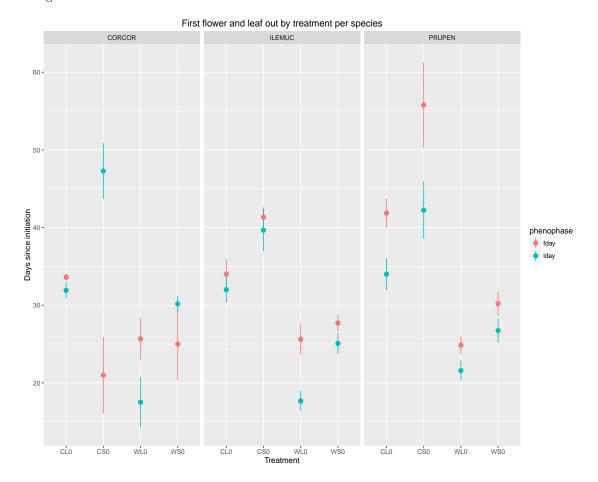


Figure 1: Mean first flower and mean leafout plotted by cue treatments for three deciduous shrubs

Of particular interest, the we see that when exposed to short photoperiod, Corylus cornuta switches between seranthy and proteranthy. However the data might be deceiving. Under WSO 3/4 flowerers flowered on the same day as their leafout, and 1 that flowered after 12 days (leafed at 34) is driving this trend. For CSO, 4 out of 5 are indeed proteranthous, with the 5th emerging on the same day. For WLO, the trend is consistantly seranthous, but 9/10 plants that leafed out also flowered (which is double the other treatments). CORCOR is reported to be proteranthous in the field. I also do not know if the flowers describes in our experiement are female or male flowers. I am pretty sure that the female flowers of C. cornutacould be conpound floral-vegetative buds like in the European Hazelnut. There is a good paper in my zotero by Shawn Mehlenbacher that addresses the chilling requirements. Which leads me to the next quesition,. if we think chilling is so very important from Dan's work, is it silly not use species(2 or of the 3) that we dont have chilling data for?

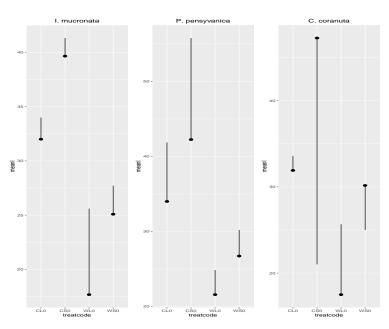


Figure 2: The temporal offset between mean first flower and mean leafout by cue treatment for 3 deciduous species. The solid points \bullet show mean leafout and the open ends of lines | mean first flower