

Limiting cues: How spring warming, winter chilling and daylength will shape climate change responses

THE LAB AS IT WAS IN 2017^{1,2}

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1 Overview of OSPREE

Studies versus papers ... how many crops versus wild species

We built the Observed Spring Phenology Responses in Experimental Environments (OSPREE) database, by searching both ISI Web of Science and Google Scholar the following terms:

1. TOPIC = (budburst OR leaf-out) AND (photoperiod or daylength) AND temperature*, which yielded 85 publications
2. TOPIC = (budburst OR leaf-out) AND dorman*, which yielded 193 publications

2 Trends in experimental treatments over space

The actual cues studied varied across latitude with a general trend toward examining more extreme values at higher latitudes. Thus, forcing and chilling treatments decline 0.1°C per 1 ° latitude (for forcing, min is -0.1, for max it's -0.06, see Fig 3; for chilling it's -0.06 for min and -0.09 for max); and the maximum studied photoperiod increases with latitude (0.09 hr per degree ° latitude).

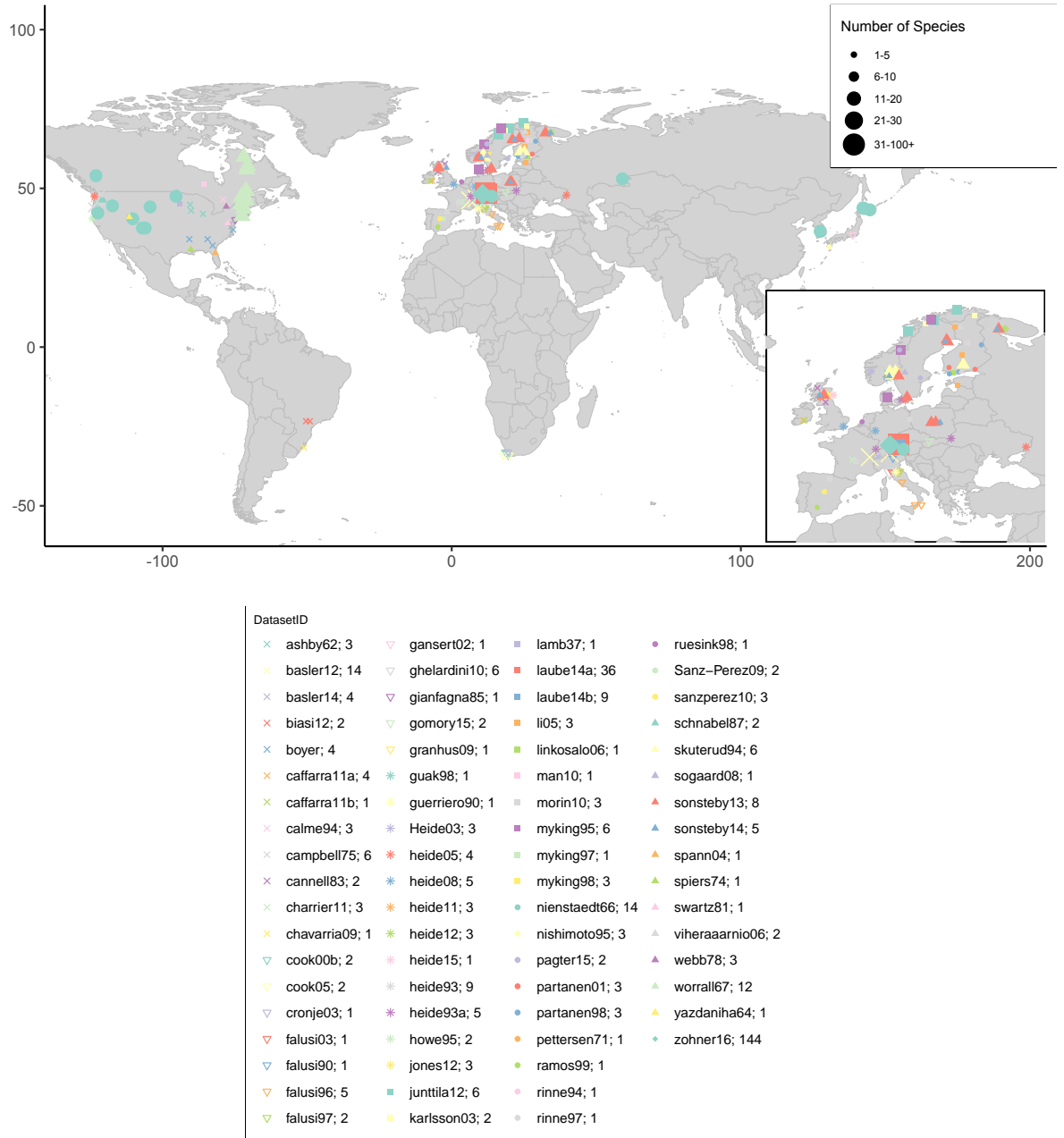


Figure S1: We review seven decades of controlled environment studies, from 1950 to 2020, conducted across the globe generally on 1-3 species in each experiment (size of circles and exact number of species given after each study).

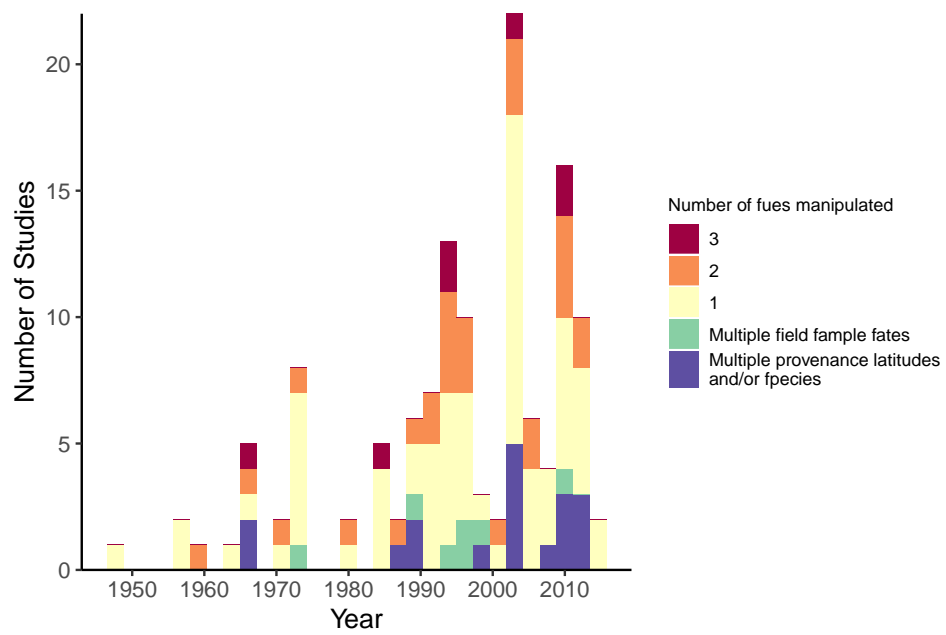


Figure S2: Cues manipulated over time.

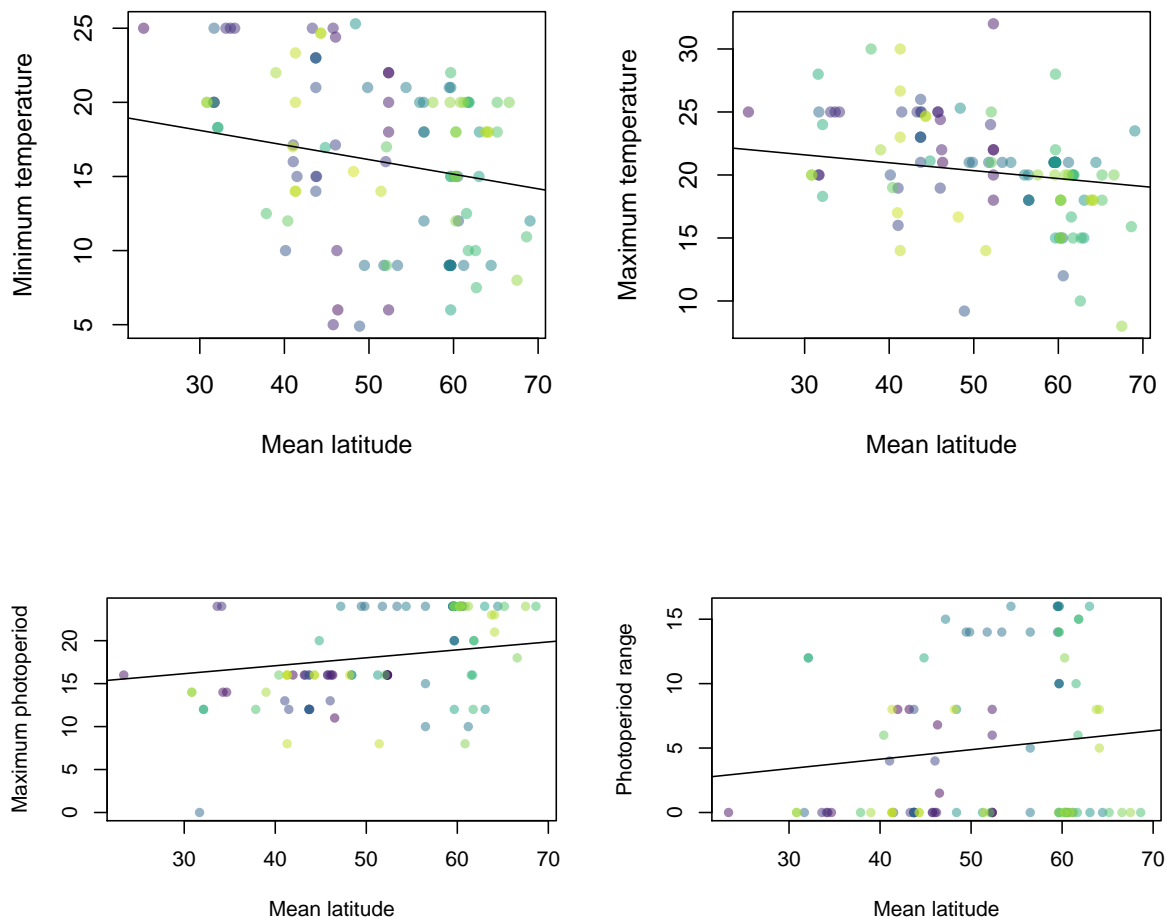


Figure S3: Some correlations with latitude plots.