

Methods

EGRET database

A systematic review was conducted to identify and analyze experimentally controlled germination trials reported in the scientific literature. The search was performed using the ISI Web of Science database with the following search terms:

TOPIC = ("germination rate" OR "germination tim*" OR "mean germination time" OR "t50" OR "time to germination") AND ("chill*" OR "stratification")

The search was conducted on May 27 2022, and yielded a total of 1,360 results. Out of these, 1,203 research articles were selected for the initial review process, where their abstracts were evaluated.

Articles were excluded if:

1. study species were crops, e.g. cultivated varieties that underwent anthropogenic selection altering dormancy traits
2. treatments didn't include environmental variables
3. studies were conducted in the field, i.e. no controlled environments
4. treatments were pooled, sequential or in other ways not clearly distinguishable
5. written in a languages other than English
6. reminder for future: what do we do with studies without error

These selection criteria resulted in 246 studies, including 0 species.

Data were extracted from tables and text sources. In cases where figures were used, the software imageJ was used for data extraction. Data from figures with poor quality or overlapping datapoints were not further considered.

Decisions on the way to analysis

We assumed that authors report % germination as relative to the total number of (we assume) viable seeds at the start of the experiment and discarded data that reported % germination relative to some other seed number.

Seed dormancy classes

Classes of Seed Dormancy were downloaded on Nov 29 2023 from https://docs.google.com/spreadsheets/d/e/2PACX-1vQT6PoytQP3NP5RyoMb3zSXxoMmNj6rdkkyTv5CjE-jdqeovJJcEVr80GND_L9P0nvYgdcepDACL8HX/pubhtml