Results:

* Figure 1: phenological response of each local population of each species. Local populations in gray, continental averages in color, with standard error bars.
  + 1a. germination rate
  + 1b. germination date
  + 1c. growth rate
* Figure 2: germination rate by temperature, origin, and stratification length for each species, with standard error.
* Figure 3: germination date by temperature, origin, and stratification length for each species, with standard error.
* Figure 4: growth rate by temperature, origin, and stratification length for each species, with standard error.
* Figure 5: plasticity
  + 5a. germination rate plasticity
  + 5b. germination date plasticity
  + 5c. growth rate plasticity
* Supplement: height vs. number of days since germination for each individual, fitted with a linear fit line for each continent. The slope of this line was treated as the growth rate.
* Tables
  + Table 1: Output of hierarchical mixed-effects model of germination rate for each species. Stratification length (days), temperature (degrees Celsius), and origin were modeled as fixed effects, while local population and individual were modeled as random effects
  + Table 2: Output of hierarchical mixed-effects model of germination date for each species. Stratification length (days), temperature (degrees Celsius), and origin were modeled as fixed effects, while local population and individual were modeled as random effects
  + Table 3: Output of hierarchical mixed-effects model of growth rate (linear fit model in cm/day—see supplementary figure 6) for each species. Stratification length (days), temperature (degrees Celsius), and origin were modeled as fixed effects, while local population and individual were modeled as random effects.
* *Germ Rate*
  + On average, 70-100% of each species germinated, except CAPBUR which showed much lower germination rates, especially for the American origin. Germination rates for most species were similar for the USA and Europe, except CAPBUR and PLAMAJ which seeds from Europe germinated better (see figure 1a)
  + Germination rates did not significantly depend on stratification length, germination temperature, or European/American origin for any of the species except *Plantago major* and *Plantago lanceolata* (see figure 2, table 1)*.*
  + The difference in germination rates between the origins was lower when stratified longer for PLAMAJ (originUSA:strat, t152=2.3319, P<0.05) and PLALAN (originUSA:strat, t602=1.9841, P<0.05) (see table 1).
  + The difference in germination rates between origins was lower at higher temperatures for PLAMAJ (originUSA:temp, t152=2.1514, P<0.05) and for PLALAN (originUSA:temp, t602=2.1509, P<0.05) (see table 1)
  + PLALAN germination rate was affected by origin, stratification, and temperature (originUSA:temp:strat, t602=-2.1145, P<0.05)
* *Germ Date*
  + Overall, CHEMAJ germinated much later than other species (see figure 1b).
  + Days to germination did not significantly depend on stratification length, germination temperature, or European/American origin for any of the species except *Plantago lanceolata* (see figure 3, table 2)*.*
  + *PLALAN*
    - PLALAN germination date dependent on stratification, temperature, and origin (originUSA:strat:temp, t414 =-2.0995, P<0.05) (see table 2).
    - PLALAN germinated later when stratified for longer (strat, t414=3.4271, P<0.001) (see table 2).
    - But the effect of stratification on germination date was lower at higher temperatures (strat:temp, t414 =-2.7316, P<0.01) and for the American non-native origin (originUSA:strat, t414 =-2.13297, P<0.05) (see table 2)
* *Growth Rate*
  + All species had average growth rates between 0 and 0.15 cm/day, except DACGLO, which had a significantly higher growth rate of ~0.35 cm/day.
  + PLALAN
    - The non-native American origin of PLALAN grew faster than the European native origin (strat, t11 = 2.6491, P<0.05)
    - The difference in growth rates between origins was lower at higher temperatures (originUSA:temp, t382 = -2.5594, P<0.05) and at longer stratification lengths (originUSA:strat, t382 = -1.96895, P<0.05) (see table 3, figure 4).
  + PLAMAJ
    - PLAMAJ grew faster at higher temperatures (temp, t137 = 2.6934, P<0.01) (not supported by figure) and when stratified for longer (strat, t137 = 4.6101, P<0.00001) (not supported by figure). The differences across stratification treatments was smaller at higher temperatures, and the differences across temperature treatments was smaller at longer stratification (temp:strat, t137 = -5.8189, P<0.00001) (see figure 4, table 3)
  + CHEMAJ
    - Nothing significant
  + DACGLO
    - Nothing significant
  + RUMCRI
    - RUMCRI growth rate dependent on temperature, stratification, and origin (originUSA:temp:strat, t133 =5.04731, P<0.00001)
    - RUMCRI grew faster at higher temperature (temp, t133 =2.7810, P<0.01). The difference in growth rate across temperatures was smaller for the non-native American origin (originUSA:temp, t133 =-6.0072, P<0.00001) and after longer stratification (temp:strat, t133 =-5.82286, P<0.00001) Not supported by figure
    - RUMCRI grew faster after longer stratification (strat, t133 =4.3343, P<0.00001). The difference in growth rate across stratifications was smaller for the non-native American origin (originUSA:strat, t133 =-4.116, P<0.0001) and at higher temperatures (temp:strat, t133 =-5.82286, P<0.00001) not supported by figure
  + CAPBUR
    - No sig effects
  + TAROFF
    - The difference in TAROFF growth rates across temperatures was lower at longer stratification, and the difference across stratifications was smaller for higher temperatures (temp:strat, t123 =-2.82873, P<0.01)