How Flowering Phenology Has Evolved From Coast to Mountain Top

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Introduction

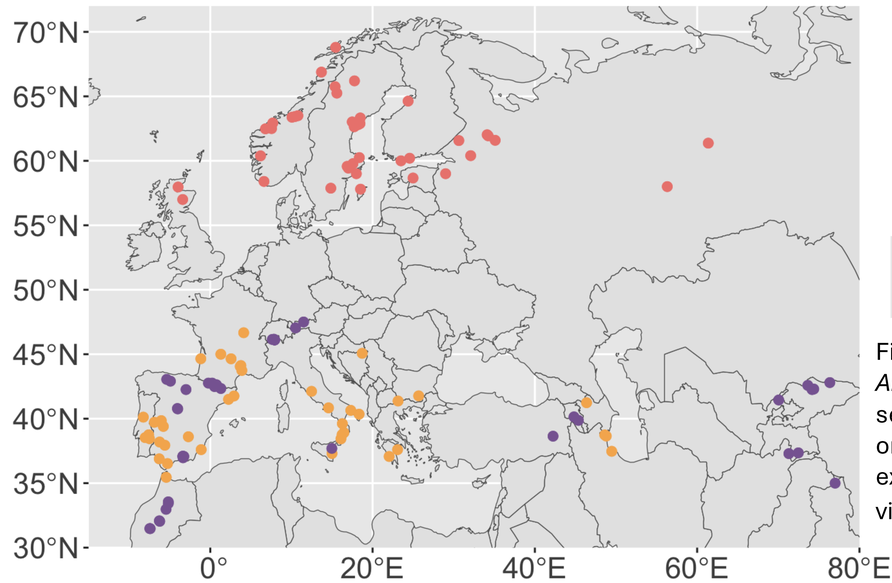

Figure .1 Map of *Arabidopsis thaliana* seed collection origin sites. One site excluded for better view.

- Flowering time is crucial to ensure reproduction when conditions are optimal.
- In low atlitude/ latitude areas the environment where plants experience drought, we expect a faster flowering period to reproduce before drought.

Conclusion

- Takeaways: Low Alt/Lat plants have evolved to a have shorter flowering period.
- The data suggests flowering period is an adaptive trait, further studies are being done to test this hypothesis.

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Methodology

Flowering Period

Figure 2. Arabidopsis grown in growth chambers and exposed to vernalization for 8 weeks. Monitored daily for first flower and last flower.

Results

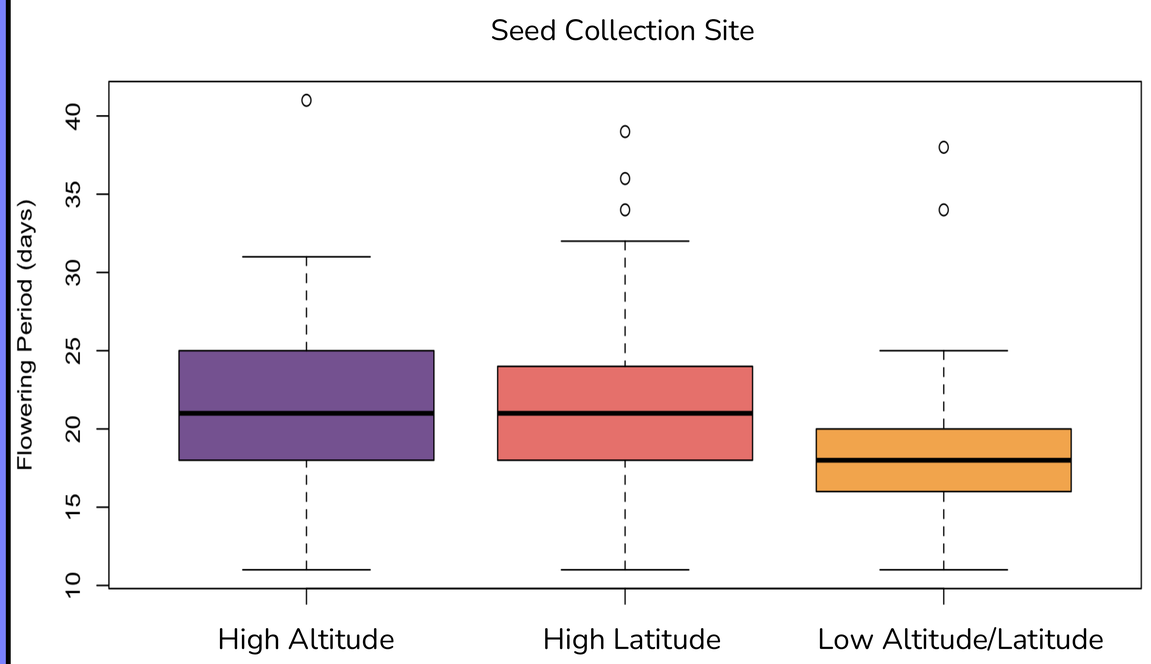

Figure 3. Boxplot showing flowering period and seed collection site.

- Low alt/lat plants have a 15% (3 day) shorter flowering period than high alt and high lat. Both high areas average a 21-day flowering period. P value=0.003