

Bridging the gap to resilience: A study on native plant propagation and consumer preferences

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Eastern Washington is home to diverse ecosystems that support plants and animals not found elsewhere. Unfortunately, little research has been done on the native plants found within Eastern Washington. Climate change is increasing the difficulty for gardeners and conservationists to find and grow them. The difficulty is compounded by issues involving seed sources, such as lack of supply, inconsistent demand, and dwindling access to wild populations. The first part of my research contributes to production information for *Frasera fastigiata*, *Erythronium grandiflorum*, *Fritillaria pudica*, and *Astragalus succumbens* by testing propagation techniques on seed. Treatments included 90/60/30-day cold moist stratification, mechanical scarification, sowing depth, and microbe presence. After 60 days only 90-day cold moist stratification of *Fritillaria pudica* ($p = 0.00$) and mechanical scarification of *Astragalus succumbens* ($p = 0.01$) showed significant effect on germination. The second part of my research involved constructing, administering, and interpreting a survey of seed source availability and preference to better understand current challenges faced by both producers and consumers within Washington state. The survey is ongoing, but we currently have received 53 of 998 possible respondents. Early results show variable impacts of timing, diversity, availability, and price as challenges to buying native seeds.