Utah report
Annual report for calendar year 2024 to the W6 Technical Committee
Paul Johnson, Utah State University

2024 report

PI	Contact Info	City	Species (no. accessions)	Common Name
Warnock, Caleb	calebwarnock@yahoo.com	Alpine	Taraxacum kok-saghyz (1)	Russian dandelion
Barga, Sarah	sarah.barga@usda.gov	Cedar City	Dalea searlslae (2)	
Behling, William	William.Behling@usda.gov	Logan	Festuca arundinacea (15)	Tall fescue
Palmer, Jakob	jakob.palmer@usu.edu	Logan	Nicotiana attenuate (32)	
Wang, Richard	richard.wang@usda.gov	Logan	Thinopyrum junceum (6)	Russian wheatgrass
McCampbell, Lowell	lowell@goingtoseed.org	Salt Lake City	Phaseolus lunatus (1) Phaseolus vulgaris (1)	Lima bean, bean
Nelson, Spencer	spencer_nelson@comcast.net	Salt Lake City	Ericameria nauseosa (1)	Rabbitbrush

Seven requestors from Utah placed orders for 59 accessions from the W6 program in 2024. Utah State University was the largest requestor this year followed by the USDA-FRRL, the US Forest Service, plus two individuals.

Notes:
Jakob Palmer at Utah State University commented that the "quality of the plant material received was excellent. I had very high germination rates for my seeds. I used the plant material to investigate how drought and insect diet breadth interact to impact herbivore performance." No publication yest but the experiments are being repeated and likely published in the future. Jakob notes: "The system is easy to use and the folks at NPGS are awesome to work with!"

Lowell McCampbell of Going to Seed commented " The quality of all the seed germplasm was good except for the peanut accessions. Several of these accessions had low germination, and one had no germination. Germination ranged from 90+ percent to 0. I noted that some of the seeds were wrinkled, as if they were harvested prematurely. This was used for a rice breeding project with a farmer as part of a grant program, Going to Seed…Unfortunately, the rice plants did not perform well under these conditions and failed to produce viable seed. The project was terminated." Other materials were for a a community grow-out, and the results can be viewed at: https://goingtoseed.org/pages/melons. Seed was offered to program participants in a mix titled: "Landrace Discovery Mix": https://goingtoseed.org/products/muskmelon2025.

Sarah Barga commented that the plant material she received were of excellent quality and was being used to study different soil matrices for the outplanting of forbs. She has had great experiences with the NPGS system.

2021 follow-up report

PI	Contact Info	City	Species (no. accessions)	Common Name
Matthews, Grason	grasonmatthews17@gmail.com	Deweyville	Lupinus mutabilis (1)	Andean lupine
Robbins, Matthew	matthew.robbins@ars.usda.gov	Logan	Festuca brachyphylla (13)	Alpine fescue
Winkler, Daniel	dwinkler@usgs.gov	Moab	Encella farinose (4); Lupinus sparsiflorus (1); Psilostrophe cooperi (2)	White brittlebrush; Coulter's lupine; white-stem paper flower
Laney, Alma	alaney@uvu.edu	Orem	Medicago sativa (5)	alfalfa
Jarvis, David	david_jarvis@byu.edu	Provo	Bromus ciliatus (1); Cyperus fendlerlanus (1); Dysphanla graveolens (2); Machaeranthera tanacetifolia (1)	Fringe brome; Fendler flat sedge; none; Tahoka daisy
Larson, Chelsey	chelsey71@icloud.com	Roy	Rheum x rhabarbarum (25)	pieplant

Seven requestors from Utah placed orders for 56 accessions from the W6 program in 2021. Tree L Farm was the largest requestor this year followed by the USDA-FRRL and the USGS..

Notes:

Grason Matthews commented that the "quality was good the germination rates were lower than expected but overall good." The materials requested were used in attempts to cross for frost resistance and earlier photo periods while maintaining a semi-decent ability to breed further with the potato. No publications or releases have occurred.

Alma Laney noted the "quality was excellent with good germination and growth after germinating." It "is being used for plant virus research with undergraduates to help characterize several new legume viruses we've found in the state." She presented research that used this material at Plant Health 2023: Hess, R., Zahn, G., and Laney, A.G. 2023. Identification of novel viruses in yellow sweet clover in Utah. (Abstr.) Phytopathology 113:S3.1. https://doi.org/10.1094/PHYTO-113-11-

S3.1. No publication to date yet. She also noted that "the NPGS is a wonderful resource that has allowed undergraduate students the opportunity to conduct high level research."

Matt Robbins noted the following:
"I ordered a total of 13 accessions all of the same species, Festuca brachyphylla, in 2021 from NPGS. Two accessions were the same, just under different names, so 12 unique accessions. The seeds were packaged well and all seeds were sowed in standard media in greenhouse conditions. All but two accessions germinated well enough to provide enough plants to trial. The percentage of seeds from each accession that reached the seedling stage ranged from 0% to 63% with an average of 38.25%."

"The seed was used for a single-plant based field evaluation for potential as a non-irrigated, low-input turfgrass. Seeds were sown in standard greenhouse conditions, then transplanted to a field location near Logan, UT in the spring of 2022. Plant were evaluated in 2023 and 2024 for turf characteristics such as size, color, heigh, width, growth habit, regrowth, and potential seed yield. Selections were made in the spring of 2025 that will used in a crossing block for further evaluation and development."
No releases to date. Selections were made to use in future crosses for a possible future release.