

Procedures and Policies Roadmap

A guide to resources at the US Potato Genebank updated October, 2020

Introduction: The service of the US Potato Genebank extends beyond germplasm to information about the characteristics of germplasm, its handling, best use, and proven administrative policies. This document is meant to serve as a modular and dynamic searchable index for a broad array of resources.

<p>Accession information. The link given at “Ordering Germplasm” provides categorized holdings of USPG. It also provides a link “GRIN Global Search Page” which allows a search box for any individual germplasm items (accessions as PI numbers) or species... https://npgsweb.ars-grin.gov/gringlobal/search.aspx</p>
<p>Administration. USPG is a cooperative program of the USDA/ARS, University of Wisconsin, and a Multistate Research Project, NRSP6. In addition to the Staff page, the following links lead to comprehensive treatments of the policies, procedures, and staff with respect to those three entities...</p> <p>USDA/ARS: https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/</p> <p>UW: https://horticulture.wisc.edu/contact-us/</p> <p>NRSP6: https://www.nimss.org/projects/view/mrp/outline/16896 and archived project reports, budgets, and minutes at... https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/administrative-reports-cgc/</p>
<p>Brochures. Links 3-4 at...https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/more-about-the-USPG/</p>
<p>Collecting Procedures. Collecting expedition logs provide detailed descriptions of the objectives and methods, and outcomes of collecting initiatives. For example, on the page for PI 679929 (https://npgsweb.ars-grin.gov/gringlobal/accessiondetail.aspx?id=1943503), there is a hot link at the bottom, “Potato Collecting Expedition Log” that provides the full story of the collection of this accession from the wild.</p>
<p>Collection Reports for Bamberg Southwest Potato Collections: 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, March 2019 and 2019</p>
<p>Core accessions for species. Core subsets can be found at ... https://npgsweb.ars-grin.gov/gringlobal/descriptor/detail?id=73060</p>
<p>Crop status and Vulnerability. USDA created expert panels to advise on all aspects of the nation’s potato germplasm, the Potato Crop Germplasm Committee. The document at this link provides an up-to-date and thorough treatment, but also short “snapshot” summaries of the history, status, policies, and priorities for the genebank and related germplasm users... https://www.ars.usda.gov/ARSUserFiles/274/Bamberg%20TAC/CGC_PotatoVuln2020.pdf</p>
<p>Evaluation Data. As with taxonomy, a search for any particular PI or species will return a page with links to all evaluation data the genebank has collected through in-house or other studies.</p>
<p>Evaluation priorities and procedures. The Potato Crop Germplasm Committee has scouted and recommended high priority evaluation grants for the US Potato Genebank germplasm. A list of past funded projects is provided at... https://www.ars.usda.gov/ARSUserFiles/274/Bamberg%20TAC/CGC_ScreeningGrants1992to2019.pdf See also: “Scholarly Publications”.</p>
<p>Geographic Natural Origins. For example, access the page for PI 679929 (https://npgsweb.ars-grin.gov/gringlobal/accessiondetail.aspx?id=1943503). Source history provides the complete narrative or origin. It also provides a hot link “Map it” that flags the origin site of this accession on a map, and also every other accession of the same species in the genebank.</p>
<p>GMO Policy and Best Management Practices. A current statement is found here... https://www.ars.usda.gov/ARSUserFiles/274/Bamberg%20TAC/CGC_Minutes2019.pdf</p>
<p>Homepage. General introduction and mission of the genebank with links to many associated resources... https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/bamberg-lab/</p>

<p>Impact statements. These reports illustrate the accomplishments and priorities of the genebank. See links 1-2....https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/more-about-the-USPG/</p>
<p>NPGS Instructional Material. Links 6-8 at....https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/more-about-the-USPG/</p>
<p>Ordering germplasm. This page is a comprehensive guide to the available germplasm, and how to order it... https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/genebank-holdings/</p>
<p>Popular press reports. Popular news releases that explain, in layman's' terms, all aspects of genebank goals, philosophy, service, accomplishments...https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/in-the-news/</p>
<p>Scholarly publications. In addition, genebank staff do research on a broad array of topics. The resulting publications give an ideal sense of genebank priorities, and provide many details of techniques. These publications also list references to other useful related works. See Staff advice.</p>
<p>Staff advice. Asking an expert on the genebank staff may be the most efficient way to access policy and procedures and the most up-to-date and customized advice. On the following page, staff areas of expertise, and links to research staff CVs and publications. We welcome your contact... https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/genebank-staff</p>
<p>Taxonomy. A search for any particular PI or species will return a page with species name, hot linked to the complete record of the taxonomic history.</p>
<p>Techniques of germplasm handling. This link provides step-by-step illustrated instructions for the most common procedures needed to grow and use potato germplasm from USPG... https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/Techniques-of-Germplasm-Handling/ With respect to Tuber generation, the genebank provides clonal samples in the default form of <i>in vitro</i> plantlets because it provides the best phytosanitary security. However, to grow tubers in the best possible way, we provide our method here, as well as current offerings of such tubers...https://www.ars.usda.gov/midwest-area/madison-wi/vegetable-crops-research/people/john-bamberg/ad-hoc-tubers/</p>
<p>Tuber pictures and descriptions. As with Taxonomy and Evaluation, a search for any particular PI will return pictures and descriptions of that PI - if pictures exist.</p>