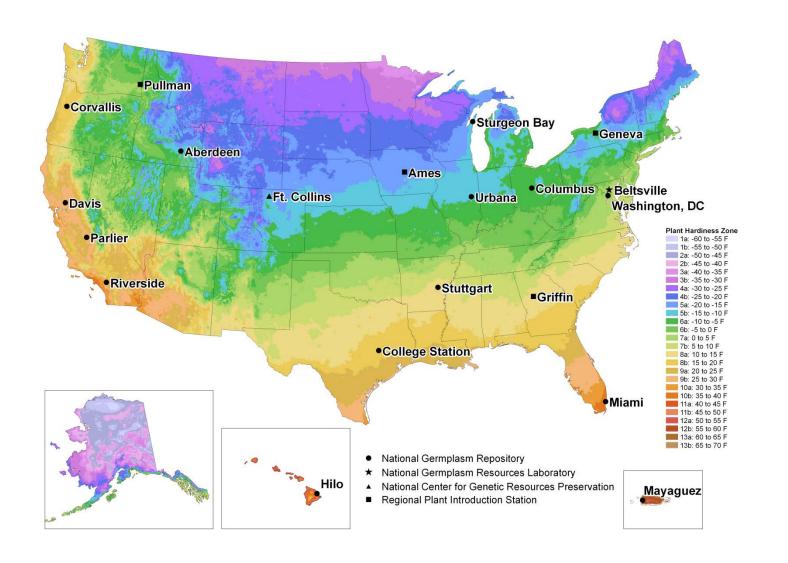
The National Plant Germplasm System: 2018 Status, Prospects, and Challenges

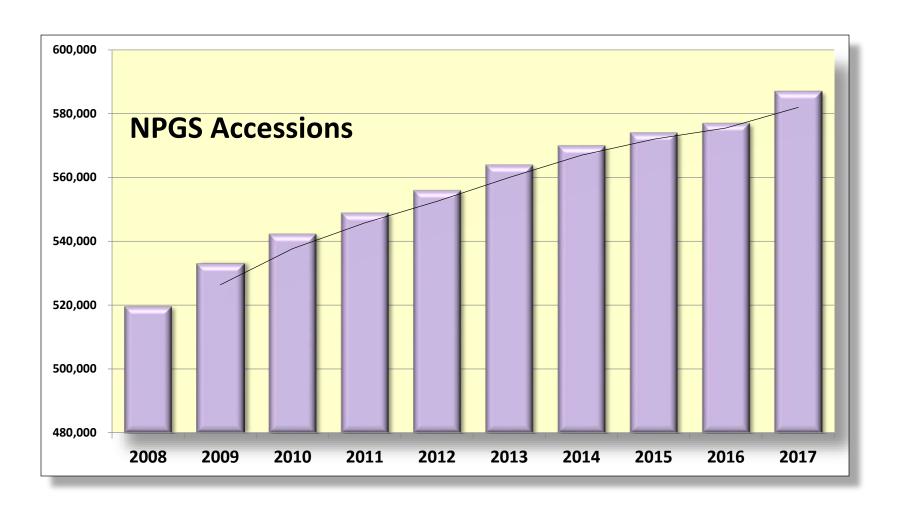
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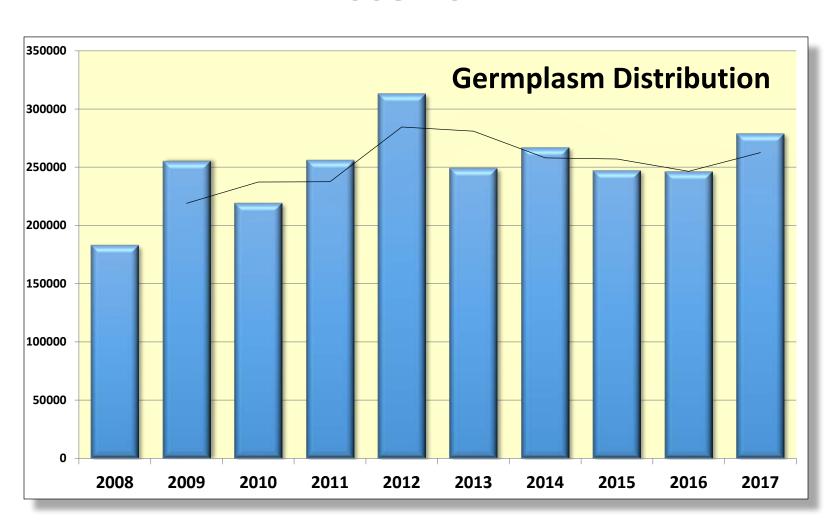
USDA National Plant Germplasm System (NPGS)



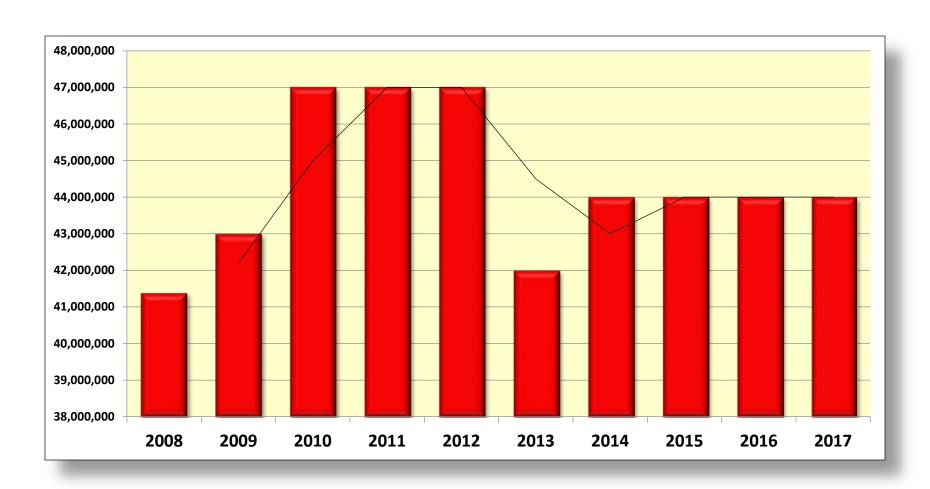
NUMBER OF NPGS Accessions 2008-2017



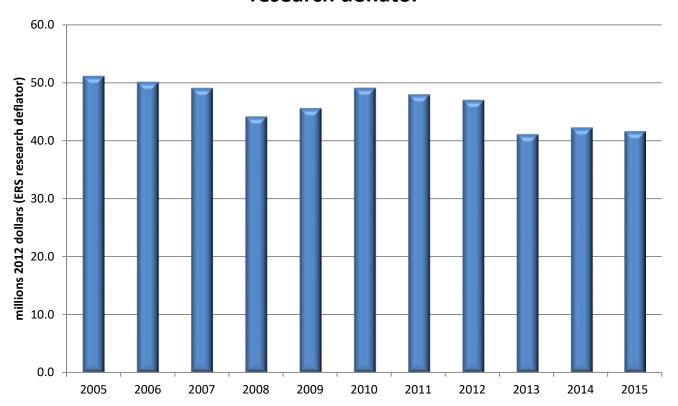
DEMAND FOR NPGS GERMPLASM 2008-2017



ARS NATIONAL PLANT GERMPLASM SYSTEM BUDGET 2008-2017



Real ARS National Plant Germplasm System Budget, 2005-2015, converted to 2012 dollars with ERS research deflator



Note: Deflator for 2015 is preliminary

Some key challenges for the NPGS

- Managing and expanding the NPGS operational capacity and infrastructure to meet the increased demand for germplasm and associated information.
- Recent and upcoming NPGS personnel retirements.
- Developing and applying cryopreservation and/or in vitro conservation methods for clonal germplasm.
- BMPs and procedures for managing accessions (and breeding stocks) with GE traits and the occurrence of adventitious presence (AP).
- Acquiring and conserving additional germplasm, especially of crop wild relatives.

Genetic Resource Management Priorities

- Acquisition
- Maintenance
- Regeneration
- Documentation and Data Management
- Distribution

- Characterization
- Evaluation
- Enhancement
- Research in support of the preceding priorities

Personnel Changes

- Farewell and best wishes to RLs Richard Percy (ARS-College Station), Randy Nelson (ARS-Urbana) and Gary Pederson (ARS-SRPIS, Griffin) for their retirements.
- Congratulations to Melanie Harrison (ARS-SRPIS, Griffin) for her promotion to RL.
- Farewell and best wishes to Merrelyn Spinks (ARS-SRPIS, Griffin; GRIN-Global, information management).
- Welcome and best wishes to Melanie Schori, new plant taxonomist for GRIN Taxonomy at NGRL, Beltsville.
- With hiring freeze lifted, we hope to hire additional staff in the near future.

Plant Genetic Resource (PGR) Management Training Initiative

- At least 1/3 of NPGS PGR managers could (likely will) retire within 5 years.
- Currently, no formal, comprehensive program exists for training new PGR managers.
- G. Volk (ARS-Ft. Collins) and P. Byrne (CSU-Ft. C.) secured a USDA/NIFA grant for a workshop at Ft. C. 24-26 April 2018 that discussed designing & developing a training program for PGR management to be delivered primarily through distance-learning.
- The workshop generated numerous insights; another grant (Higher Education Challenge) was already submitted to extend concepts and ideas from the workshop.