

# PGOC, NRSP-6, and Regional Plant Introduction Stations Update

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# Plant Germplasm Operations Committee

Upcoming teleconference June 19, 2013

- Due to travel funding concerns, PGOC decided in 2012 to meet by teleconference in 2013.
- March 20, 2013, PGOC teleconference on summary of NPGS project plan reviews.
- John Preece (RL Davis, CA) was elected as new PGOC Vice Chair and Joseph Postman (Corvallis, OR) will move up to PGOC Chair.
- NPGS Special Achievement Awards winners will be announced during teleconference.

# Plant Germplasm Operations Committee

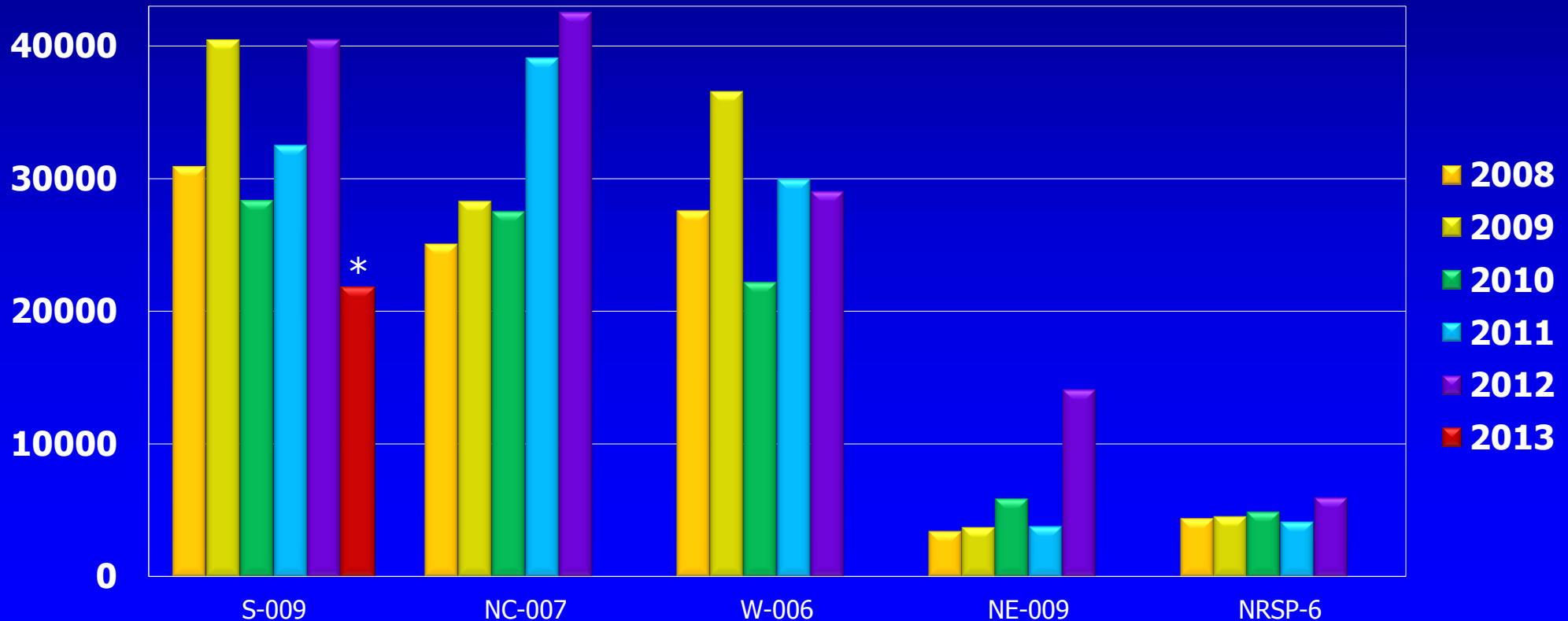
- Usual reports from NPS, Beltsville, Ft. Collins, and GRIN Global update
- PGO C Subcommittees
  - Reports on NPGS Operations manual update, acquisition and distribution, GRIN molecular markers, NPGS brochure update, GIS and georeferencing, crop wild relatives, phytosanitary certificates, GMOs, and gene patenting.
- Additional business
  - Response to non-research requests and disclaimer for x-PVP lines.

# Plant Germplasm Operations Committee

- Future PGOC meetings
  - 30% federal travel reduction and location budgets reduced by sequestration will impact future meetings.
  - Tentative 2014 meeting
    - National Clonal Germplasm Repository for Fruit and Nut Crops, Davis, CA
    - Joint PGOC meeting with 5<sup>th</sup> Curators workshop

# Distributions

- Over 1.16 million accessions and genetic stocks have been distributed in last 5 years by NPGS



\* Orders shipped (16,142) and/or received (5,610) by June 6

# NRSP-6



- Filmed documentary with Hungry Film Inc. on 20<sup>th</sup> anniversary of *Solanum* collecting in the southwestern U.S.
- Collected 20 wild *Solanum* sp. populations in AZ
- With cooperators, screened for golden flesh, yellow fry color, high antioxidants, frost resistance in Peru, anti-diabetes compounds, folate, potassium, tuber greening resistance, and appetite-suppress protein.
- Total orders increased by 20% in 2012.

# NE-009

- Continued outreach efforts with organic producers on seed production, processing, and cleaning.
- Evaluated 42 tomato varieties in replicated trials in OH, NY, and NC for tomato fruit quality observing differences and G x E effects for sugar, acid, vitamin C, and lycopene.
- Initiated genotype by sequencing project on over 2,000 apple and 130 tart cherry accessions.
- Continued cryo-storage of *Malus* and *Prunus* and added images of apple and tart cherry to GRIN.
- Increased distributions of tomato and other crops.

# NC-007

- Distributed large orders of *Helianthus* to Embrapa for disease and stress tolerance and *Linum* to Turkey for flax diversification.
- With cooperators, used genotype by sequencing to characterize 2,800 maize inbred lines and investigate relationships between accessions.
- Over 2,700 accessions were screened for sclerotinia resistance in the greenhouse with data in GRIN.
- Developed version 1.65 of Curator Tool of GRIN-Global currently being tested by NPGS personnel.



# W-006

- Acquired 1,942 native plant accessions from Seeds of Success project with BLM.
- Distributed seeds to requestors from all 50 states for the second year in a row.
- Evaluated segregating populations from crosses of high oil and high oleic acid safflower for cold tolerance.
- Conducted cooperative study with China evaluating pea and faba bean accessions for winter survival in Qingdao, China.

# S-009

- Completed installation of moveable storage shelves in new 4C cold storage room (21 x 30').
- Characterized entire U.S. collections including:
  - Seed oil content and fatty acid composition of kenaf, roselle, and two pumpkin spp.
  - Seed oil content in okra
  - Salt tolerance in zoysia
- Collected 25 switchgrass accessions in GA, NC, SC
- Due to TSWV susceptibility, peanut accessions were successfully regenerated in GA, FL, NC, OK, and NM with help from cooperators.

Seed processing building  
at Griffin prior to addition



New 4C cold room installed



New moveable storage shelves



New seed storage trays

