

# Plant Germplasm Conservation and Research:

A three-way partnership:  
ARS--CSREES--SAES

Background Material prepared by Ann Marie Thro with emphasis on CSREES programs  
in Plant Germplasm

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This document describes the multi-state project structure of CSREES collaboration in the National Plant Germplasm System (NPGS). Included are examples of activities funded; tables of measurable outputs for the most recent available years, FY 2003 and 2004; and tables of funding levels for the years FY 2000-2004. The document also describes additional CSREES-funded activities in the area of plant germplasm.

## Summary

The National Plant Germplasm System (NPGS) has responsibility for the conservation, maintenance, preservation, and use of the Nation's plant germplasm resources. The NPGS has its roots in the 19th century; yet converging political and technical factors make its collections more valuable today than at any previous time. The ability to use plant genetic diversity, quickly and with creativity, is an important part of this national asset.

Today's National Plant Germplasm System is a federal-state collaborative program with over 50 years of service to U.S. agriculture, although its antecedents trace back to the beginnings of USDA and the land-grant system. USDA-ARS has primary responsibility for management of the NPGS. CSREES provides significant funding to the NPGS, averaging over \$3 million/yr for the past five years, through Hatch Act Funds, both the Multistate Research Fund (MRF) (25% of the Hatch appropriation) and allocations to individual states.

The state agricultural experiment station (SAES) directors allocate an annual off-the-top amount from the annual Hatch Act appropriated funds managed by CSREES. This CSREES/SAES funding for the NPGS has been about 10 % of the total. It is contributed through support to five projects: four multi-state research projects and one national research support project. Over the past five years, these funds to NPGS, plus funds from individual state Hatch allocations, have averaged over \$3 million per year. Other funding sources are ARS (about 90% of overall NPGS support) and the individual host state of each project.

Decisions regarding the use of Hatch funds are made at the ESCOP and SAES levels. SAES participation in the NPGS is structured in four multi-state research projects and one national research support project. Members of these projects include the ARS staff of the regional active site, and SAES scientists. Typically, ARS project members conserve and curate plant germplasm, while SAES members realize its value through characterization, evaluation, and use. SAES project members also contribute advice to the regional active sites.

The state and federal scientists and administrative advisors who participate in the five ESCOP projects constitute a source of advice to NPGS management. They interact with over 40 public/private sector Crop Germplasm Committees (CGCs) and the Plant Germplasm Operations Committee (PGOC) coordinated by ARS.

Beyond the five collaborative projects that form the backbone of the system, the three partners --ARS, CSREES/SAES-- have significant additional investment in plant germplasm. ARS is the primary investor in plant germplasm conservation and curation. Both ARS and CSREES/SAES invest in research to characterize, evaluate, and use plant germplasm. The CSREES/SAES activities are funded by base (Hatch) funds and other sources, including competitive grants.

As a result of the funding allocation process, including the multi-state committee structure, individual state Hatch projects, and other funding sources, state/federal collaboration in NPGS is supported on various levels,

- in planning and managing the NPGS, and,
- in conducting the research through which the value of the NPGS is realized.