

## Executive Summary

This renewal proposal for NRSP6 is similar to the FY11-16 project (and all previous ones since the early 1950's), because what the genebank does and how it does it continue to efficiently fill a strong and growing national need for germplasm support for potato research and breeding.

As the most consumed and most valuable US vegetable, potato substantially influences the farm economy and environment in many states. High value-added processing and high and regular consumption gives potato significant impact in all states with respect to the food economy and citizens' health.

Because potato has more useful exotic germplasm than any other crop, there is much activity in federal, state, and private breeding and research programs using genebank stocks. Potato is a high input crop with many opportunities of improvement that can be addressed by germplasm. Potato is a prohibited import crop, so genetic resources already in the US genebank are the only ones readily available to germplasm users. Continuing restrictions on international germplasm collecting and sharing make what we already have at NRSP6 even more precious. NRSP6 is one of the premier potato genebanks in the world, and the only program in the nation responsible for providing these potato genebank services.

NRSP6 has a technical advisory committee that meets annually to review a detailed annual report, and NRSP6 undergoes a mid-term review. Performance of Wisconsin and USDA/ARS staff is also comprehensively reviewed twice per year in the federal 5-year CRIS project that almost exactly duplicates NRSP6.

This document details robust accomplishments over the past 5 years:

Requests for NRSP6 germplasm were strong and were promptly filled. We not only preserved the materials, but conducted R&D that showed ways to make genebank techniques more efficient. We have cooperated with and assisted federal, state, and private scientists to discover, characterize, and evaluate traits of interest to the industry.

For the FY11-15 project, ESCOP requested that NRSP6 demonstrate relevance by obtaining significant financial contributions from Industry. This has been fulfilled.

We are asking for continuation of \$150K per year in MRF funding. This maintains the *status quo*, being close to the average funding for the past 40 years. Of course, such long-term flat funding actually represents about a 50% reduction of historic support in terms of buying power.

Virtually all crop germplasm in the National Plant Germplasm System is genebanked in partnership with SAES. And although MRF funding of NRSP6 is only about one-fifth of total inputs from ARS, APHIS, UW, grants and gifts, about 27% of NRSP6 germplasm distributions go to SAES scientists. NRSP6 gives SAES ownership of a renowned genebank for one of the nation's main food crops, and its mission fills an ongoing national need with increasing returns on SAES investment.