

AMERICAN SEED TRADE ASSOCIATION



April 24, 2014

Chairman Barbara Mikulski
Ranking Member Richard Shelby
Senate Committee on Appropriations
Submitted via E-mail to FullCommittee@appro.senate.gov

RE: Support for Agriculture Research Funding

Dear Chairman Mikulski and Ranking Member Shelby:

The American Seed Trade Association respectfully submits the following comments on how Federal investments in agriculture research drive innovation. The goal of reducing the vulnerability of the U.S. and global food supply by increasing productivity and resiliency in major crops has been identified as a priority by a wide range of leading authorities including the President's Council of Advisors on Science and Technology. The work of the public and private sectors complements one another in our mutual goal to feed a growing global population. The private sector can not undertake the broad portfolio of long-term research that is needed to sustain the global food supply. In areas such as fundamental research, germplasm collection and maintenance, addressing emerging plant diseases and pests, training of scientists and international agricultural development the government's role is critical.

Founded in 1883, ASTA represents all varieties of seeds, including grasses, forages, flowers, vegetables, row crops and cereals. ASTA's diverse membership consists of over 700 companies involved in seed production, distribution, and plant breeding. We support the comments submitted by the National Coalition for Food and Agricultural Research and add the following background information on programs that are critical to innovation in the seed industry. Agriculture threats are constantly evolving and must be met with sustained investments in research by the federal government and private industry.

Agricultural Research Service (ARS) – National Plant Germplasm System (NPGS)

NPGS is a network of labs that preserve the genetic diversity of crop plants. Scientists must have access to genetic diversity to help bring forth new varieties that can resist pests, diseases, and environmental stresses. The NPGS collects unique plant germplasm from all over the world and provides access to it for plant breeders in the U.S. and globally. Despite its vast impact, the NPGS is only modestly funded at \$48 million. ASTA and its members strongly believe that lack of funding is a significant threat to the functionality and utility of the current collection and as such ASTA recommends increased funding to \$72 million to strengthen the National Plant Germplasm System (NPGS). Strengthening the NPGS is key to developing new varieties to address production

challenges in the U.S. and around the globe. Long-term, continuing to have insufficient funding for NPGS will have a devastating effect.

Agricultural Research Service (ARS) National Plant Germplasm System (NPGS) Germplasm Enhancement of Maize (GEM)

GEM is a unique public-private partnership that focuses on adapting exotic corn germplasm for use in the U.S. and identifying useful genetics in exotic landraces to develop new hybrids. These resources are then made available to any breeders who request them. The demand by researchers for corn genetic resources held at the leading ARS genebank housed at Iowa State University in Ames, Iowa is among the highest for any germplasm bank in the world, with 25%-40% of its holdings distributed annually.

The continued success of American agriculture is intimately linked to corn production with USDA estimating 13.92 billion bushels were harvested in 2013. However, U.S. corn production is based on predominantly one race of maize from more than 250 New World races. This limited genetic diversity renders the U.S. corn crop, and therefore, the global food supply, more vulnerable to attack by new diseases.

The ability of companies to mine the genetic information within exotic species is increasing every day. Demand for maize germplasm will continue to increase in the future due to the need for new traits in the face of changing climates, the desire to continue to increase yields sustainably and the growing use of corn seeds and crop residues as a fuel feedstock.

The current funding for GEM is approximately \$1.6 million. Private industry provides over \$625,000 of in-kind support annually for this effort and industry germplasm contributions to GEM are currently valued at over \$3 billion.

USDA-Natural Resources Conservation Service Plant Material Centers


The network of 25 Plant Material Centers across the country seek out and test plants and plant technologies that restore and sustain healthy natural regional ecosystems. A key function of the centers is to evaluate plants for conservation traits and to make these materials available to commercial growers who provide plant materials to the public.

The materials developed by the Plant Material Centers are critical to many USDA goals including improving soil health, increasing pollinator and wildlife habitat and expanding the availability of new cover crop solutions. In addition, materials developed by the Plant Material Centers have been used to stabilize shorelines and restore critical landscapes.

Nationwide, of the 700 plant material centers' releases, 500 are currently under commercial production. This work can't be duplicated by the private sector seed industry which lacks the resources to develop and test materials to address such an extensive range of concerns for the entire United States. Current funding is \$9.4 million.

ASTA members would be happy to provide additional information to you, please contact Jane DeMarchi, vice president for government and regulatory affairs via e-mail at jdemarchi@amseed.org or via phone at 703-837-8140.

Sincerely,

A handwritten signature in black ink that reads "A. W. LaVigne". The signature is written in a cursive style with a large initial "A" and a long, sweeping underline.

Andrew W. LaVigne
President & CEO