ASTA Supports Innovation

The seed industry is fueled by innovation and funding the U.S. Department of Agriculture's research is critical. We must continue that commitment in order to advance our understanding of pests and diseases that can impact farmers' yields and profitability.

Agricultural Research Service – National Plant Germplasm System

The National Plant Germplasm System 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.

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. Despite its vast impact, the NPGS is only modestly funded at $48 million. ASTA recommends increased funding to $72 million. Strengthening the NPGS is key to developing new varieties that will help address production challenges in the U.S. and around the globe. Continuing to have insufficient funding for NPGS will have a long- term devastating effect.

RECOMMENDED ACTION:

- Increase funding of the National Plant Germplasm System to $72 million.

Germplasm Enhancement of Maize

The Germplasm Enhancement of Maize program 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 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. ASTA recommends an increase in GEM funding due to increased research and operations costs and the need to establish consistent winter nurseries for seed increases and regeneration.

RECOMMENDED ACTION:

- ASTA recommends increasing funding of the Germplasm Enhancement of Maize to $2.7 million.

ASTA Supports Innovation (continued)

Ratification of the International Treaty on Plant Genetic Resources

The International Treaty on Plant Genetic Resources for Food and Agriculture creates a specialized, global system for the management and exchange of plant genetic resources. The U.S. is a signatory to the Treaty but ratification in the Senate is pending. Without ratification, the U.S. is missing opportunities to protect our national interests.

Our companies and government agencies must abide by the legally binding material transfer agreement established by the treaty in order to access international germplasm but we can't directly participate in the treaty negotiations on the restrictions and costs associated with those materials. The U.S. is the world's biggest market for seeds and the world's largest seed exporter. We simply cannot afford to be absent from the table when negotiating these terms.

Although the U.S. has one of the largest and best gene banks in the world, it is not all-encompassing. American researchers need access to materials in gene banks in other countries and a rational system to manage these exchanges. In the future, food and agriculture's most pressing problems will likely be solved by accessing traits that already exist in plant materials somewhere in the world. If the U.S. does not ratify the International Treaty, there is a risk that U.S. researchers will not be able to acquire those traits and our food and agriculture system will suffer.

RECOMMENDED ACTION:

- Ratify the International Treaty on Plant Genetic Resources in the Senate.

Foundation for Food and Agriculture Research

The Farm Bill authorizes a Foundation for Food and Agriculture Research and provides an initial investment of $200 million. The FFAR offers significant potential to increase investments in food and agricultural research. However, much work remains on the implementation.

RECOMMENDED ACTION:

- Implement the Foundation for Food and Agriculture Research as authorized in the 2014 Farm Bill.