



USA Dry Pea & Lentil Council Policy Positions 2012

Research

Research is the backbone of any successful farm commodity. USADPLC supports the efforts of Congress and the Administration to help farmers and America's economy by increasing the investment in agricultural research. The public is asking for help understanding the health benefits of their food and discovering the sustainability of their food system. USADPLC is working to increase the pulse crop research dollars in health information, functionality and sustainability.

1. Pulse Health Initiative \$25,000,000. The purpose of the Pulse Health Initiative is to find, through research on pulse crops, solutions to the critical health and sustainability challenges facing the U.S. and the world. The Initiative will focus on three major goals: 1) reducing obesity and related chronic diseases; 2) increasing food security; and 3) improving sustainability. It is well known that pulses - dry peas, lentils, chickpeas and dry beans - are significant dietary sources of fiber, protein and micronutrients, and increasing their consumption holds the promise substantially impact public health, yet research specifically linking pulses to reductions in obesity and biomarkers for chronic disease remains sparse. Small studies have shown pulse flours and other derivative ingredients are nutritious, versatile and can be incorporated into food products with high consumer appeal, and other research has shown these legumes reduce nitrogen use and improve soil health in rotation with other crops, although large-scale studies quantifying sustainability improvements have not yet been conducted. Data from research required to provide definitive information in these areas remains sparse and is currently an impediment to improvements for the producer, the industry and the U.S. consumer. ***USADPLC requests \$25 million for the Pulse Health Initiative in FY 2013 to find solutions to the Health, Nutrition and Sustainability issues facing our country through research on pulse crops.***

2. USDA/ARS Cool Season Grain Legume (Pulse) End-Use Research Program \$500,000. The USADPLC supports the immediate creation of a USDA/ARS program to develop new uses for pulse crops through the evaluation of end-use characteristics such as cooking time, canning quality, frying traits, extrusion consistency, protein, starch and other nutrient factors important to end-users. Nutritional and functional characteristics would be linked to genetic information to improve the breeding efforts and overall quality of the crop. With the creation of the NDSU Pulse Quality Lab at Fargo, the USDA-ARS Pulse Crop End Use Research Lab would complement the efforts of the State Lab and provide additional national support for Pulse Quality. ***The USADPLC requests a \$500,000 appropriation in FY 2013 to fund a new USDA/ARS scientist dedicated to developing new food and industry end uses for dry peas, lentils and chickpeas at the USDA/ARS facility in Fargo, ND.***

3. Cool Season Food Legume (CSFL) Research Program \$1,200,000. Results from this highly productive grant include improvements in priority genetic information of peas, lentils and chickpeas, strategies against diseases like Ascochyta blight, and development of extruded snacks and other products. Since the creation of the grant, the industry has expanded acreage of pulse crops into four northern tier states encompassing over 1.5 million acres--almost triple the production since 2002. Further expansion could double pulse acreage in the next five years. Cool season legumes are one of the most nutritious and climate friendly crops on the planet. Research is needed to improve health and nutrition of these crops as well as end use/functionality and improved sustainability. The Cool Season Food Legume grant was eliminated from last year's budget. USADPLC desperately needs Congress to restore and increase this funding in FY 2013. ***The USADPLC requests a \$1,200,000 appropriation in FY 2013 to fund the Cool Season Food Legume research program.***

4. USDA/ARS Legume Agronomist/Breeding Program Manager in Montana \$300,000. Expanding pulse acreage in MT, ND, SD and NE have created a growing need for coordination of the Grain Legume Genetics and Physiology Research Unit (GLGPR) Breeding Program based in Pullman, WA. Rapid development of



superior varieties with improved yield, quality and disease resistance is the top research priority for USADPLC producers. Planting trials located across the entire US require additional support to coordinate a national breeding program which includes the Northern Plains. An Agronomist/ Breeding Technician stationed in Sidney, MT, would be able to coordinate planting, collection of data, evaluation and selection of early and advanced breeding lines developed at the USDA/ARS GLGPR Unit at WSU in Pullman. ***USADPLC requests a \$300,000 appropriation in FY 2013 to fund a new USDA/ARS Agronomist/Breeding Program Manager to be stationed at the USDA/ARS facility in Sidney, MT, and assigned to the GLGPR Unit.***

5. USDA/ARS Winter Grain Legume Plant Geneticist Position \$300,000. Dry pea, lentil and chickpea growers have a need for winter-sown cool season legumes in their crop rotation. Development of high-yielding winter pulse varieties will help US growers remain competitive with rapidly expanding pulse acreage in Canada and Australia. This position would be established at the USDA/ARS Grain Legume Genetics and Physiology Research (GLGPR) Unit at Washington State University, Pullman, WA. In FY 2006, Congress appropriated \$120,000 for this position. Since FY 2006, the partial funding of this critical position continued and is part of the USDA-ARS budget. ***The USADPLC requests a \$300,000 appropriation in FY 2013 to fully fund a new USDA/ARS Winter Grain Legume Plant Geneticist located in Pullman, WA.***

6. Sclerotinia Initiative \$500,000. For the past seven years, the pulse industry has joined with soybeans, dry beans, canola, sunflowers and the USDA-ARS to manage an Initiative currently funded at \$1.7 million to combat Sclerotinia or “white mold”. This project receives industry input, competitively selects scientifically sound research, and uses an outside review process to audit the progress toward goals. Reported outcomes include finding sources of resistance, improving basic knowledge about the pathogen, and exploring efficacy of management tools. Since formation of the initiative, additional genetic resources have become available such as the genetic map of soybean, medicago truncatula and the Sclerotinia pathogen itself. The participants in the initiative request funding be increased \$500,000 to expand the program to utilize these resources. ***USADPLC requests an increase to funding of \$500,000 to the Sclerotinia Initiative to a total of \$2.2 million for FY 2013.***

7. USDA/ARS Pulse Breeding Program at WSU, Pullman, WA \$400,000. The Grain Legume Genetics and Physiology Research Unit (GLGPR) at USDA/ARS in Pullman, WA, provide critical germplasm development for dry peas, lentils and chickpeas for the nation. This unit supports variety development and disease research for WA, ID, OR, MT, ND, NE and SD. Acreages of pulse crops have increased dramatically over the past five years, particularly in MT and ND, growing from 10,000 acres to over 1,200,000 acres in the two states. Funding levels for the scientists attached to the research unit has not increased in spite of this increase in the scope of their responsibilities. ***USADPLC requests a \$400,000 appropriation in FY 2013 to fully fund the ARS GLGPR Unit at WSU, Pullman, WA.***

8. Increase Funding to USDA/ARS Vegetable and Forage Legume Research Unit at WSU, Prosser, WA \$200,000. The Vegetable and Forage Legume Research Unit at WSU Prosser, WA, currently supports the following two scientists: Senior Plant Breeder for Dry Edible Beans and a Legume Plant Pathologist for Root Diseases of Edible Legumes (peas, lentils and chickpeas). The Plant Pathologist was created to work solely on root diseases of pulse crops. Over the last 10 years, pulse acres have increased from 290,000 acres to over 1.2 million acres. With the rapid increase in acres, root diseases have become a much more important national research priority. In the last 12 months, this scientist has been directed to work on alfalfa, a related legume, and to reduce the focus from 100 percent pulses to 50% pulses and 50% potatoes because of the lack of program funding available to this CRIS. ***USADPLC requests a \$200,000 appropriation in FY 2013 to fully fund the ARS Vegetable and Forage Legume Research Unit (VFLRU) at USDA-ARS Station at Prosser, WA. USDA-ARS should redirect the pathologist position to work full time with cool season food legumes, i.e. dry peas, lentils, and chickpeas.***