

APA Goal 3: "Ensure the adoption of policy that will promote and protect the US Pulse Industry. Pulse crops are defined as beans, dry peas, lentils, and chickpeas."

1. Farm Bill 2023. The American Pulse Association (APA) is working for full equality for pulse crops (dry beans, dry peas, lentils, and chickpeas) under Federal Farm Policy in the next Farm Bill, especially in research and nutrition. The APA supports:

a. Pulse Crop Health Initiative (PCHI; \$25.0 million per year for five years). Full funding of the PCHI at the authorized level will ensure that it accomplishes its overall purpose to find solutions to the critical health and sustainability challenges facing the US through research on pulse crops. The PCHI focuses on three primary goals: 1) improving human and animal nutrition, 2) improving knowledge of functionality, and 3) improving the sustainability and productivity of agricultural systems using pulses. The APA continues to play a key advisory role in working with the USDA-Agricultural Research Service (ARS), National Institute of Food and Agriculture (NIFA), and USDA-Research, Education, and Economics (REE) to establish strategic goals, recommended research proposals, and initiative performance measures. *The APA supports authorizing the PCHI in the 2023 Farm Bill at \$25.0 million per year for five years*.

b. School Pulse Crop Products Program (PCPP). The APA supports appropriated funding of the Pulse Crop Products Program. With the announcement of the 2020 Dietary Guidelines for Americans, permanent funding of the PCPP will help ensure increased introduction of pulses (dry peas, lentils, chickpeas, and dry beans—both whole and as ingredients) in school nutrition programs and that there is a program in place to evaluate the acceptability of pulses, identify suitable products for school lunches, evaluate the adoption of pulses outside of school, and evaluate the effects of the products on nutrition. *APA supports increasing the authorization for the PCPP to \$4.0 million per year for five years in the 2023 Farm Bill.*

c. Pulse Crop Climate Initiative. The APA supports creating a research fund focused on providing solutions to mitigate climate change and improve human health by increasing the production and consumption of pulse crops. We propose a minimum of \$1.0 billion in new research funding through the USDA-ARS and NIFA to advance the productive capacity, nitrogen-fixing ability, crop management, nutrient density, and food processing flexibility of pulse crops. The pulse research funding could be spent in the following areas: breeding and genetics; nitrogen fixation; soil health; innovative crop management systems; human health and nutrition; animal health and nutrition; new product development; crop quality and functionality; food processing; and crop management for conventional and organic production including diseases, insects, weeds, crop rotation, cover crops and intercropping. *The APA supports establishing a Pulse Crop Climate Initiative authorized at \$1.0 billion in the 2023 Farm Bill*.

2. Childhood Nutrition Act Reauthorization. Pulse crops (dry peas, lentils, chickpeas, and dry beans) are nutrient-dense foods that are high in protein and fiber with little or no fat. Increasing pulses in school meals is an economical way to add plant proteins and fiber into children's diets without increasing saturated fat or cholesterol. In 2015 and 2016, Congress considered reauthorizing the Healthy, Hunger-Free Kids Act of 2010 which expired on September 30, 2015. The current legislation identifies "beans and peas (legumes)" as unique foods that can be counted as either a meat alternative or a vegetable. However, this legislation limits the acceptable form to "whole cooked beans, dry peas, and lentils (with the exception of hummus)". The legislation includes pulses in the vegetable subgroup "beans and peas (legumes)" with a requirement of only 1/2 cup per week for all ages. Increasing flexibility to meet this requirement will enhance the nutritional quality of school and government meal programs.



- APA requests legislation supporting the increased use of pulse crops in school meal programs as follows:
 a. Include the term pulses, collectively known as beans, dry peas, lentils, and chickpeas into the "beans and peas (legumes)" category definition as defined by Dietary Guidelines for Americans (DGA).
 b. Continue requirements for minimum weekly servings of vegetables from subcategories including "beans, peas, and lentils (legumes)" in the school meal program. (Utilize the DGA 2020 Description)
 c. Allow both whole or pureed pulses and ingredients derived from an eligible pulse crop to be credited in federally reimbursable meals. These food products include pulse flours and pulse-based products such as chips and pasta.
- **3.** Food and Nutrition Programs. Pulse product manufacturers are discouraged by the barriers their products face in receiving credit in school meal programs. USDA should continue the flexibility announced through a 2019 Policy Memo that allows pasta made of pulse flour to receive credit as a vegetable, even if the pasta is not served with another recognizable vegetable. USDA should extend this flexibility to allow pasta made of pulse flour to receive credit as a meat alternate, even if the pasta is not served with another recognizable vegetables and meat alternates on top of serving the pulse pasta creates logistical and cost barriers for schools that often force them to overlook the pulse products for an easier alternative. Texturized vegetable protein is nearly impossible to credit in the school meals program due to the Protein Digestibility Corrected Amino Acid Score (PDCAAS) requirements for alternate protein products. Manufacturers of pulse crop burgers and other proteins are frustrated because, despite the protein and nutrient content of their products, they are not able to reach an 80% PDCAAS. *The APA encourages USDA to consider additional flexibility and crediting innovative products like pulse pasta, flour, breading, and beverages in Food and Nutrition Programs.*
- 4. Transportation: The APA supports the fair, efficient, and cost-effective movement of pulse crops in the US transportation system. The pulse industry relies on all modes of transportation and supports improvements in the infrastructure especially for highways, railroads, river systems, and port facilities. *APA encourages additional investments in infrastructure to improve transportation to markets, both domestic and international.*
- **5.** Climate Smart Ag Processing Program. The APA proposes the creation of a Climate Smart Agriculture Processing Program (or tailoring existing USDA programs to increase utilization) to provide grants to processors and food manufacturers to upgrade food processing facilities and lower their GHG emissions. Just as NRCS provides technical assistance to farmers to improve conservation practices and outcomes, such assistance should help processors and food manufacturers identify and implement upgrades and systems changes that lower GHG emissions at their facilities. These programs should also support the establishment of processing facilities where they do not currently exist. As the acreage of pulse crops expands across the country, an increased number of storage, delivery, and processing facilities will be required.
- 6. Climate-Smart Food Innovation Program. The APA proposes programs to support food innovators in developing climate-friendly food choices. For example, the pulse industry works with the pork industry on a campaign called "Powerful Pairings". USDA could facilitate and support such partnerships to develop new products that consider consumer preferences while also reducing the carbon footprint of food products.
- 7. Trade Sanction Policy. The APA opposes any trade sanctions on food, except in cases of extreme national emergency or a declaration of war.
- **8.** Free Trade Agreements. The American Pulse Association supports free and fair trade between countries. Over 60% of the pulse crops produced in the US are exported overseas. Reducing trade barriers is vital to



the continuing growth of our industry. *The APA supports trade agreements that reduce or eliminate barriers to free and fair trade.*

Policy Positions 2024 Research

APA Goal 2. Increase the body of research on health/nutrition, functionality, and production/sustainability of pulse crops.

1. Pulse Crop Health Initiative (PCHI; \$25.0 million per year, five years). The purpose of the PCHI is to find solutions, through research on pulse crops, to the critical health and sustainability challenges facing the US and the world. The PCHI will focus on four major goals: 1) reducing obesity and related chronic diseases; 2) increasing food security; 3) improving sustainability; and 4) improving human and animal health. The APA supports permanent funding of the PCHI at \$25.0 million per year for five years. This will require the establishment of policies and procedures to establish goals, provide guidance, and prioritize the research funded through the PCHI. The APA will participate in the establishment and administration of this initiative to help prioritize research efforts and meet the needs of our nation. *The APA requests \$25.0 million per year for five years for the Pulse Crop Health Initiative in the 2023 Farm Bill to find solutions, through pulse crop research, to the health, nutrition, and sustainability issues facing our country.*

2. Research Plant-Based Foods as Sources of Nutrients of Concern (\$25.0 million per year, five years). The designation of "nutrients of concern" (dietary fiber, vitamin D, calcium, potassium), established by the USDA, provides an important tool to focus agriculture and food research. APA requests that the USDA devote a portion of the Agriculture and Food Research Institute (AFRI) competitive grants toward using plant-based foods as sources of nutrients of concern. Research should add investigations into the nutrition provided by plant-based foods and the development of processing, functionality, and bioavailability of nutrients in plant-based foods and food products. Pulses, i.e. dry peas, lentils, chickpeas, and dry beans are plant-based foods that provide major sources of nutrients of concern. *APA requests \$25.0 million per year for five years in FY 2023-28 to the AFRI for research on plant-based foods as sources of nutrients of concern.*

3. Climate-Smart Agriculture Research Funding (\$1.0 billion). The APA proposes \$1.0 billion focused on pulse crops to accomplish the following:

- Increase nitrogen fixation of pulse crops.
- Improve productivity of climate-friendly crops like pulses.
- Increase functionality and processing technology to include pulses in more products.
- Increase nutrient density and nutrient availability for healthy, climate-friendly diets.
- Focus research efforts toward achieving net-zero carbon emissions from agriculture.

APA supports establishing a Climate-Smart Agriculture Research Program of \$1.0 billion focused on finding climate change solutions for agriculture.

4. Increase Base Level Funding for USDA-ARS (\$4.5 million). The pulse industry has grown significantly over the past two decades, growing from nearly 1.5 million acres in 2000 to over 3.5 million acres of dry peas, lentils, chickpeas, and dry beans in 2024. During this time, base level funding of USDA-ARS research programs focused on pulse crops has at best remained stagnant or at worst been reduced. *The APA requests an increase to base level funding of \$4.5 million to support the following research programs:*

AMERICAN PULSE ASSOCIATION

Request for USDA-ARS Base Level Increase Focused on Pulse Crops

	Cur	rent Base	Requested Increase			Projected Funding	
Base Level Increase-ARS Fargo, ND, Pullman, WA, and East Lansing, MI							
Add Pulse Crop Quality Research Center to Wheat Quality Labs	\$	2,500,000	\$	3,500,	000	\$	6,000,000
Total for ARS Pulse Quality Network	\$	2,500,000	\$	3,500,	000	\$	6,000,000
Base Level Increase-ARS Pullman, WA							
Grain Legume Genetics Physiology Research Unit Pullman Pathology, Pulse Breeding							
Prosser Pathology, Weeds, Pulse Breeding	\$	2,440,097	\$	4,500,	000	\$	6,940,097
Increase for Winter Pulse Breeder	\$	120,000	\$	630,000		\$	750,000
Plant Germplasm Introduction & Testing (Grasses, Pulses, Alfalfa)	\$	2,794,588	\$	1,000,000		\$	3,794,588
Total for ARS-Pullman, WA	\$	5,354,685	\$	6,130,	000	\$	11,484,685
Base Level Increase-ARS East Lansing, MI							
ARS Pulse Breeding Program-Michigan	\$	624,000		\$	0	\$	624,000
Total for ARS-East Lansing, MI	\$	224,000		\$	0	\$	624,000
Base level increase to Sclerotinia Initiative							
National Sclerotinia Initiative Increase	\$	2,500,000	\$		-	\$	2,500,000
Total Request for USDA-ARS Base Level							
Funding Increase for National Pulse Research	\$	10,078,685	\$	9,630,	000	\$	20,608,685

5. Establishment of a Pulse Crop Quality Network, **\$3.5** million. We are requesting an additional **\$3.5** million to establish this network of labs. Initially, USDA-ARS received **\$1** million in 2020 and an increase to **\$2.0** Million in 2021, **\$2.5** million in FY 2022 and **\$2.5** million in FY 2023. Total funding requested is **\$6.0** million. In cooperation with the industry, the USDA-ARS provided for a quality lab in Fargo, ND and two satellite locations in Pullman, WA and East Lansing MI. The industry proposes to increase the funding in FY 25 to provide a center focused on beverages and meat analogues with the additional **\$3.5** million in base level funding. *The APA requests a \$3.5 million increase in base funding in FY 2024 to fund a new network of USDA-ARS scientists dedicated to developing new food and industry end uses for dry beans, dry peas, lentils, and chickpeas at USDA-ARS lab facilities.*

6. USDA-ARS Winter Pulse Crop Plant Geneticist Position (\$630,000). Dry bean, dry pea, lentil, and chickpea growers need fall-seeded, cool-season legumes in their crop rotations to advance their climate-smart agriculture goals. The development of high-yielding fall-seeded pulse varieties will help US growers remain competitive with rapidly expanding pulse acreage in Canada and Australia. Research trials conducted from 2021 to the present show that fall-seeded winter pulses have the potential to provide increased productivity during a drought. The proposed position would be established at the USDA-ARS Grain Legume Genetics



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 APA requests a \$630,000 appropriation in FY 2024 to fully fund a new USDA-ARS Winter Pulse Crop Plant Geneticist located in Pullman, WA.*

7. Sclerotinia Initiative (\$2.5 million). Since 2004, the pulse industry has joined with soybeans, canola, sunflowers, and the USDA-ARS to manage the Sclerotinia Initiative, currently funded at \$2.5 million, to combat Sclerotinia or "white mold". This project receives industry input, selects competitive, scientifically sound research, and uses an outside review process to audit the progress of research toward goals. Reported outcomes include finding sources of Sclerotinia resistance, improving basic knowledge about the pathogen, and exploring the efficacy of management tools. Since the formation of the initiative, additional genetic resources have become available such as the genetic maps of soybean, *Medicago truncatula*, and the Sclerotinia pathogen. Last year, the funding level was increased and the initiative can now provide producers with important crop management tools to make progress against this disease. Recent discoveries include potential biocontrol products and innovative genetic tools. *The APA requests that the funding of \$2.5 million for the Sclerotinia Initiative remain unchanged for FY 2024. This funding would be included in the USDA-ARS base level budget.*

8. Grain Legume Genetics Physiology Research (GLGPR) Unit (\$4.5 million). The USDA-ARS considers a scientific position fully sustainable at \$750,000. The GLGPR Unit includes three scientists focused on pulse crop breeding, two plant pathologists, and a scientist focused on soil microbial activity. Current funding for these six positions is \$2.4 million which amounts to only \$400,000 per scientist. This group of scientists provides the USDA-ARS with key pulse crop genetics research and scientific leadership. With pulse crop acreage expanding and the potential uses of pulse crops also expanding, it is critical that USDA-ARS base level funding is increased to provide sustainable scientific research on pulse crops. *The APA requests increased funding of \$4.5 million for six scientific positions in the USDA-ARS Grain Legume Genetics Physiology Research Unit at Pullman, WA and Prosser, WA.*

9. Plant Germplasm Introduction & Testing Research (\$1.0 million). The USDA-ARS Plant Introduction unit at Pullman, WA houses the genetic resources (germplasm) for pulse crops in the US. The unit contains seeds for dry peas, lentils, chickpeas, lupin, fava beans, and dry beans and is the primary source of genetic diversity of pulses in the US. This collection is a critical resource for plant breeders to develop disease resistance, improve nutritional traits such as protein content, and improve the quality of pulse crops. Current funding supports three full-time scientists, the support programming for these scientists, and support for the physical storage facility. The unit requires additional funding to properly maintain the germplasm, catalog traits and genetic information on different genetic databases, fund additional collection missions, increase storage capacity, and increase the ability to answer requests for germplasm. *USADPLC requests an additional \$1.0 million to increase support for this critical facility.*

10. Alternatives to Fumigation as Protection against Bruchids and Nematodes. The US pulse industry has faced market uncertainty with India each year due to a requirement to fumigate shipments of US pulse crops with methyl bromide (MeBr) before arrival at Indian ports to prevent bruchids and nematodes from entering the country. India is the largest market for US dry peas and lentils and in the top five markets for US chickpeas. Exporters are faced with US regulatory pressure to reduce MeBr use, technical problems due to labeled usage in the US, and no effective alternatives to control the pests. *APA requests USDA-ARS focus the MeBr alternatives initiative on finding effective alternatives for the fumigation of stored grains.*



11. Pulses and Dilated Cardiomyopathy (DCM) in Canines. The US Food & Drug Administration recently linked DCM in dogs to pulses in their diets. This created a significant negative impact on pulse markets. *The APA strongly supports scientific research investigating the nutrition provided to companion animals in diets including higher concentrations of pulses. In addition, the APA requests that all announcements about pet food nutrition be based on sound science and clearly communicate the actions consumers need to keep their pets safe.*