



Climate Change Statutes

UNITED STATES FEDERAL LAWS

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Current through the 2009 Legislative Session.

§ 5925. High-priority research and extension initiatives

(a) Competitive specialized research and extension grants authorized

The Secretary of Agriculture (referred to in this section as the "Secretary") may make competitive grants to support research and extension activities specified in subsections (e) through (i) of this section. The Secretary shall make the grants in consultation with the National Agricultural Research, Extension, Education, and Economics Advisory Board.

(b) Administration

(1) In general

Except as otherwise provided in this section, paragraphs (4), (7), (8), and (11)(B) of subsection (b) of section 450i of this title shall apply with respect to the making of grants under this section.

(2) Use of task forces

To facilitate the making of research and extension grants under this section in the research and extension areas specified in subsections (e) through (i) of this section, the Secretary may appoint a task force for each such area to make recommendations to the Secretary. The Secretary may not incur costs in excess of \$1,000 for any fiscal year in connection with each task force established under this paragraph.

(c) Matching funds required

(1) In general

The Secretary shall require the recipient of a grant under this section to provide funds or in-kind support from non-Federal sources in an amount at least equal to the amount provided by the Federal Government.

(2) Waiver authority

The Secretary may waive the matching funds requirement specified in paragraph (1) with respect to a research project if the Secretary determines that--

(A) the results of the project, while of particular benefit to a specific agricultural commodity, are likely to be applicable to agricultural commodities generally; or

(B) the project involves a minor commodity, the project deals with scientifically important research, and the grant recipient is unable to satisfy the matching funds requirement.

(d) Partnerships encouraged

Following the completion of a peer review process for grant proposals received under this section, the Secretary shall provide a priority to those grant proposals, found in the peer review process to be scientifically meritorious, that involve the cooperation of multiple entities.

(e) High-priority research and extension areas

(1) Ethanol research and extension

Research and extension grants may be made under this section for the purpose of carrying out or enhancing research on ethanol derived from agricultural crops as an alternative fuel source.

(2) Aflatoxin research and extension

Research and extension grants may be made under this section for the purpose of identifying, improving, and eventually commercializing, aflatoxin controls in corn and other affected agricultural products and crops.

(3) Prickly pear research and extension

Research and extension grants may be made under this section for the purpose of investigating enhanced genetic selection and processing techniques of prickly pears.

(4) Deer tick ecology research and extension

Research and extension grants may be made under this section for the purpose of studying the population ecology of deer ticks and other insects and pests that transmit Lyme disease.

(5) Peanut market enhancement research and extension

Research and extension grants may be made under this section for the purpose of evaluating the economics of applying innovative technologies for peanut processing in a commercial environment.

(6) Dairy financial risk management research and extension

Research and extension grants may be made under this section for the purpose of providing research, development, or education materials, information, and outreach programs regarding

risk management strategies for dairy producers and for dairy cooperatives and other processors and marketers of milk.

(7) Cotton research and extension

Research and extension grants may be made under this section for the purpose of improving pest management, fiber quality enhancement, economic assessment, textile production, and optimized production systems for short staple cotton.

(8) methyl bromide research and extension

Research and extension grants may be made under this section for the purpose of--

(A) developing and evaluating chemical and nonchemical alternatives, and use and emission reduction strategies, for pre-planting and post-harvest uses of methyl bromide; and

(B) transferring the results of the research for use by agricultural producers.

(9) Potato research and extension

Research and extension grants may be made under this section for the purpose of developing and evaluating new strains of potatoes that are resistant to blight and other diseases, as well as insects. Emphasis may be placed on developing potato varieties that lend themselves to innovative marketing approaches.

(10) Wood use research and extension

Research and extension grants may be made under this section for the purpose of developing new uses for wood from underused tree species as well as investigating methods of modifying wood and wood fibers to produce better building materials.

(11) Wetlands use research and extension

Research and extension grants may be made under this section for the purpose of better use of wetlands in diverse ways to provide various economic, agricultural, and environmental benefits.

(12) Food safety, including pathogen detection and limitation, research and extension

Research and extension grants may be made under this section for the purpose of increasing food safety, including the identification of advanced detection and processing methods to limit the presence of pathogens (including hepatitis A and E. coli 0157:H7) in domestic and imported foods.

(13) Financial risk management research and extension

Research and extension grants may be made under this section for the purpose of providing research, development, or education materials, information, and outreach programs regarding financial risk management strategies for agricultural producers and for cooperatives and other processors and marketers of any agricultural commodity.

(14) Ornamental tropical fish research and extension

Research and extension grants may be made under this section for the purpose of meeting the needs of commercial producers of ornamental tropical fish and aquatic plants for improvements in the areas of fish reproduction, health, nutrition, predator control, water use, water quality control, and farming technology.

(15) Gypsy moth research and extension

Research and extension grants may be made under this section for the purpose of developing biological control, management, and eradication methods against nonnative insects, including *Lymantria dispar* (commonly known as the "gypsy moth"), that contribute to significant agricultural, economic, or environmental harm.

(16) Tomato spotted wilt virus research and extension

Research and extension grants may be made under this section for the purpose of control, management, and eradication of tomato spotted wilt virus.

(17) Genetically modified agriculture products (GMAP) research

Research grants may be made under this section for the purposes of providing unbiased, science-based evaluation of the risks and benefits to the public and the environment of specific genetically modified plant and animal products. Grants may be used to form interdisciplinary teams to review and conduct research on scientific, social, economic, and ethical issues during the review process, to answer questions raised by the release of new genetically modified agriculture products, to conduct fundamental studies on the health and environmental safety of genetically modified agriculture products (including quantitative risk assessment, the effect of specific genetically modified agriculture products on human health, and gene flow studies), to communicate the risk of genetically modified agriculture products through extension and education programs, and to engage the public and industry in relevant issues.

(18) Land use management research and extension

Research and extension grants may be made under this section for the purposes of evaluating the environmental benefits of land use management tools such as those provided in the Farmland Protection Program.

(19) Water and air quality research and extension

Research and extension grants may be made under this section for the purpose of better understanding agricultural impacts to air and water quality and means to address them.

(20) Revenue and insurance tools research and extension

Research and extension grants may be made under this section for the purposes of better understanding the impact of revenue and insurance tools on farm income.

(21) Agrotourism research and extension

Research and extension grants may be made under this section for the purpose of better understanding the economic, environmental, and food systems impacts of agrotourism.

(22) Nitrogen-fixation by plants

Research and extension grants may be made under this section for the purpose of enhancing the nitrogen-fixing ability and efficiency of legumes, developing new varieties of legumes that fix nitrogen more efficiently, and developing new varieties of other commercially important crops that potentially are able to fix nitrogen.

(23) Environment and private lands research and extension

Research and extension grants may be made under this section for the purpose of researching the use of computer models to aid in assessment of best management practices on a watershed basis, working with government, industry, and private landowners to help craft industry-led solutions to identified environmental issues, researching and monitoring water, air, or soil environmental quality to aid in the development of new approaches to local environmental concerns, and working with local, State, and federal officials to help craft effective environmental solutions that respect private property rights and agricultural production realities.

(24) Livestock disease research and extension

Research and extension grants may be made under this section for the purpose of identifying possible livestock disease threats, educating the public regarding livestock disease threats, training persons to deal with such threats, and conducting related research.

(25) Plant gene expression

Research grants may be made under this section for the purpose of plant gene expression research to accelerate the application of basic plant genomic science to the development and testing of new varieties of enhanced food crops, crops that can be used as renewable energy sources, and other alternative uses of agricultural crops.

(26) Animal infectious diseases research

Research and extension grants may be made under this section for the purpose of developing prevention and control methodologies for animal infectious diseases (including evaluation under field conditions in countries in which an animal disease occurs) such as laboratory tests for quicker detection of infected animals and presence of disease, prevention strategies (including vaccination programs), and rapid diagnostic techniques for animal disease agents considered to be risks for agricultural bioterrorism attack.

(27) Program to combat childhood obesity

Research and extension grants may be made under this section to institutions of higher education with demonstrated capacity in basic and clinical obesity research, nutrition research, and community health education research to develop and evaluate community-wide strategies

that catalyze partnerships between families and health care, education, recreation, mass media, and other community resources to reduce the incidence of childhood obesity.

(28) Integrated pest management

Research and extension grants may be made under this section to coordinate and improve research, education, and outreach on, and implementation on farms of, integrated pest management.

(29) Sugarcane genetics

Research grants may be made under this section for the purpose of maintaining acceptable yields under reduced production inputs, implementing marker-assisted breeding strategies and other basic plant genomic technologies to screen for improved plant resistance to diseases, weeds, and insects toward minimizing pesticide use, enhancing food, fiber and energy production, and developing varieties for maximum performance under prevailing conditions, including management for improved soil and water conservation.

(30) Air emissions from livestock operations

Research and extension grants may be made under this section for the purpose of conducting field verification tests and developing mitigation options for air emissions from animal feeding operations.

(31) Swine genome project

Research grants may be made under this section to conduct swine genome research, including the mapping of the swine genome.

(32) Cattle fever tick program

Research and extension grants may be made under this section to study cattle fever ticks to facilitate understanding of the role of wildlife in the persistence and spread of cattle fever ticks, to develop advanced methods for eradication of cattle fever ticks, and to improve management of diseases relating to cattle fever ticks that are associated with wildlife, livestock, and human health.

(33) Synthetic gypsum

Research and extension grants may be made under this section to study the uses of synthetic gypsum from electric power plants to remediate soil and nutrient losses.

(34) Cranberry research program

Research and extension grants may be made under this section to study new technologies to assist cranberry growers in complying with Federal and State environmental regulations, increase production, develop new growing techniques, establish more efficient growing methodologies, and educate cranberry producers about sustainable growth practices.

(35) Sorghum research initiative

Research and extension grants may be made under this section to study the use of sorghum as a bioenergy feedstock, promote diversification in, and the environmental benefits of sorghum production, and promote water conservation through the use of sorghum.

(36) Marine shrimp farming program

Research and extension grants may be made under this section to establish a research program to advance and maintain a domestic shrimp farming industry in the United States.

(37) Turfgrass research initiative

Research and extension grants may be made under this section to study the production of turfgrass (including the use of water, fertilizer, pesticides, fossil fuels, and machinery for turf establishment and maintenance) and environmental protection and enhancement relating to turfgrass production.

(38) Agricultural worker safety research initiative

Research and extension grants may be made under this section--

(A) to study and demonstrate methods to minimize exposure of farm and ranch owners and operators, pesticide handlers, and agricultural workers to pesticides, including research addressing the unique concerns of farm workers resulting from long-term exposure to pesticides; and

(B) to develop rapid tests for on-farm use to better inform and educate farmers, ranchers, and farm and ranch workers regarding safe field re-entry intervals.

(39) High plains aquifer region

Research and extension grants may be made under this section to carry out interdisciplinary research relating to diminishing water levels and increased demand for water in the High Plains aquifer region.

(40) Deer initiative

Research and extension grants may be made under this section to support collaborative research focusing on the development of viable strategies for the prevention, diagnosis, and treatment of infectious, parasitic, and toxic diseases of farmed deer and the mapping of the deer genome.

(41) Pasture-based beef systems research initiative

Research and extension grants may be made under this section to study the development of forage sequences and combinations for cow-calf, heifer development, stocker, and finishing systems, to deliver optimal nutritive value for efficient production of cattle for pasture finishing, to optimize forage systems to improve marketability of pasture-finished beef, and to assess the effect of forage quality on reproductive fitness.

(42) Agricultural practices relating to climate change

Research and extension grants may be made under this section for field and laboratory studies that examine the ecosystem from gross to minute scales and for projects that explore the relationship of agricultural practices to climate change.

(43) Brucellosis control and eradication

Research and extension grants may be made under this section to conduct research relating to the development of vaccines and vaccine delivery systems to effectively control and eliminate brucellosis in wildlife, and to assist with the controlling of the spread of brucellosis from wildlife to domestic animals.

(44) Bighorn and domestic sheep disease mechanisms

Research and extension grants may be made under this section to conduct research relating to the health status of (including the presence of infectious diseases in) bighorn and domestic sheep under range conditions.

(45) Agricultural development in the American-Pacific region

Research and extension grants may be made under this section to support food and agricultural science at a consortium of land-grant institutions in the American-Pacific region.

(46) Tropical and subtropical agricultural research

Research grants may be made under this section, in equal dollar amounts to the Caribbean and Pacific Basins, to support tropical and subtropical agricultural research, including pest and disease research, at the land-grant institutions in the Caribbean and Pacific regions.

(47) Viral hemorrhagic septicemia

Research and extension grants may be made under this section to study--

(A) the effects of viral hemorrhagic septicemia (referred to in this paragraph as "VHS") on freshwater fish throughout the natural and expanding range of VHS; and

(B) methods for transmission and human-mediated transport of VHS among waterbodies.

(48) Farm and ranch safety

Research and extension grants may be made under this section to carry out projects to decrease the incidence of injury and death on farms and ranches, including--

(A) on-site farm or ranch safety reviews;

(B) outreach and dissemination of farm safety research and interventions to agricultural employers, employees, youth, farm and ranch families, seasonal workers, or other individuals; and

(C) agricultural safety education and training.

(49) Women and minorities in stem fields

Research and extension grants may be made under this section to increase participation by women and underrepresented minorities from rural areas in the fields of science, technology, engineering, and mathematics, with priority given to eligible institutions that carry out continuing programs funded by the Secretary.

(50) Alfalfa and forage research program

Research and extension grants may be made under this section for the purpose of studying improvements in alfalfa and forage yields, biomass and persistence, pest pressures, the bioenergy potential of alfalfa and other forages, and systems to reduce losses during harvest and storage.

(51) Food systems veterinary medicine

Research grants may be made under this section to address health issues that affect food-producing animals, food safety, and the environment, and to improve information resources, curriculum, and clinical education of students with respect to food animal veterinary medicine and food safety.

(52) Biochar research

Grants may be made under this section for research, extension, and integrated activities relating to the study of biochar production and use, including considerations of agronomic and economic impacts, synergies of coproduction with bioenergy, and the value of soil enhancements and soil carbon sequestration.

(f) Imported fire ant control, management, and eradication

(1) Task force

The Secretary shall establish a task force pursuant to subsection (b)(2) of this section regarding the control, management, and eradication of imported fire ants. The Secretary shall solicit and evaluate grant proposals under this subsection in consultation with the task force.

(2) Initial grants

(A) Request for proposals

The Secretary shall publish a request for proposals for grants for research or demonstration projects related to the control, management, and possible eradication of imported fire ants.

(B) Selection

Not later than 1 year after the date of publication of the request for proposals, the Secretary shall evaluate the grant proposals submitted in response to the request and may select meritorious research or demonstration projects related to the control, management, and possible eradication of imported fire ants to receive an initial grant under this subsection.

(3) Subsequent grants

(A) Evaluation of initial grants

If the Secretary awards grants under paragraph (2)(B), the Secretary shall evaluate all of the research or demonstration projects conducted under the grants for their use as the basis of a national plan for the control, management, and possible eradication of imported fire ants by the Federal Government, State and local governments, and owners and operators of land.

(B) Selection

On the basis of the evaluation under subparagraph (A), the Secretary may select the projects that the Secretary considers most promising for additional research or demonstration related to preparation of a national plan for the control, management, and possible eradication of imported fire ants. The Secretary shall notify the task force of the projects selected under this subparagraph.

(4) Selection and submission of national plan

(A) Evaluation of subsequent grants

If the Secretary awards grants under paragraph (3)(B), the Secretary shall evaluate all of the research or demonstration projects conducted under the grants for use as the basis of a national plan for the control, management, and possible eradication of imported fire ants by the Federal Government, State and local governments, and owners and operators of land.

(B) Selection

On the basis of the evaluation under subparagraph (A), the Secretary shall select 1 project funded under paragraph (3)(B), or a combination of those projects, for award of a grant for final preparation of the national plan.

(C) Submission

The Secretary shall submit to Congress the final national plan prepared under subparagraph (B) for the control, management, and possible eradication of imported fire ants.

(g) Formosan termite research and eradication

(1) Research program

The Secretary may make competitive research grants under this subsection to regional and multijurisdictional entities, local government planning organizations, and local governments for the purpose of conducting research for the control, management, and possible eradication of Formosan termites in the United States.

(2) Eradication program

The Secretary may enter into cooperative agreements with regional and multijurisdictional entities, local government planning organizations, and local governments for the purposes of--

(A) conducting projects for the control, management, and possible eradication of Formosan termites in the United States; and

(B) collecting data on the effectiveness of the projects.

(3) Funding priority

In allocating funds made available to carry out paragraph (2), the Secretary shall provide a higher priority for regions or locations with the highest historical rates of infestation of Formosan termites.

(4) Management coordination

The program management of research grants, cooperative agreements, and projects under this subsection shall be conducted under existing authority in coordination with the national formosan termite management and research demonstration program conducted by the Agricultural Research Service.

(h) Pollinator protection

(1) Research and extension

(A) Grants

Research and extension grants may be made under this section--

(i) to survey and collect data on bee colony production and health;

(ii) to investigate pollinator biology, immunology, ecology, genomics, and bioinformatics;

(iii) to conduct research on various factors that may be contributing to or associated with colony collapse disorder, and other serious threats to the health of honey bees and other pollinators, including--

(I) parasites and pathogens of pollinators; and

(II) the sublethal effects of insecticides, herbicides, and fungicides on honey bees and native and managed pollinators;

(iv) to develop mitigative and preventative measures to improve native and managed pollinator health; and

(v) to promote the health of honey bees and native pollinators through habitat conservation and best management practices.

(B) Authorization of appropriations

There is authorized to be appropriated to carry out this paragraph \$10,000,000 for each of fiscal years 2008 through 2012.

(2) Department of Agriculture capacity and infrastructure

(A) In general

The Secretary shall, to the maximum extent practicable, increase the capacity and infrastructure of the Department--

(i) to address colony collapse disorder and other long-term threats to pollinator health, including the hiring of additional personnel; and

(ii) to conduct research on colony collapse disorder and other pollinator issues at the facilities of the Department.

(B) Authorization of appropriations

There is authorized to be appropriated to carry out this paragraph \$7,250,000 for each of fiscal years 2008 through 2012.

(3) Honey bee pest and pathogen surveillance

There is authorized to be appropriated to conduct a nationwide honey bee pest and pathogen surveillance program \$2,750,000 for each of fiscal years 2008 through 2012.

(4) Annual report on response to honey bee colony collapse disorder

The Secretary shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate an annual report describing the progress made by the Department of Agriculture in--

(A) investigating the cause or causes of honey bee colony collapse; and

(B) finding appropriate strategies to reduce colony loss.

(i) Regional centers of excellence

(1) Establishment

The Secretary shall prioritize regional centers of excellence established for specific agricultural commodities for the receipt of funding under this section.

(2) Composition

A regional center of excellence shall be composed of 1 or more colleges and universities (including land-grant institutions, schools of forestry, schools of veterinary medicine, or NLGCA Institutions (as defined in section 3103 of this title) that provide financial support to the regional center of excellence.

(3) Criteria for regional centers of excellence

The criteria for consideration to be a regional center of excellence shall include efforts--

- (A)** to ensure coordination and cost-effectiveness by reducing unnecessarily duplicative efforts regarding research, teaching, and extension;
- (B)** to leverage available resources by using public/private partnerships among agricultural industry groups, institutions of higher education, and the Federal Government;
- (C)** to implement teaching initiatives to increase awareness and effectively disseminate solutions to target audiences through extension activities;
- (D)** to increase the economic returns to rural communities by identifying, attracting, and directing funds to high-priority agricultural issues; and
- (E)** to improve teaching capacity and infrastructure at colleges and universities (including land-grant institutions, schools of forestry, and schools of veterinary medicine).

(j) Authorization of appropriations

There are authorized to be appropriated such sums as are necessary to carry out this section for each of fiscal years 1999 through 2012.