

118TH CONGRESS
2D SESSION

S. 4182

To authorize appropriations for certain agricultural research of the
Department of Agriculture, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 18, 2024

Mr. MERKLEY (for himself and Mr. WYDEN) introduced the following bill;
which was read twice and referred to the Committee on Agriculture, Nu-
trition, and Forestry

A BILL

To authorize appropriations for certain agricultural research
of the Department of Agriculture, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Oregon Research
5 Bounty Act of 2024”.

6 **SEC. 2. PURPOSE.**

7 The purpose of this Act is to permanently authorize
8 certain programs of the Agricultural Research Service.

1 **SEC. 3. DEFINITION OF SECRETARY.**

2 In this Act, the term “Secretary” means the Sec-
3 retary of Agriculture.

4 **SEC. 4. AGRICULTURAL RESEARCH.**

5 (a) IN GENERAL.—The Secretary shall carry out
6 each of the research activities required by this section by
7 making grants or entering into cooperative agreements.

8 (b) SMOKE EXPOSURE.—

9 (1) PURPOSE.—The purpose of this subsection
10 is to support research to address the impacts of
11 wildfire smoke on wine grape production.

12 (2) RESEARCH.—The Secretary shall carry out
13 research to assist growers and processors of wine
14 grapes by—

15 (A) establishing science-based threshold
16 levels of smoke compounds that cause smoke-
17 tainted grapes;

18 (B) identifying the compounds responsible
19 for smoke taint in grapes;

20 (C) developing mitigation methods to re-
21 duce or eliminate smoke taint in grapes; and

22 (D) identifying compounds that can act as
23 a barrier between grapes and smoke com-
24 pounds.

25 (3) AUTHORIZATION OF APPROPRIATIONS.—

26 There is authorized to be appropriated to the Sec-

1 retary to carry out this subsection \$5,000,000 for
2 each fiscal year.

3 (c) RESILIENT DRYLAND FARMING.—

4 (1) RESEARCH.—The Secretary shall carry out
5 research on resilient dryland farming of cereal
6 grains, with a focus on—

7 (A) improving yield and quality param-
8 eters;

9 (B) developing cropping systems capable of
10 tolerating drought, heat, and diseases; and

11 (C) quantifying economic and environ-
12 mental benefits from dryland crop production
13 systems.

14 (2) AUTHORIZATION OF APPROPRIATIONS.—

15 There is authorized to be appropriated to the Sec-
16 retary to carry out this subsection \$5,000,000 for
17 each fiscal year.

18 (d) SMALL FRUITS.—

19 (1) PURPOSE.—The purpose of this subsection
20 is to support research to promote sustainable and
21 organic production of berry and grape crops with the
22 goal of reducing pesticide use and improving quality
23 and yield.

1 (2) RESEARCH.—The Secretary shall carry out
2 research to improve the ability, with respect to berry
3 and grape crops—

4 (A) to forecast pest and disease spread;

5 (B) to implement precision management
6 strategies; and

7 (C) to improve the overall quality of fruit.

8 (3) AUTHORIZATION OF APPROPRIATIONS.—

9 There is authorized to be appropriated to the Sec-
10 retary to carry out this subsection \$5,000,000 for
11 each fiscal year.

12 (e) RANGELAND PRECISION LIVESTOCK MANAGE-
13 MENT.—

14 (1) PURPOSE.—The purpose of this subsection
15 is to develop precision livestock management strate-
16 gies and tools to promote economically efficient and
17 environmentally responsive livestock production sys-
18 tems for the Western rangeland.

19 (2) ACTIVITIES.—The Secretary shall—

20 (A) for the purpose of optimizing the
21 health and productivity of Western rangeland-
22 based livestock and the Western rangeland eco-
23 system, develop—

24 (i) precision nutrition strategies for
25 rangeland-based livestock; and

1 (ii) technology-based rangeland and
2 livestock management strategies; and

3 (B) transfer new knowledge and technology
4 strategies into data-informed tools and decision
5 guidance for Western livestock and rangeland
6 managers.

7 (3) AUTHORIZATION OF APPROPRIATIONS.—

8 There is authorized to be appropriated to the Sec-
9 retary to carry out this subsection \$5,000,000 for
10 each fiscal year.

11 (f) PACIFIC SHELLFISH GENETICS.—

12 (1) FINDING.—Congress finds that there
13 exist—

14 (A) an economic importance of shellfish
15 aquaculture for rural and coastal communities
16 on the Pacific coast; and

17 (B) the need for resilient, healthy genetic
18 shellfish stocks that can withstand the changing
19 ocean and coastal conditions in the Pacific
20 coastal region and new shellfish disease threats.

21 (2) PROGRAM.—The Secretary shall carry out a
22 shellfish genetics and breeding program—

23 (A) to develop genetically improved shell-
24 fish stock;

1 (B) to promote enhanced disease resiliency
2 of shellfish;

3 (C) to modernize shellfish production tech-
4 nologies; and

5 (D) to transfer technology and improved
6 stocks to shellfish farmers in Pacific States.

7 (3) AUTHORIZATION OF APPROPRIATIONS.—
8 There is authorized to be appropriated to the Sec-
9 retary to carry out this subsection \$5,000,000 for
10 each fiscal year.

11 (g) HEMP PRODUCTION SYSTEMS.—

12 (1) FINDING.—Congress finds that there is an
13 emerging market potential for United States hemp
14 and hemp-based products for a variety of uses.

15 (2) RESEARCH.—The Secretary shall carry out,
16 in accordance with Federal and State laws, region-
17 ally focused research, development, stakeholder en-
18 gagement, and technology transfer activities to im-
19 prove agronomic and agro-economic understanding
20 of effectively integrating hemp into existing agricul-
21 tural cropping, processing, and marketing systems.

22 (3) AUTHORIZATION OF APPROPRIATIONS.—
23 There is authorized to be appropriated to the Sec-
24 retary to carry out this subsection \$5,000,000 for
25 each fiscal year.

1 (h) RANGELAND RESEARCH.—

2 (1) FINDING.—Congress finds that there is a
3 demonstrated potential for cooperative partnerships
4 to address complex sagebrush steppe ecosystem chal-
5 lenges in the Great Basin region.

6 (2) RESEARCH.—The Secretary shall support a
7 regional, multi-institutional cooperative partnership
8 to advance collaborative science-based conservation
9 research, extension, and education to address time-
10 sensitive and shared rangeland challenges affecting
11 sustainable agricultural productivity, rural commu-
12 nities, and ecosystem health.

13 (3) AUTHORIZATION OF APPROPRIATIONS.—
14 There is authorized to be appropriated to the Sec-
15 retary to carry out this subsection \$5,000,000 for
16 each fiscal year.

17 (i) SUDDEN OAK DEATH.—

18 (1) FINDING.—Congress finds that the Euro-
19 pean strain 1 and the North American strain 1 of
20 the sudden oak death pathogen are major threats to
21 western Douglas-fir and tanoak forests, resulting in
22 quarantine restrictions that threaten United States
23 forests and export markets for log shipments and
24 lily bulbs.

1 (2) RESEARCH.—The Secretary shall carry out
2 research to improve—

3 (A) understanding of the European strain
4 1 and North American strain 1 of the sudden
5 oak death pathogen; and

6 (B) treatment methods to inform control
7 and management techniques for those strains in
8 wildlands.

9 (3) AUTHORIZATION OF APPROPRIATIONS.—
10 There is authorized to be appropriated to the Sec-
11 retary to carry out this subsection \$5,000,000 for
12 each fiscal year.

13 (j) FOREST PRODUCTS RESEARCH.—

14 (1) FINDINGS.—Congress finds that—

15 (A) the forest products sector plays an im-
16 portant role in the United States economy; and

17 (B) the creation of new and improved
18 value-added products and renewable energy
19 from the United States wood supply is critical
20 to the sustainability of the United States econ-
21 omy.

22 (2) RESEARCH.—The Secretary, in coordination
23 with the Forest Products Laboratory of the Forest
24 Service, shall carry out research on—

25 (A) wood product quality improvement;

1 (B) improvement in forest products evalua-
2 tion standards and valuation techniques; and

3 (C) advances in forest production innova-
4 tion, development, and testing.

5 (3) AUTHORIZATION OF APPROPRIATIONS.—

6 There is authorized to be appropriated to the Sec-
7 retary to carry out this subsection \$5,000,000 for
8 each fiscal year.

9 (k) HOPS RESEARCH.—

10 (1) RESEARCH.—The Secretary shall carry out
11 research relating to hop production.

12 (2) AUTHORIZATION OF APPROPRIATIONS.—

13 There is authorized to be appropriated to the Sec-
14 retary to carry out this subsection \$5,000,000 for
15 each fiscal year.

16 (l) SOIL CARBON RESEARCH.—

17 (1) FINDING.—Congress finds that there is a
18 need for research into current and future dryland
19 production practices in cereal grain cropping sys-
20 tems to increase profitability, conserve soil, enhance
21 soil water storage, promote sequestration of carbon
22 and soil health, and reduce reliance on herbicides.

23 (2) RESEARCH.—The Secretary shall carry out
24 research focused on—

25 (A) improving yields;

1 (B) assessing the level of carbon sequestra-
2 tion through existing practices;

3 (C) developing new cropping systems capa-
4 ble of tolerating drought, heat, and diseases by
5 improving soil health;

6 (D) improving sequestration of carbon;

7 (E) forecasting pest and disease spread;

8 (F) implementing precision management
9 strategies; and

10 (G) identifying opportunities for increasing
11 sustainability of dryland crop production.

12 (3) AUTHORIZATION OF APPROPRIATIONS.—

13 There is authorized to be appropriated to the Sec-
14 retary to carry out this subsection \$5,000,000 for
15 each fiscal year.

16 (m) TREE FRUIT POST-HARVEST RESEARCH.—

17 (1) FINDING.—Congress finds that the tree
18 fruit industry faces significant economic vulner-
19 ability from variations in post-harvest quality con-
20 trol.

21 (2) RESEARCH.—The Secretary shall carry out
22 research relating to cherry and pear fruit physiology
23 and pathology necessary to promote enhanced qual-
24 ity and resiliency from endemic and emerging dis-
25 eases.

1 (3) AUTHORIZATION OF APPROPRIATIONS.—
2 There is authorized to be appropriated to the Sec-
3 retary to carry out this subsection \$5,000,000 for
4 each fiscal year.

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