

117TH CONGRESS  
2D SESSION

# S. 4971

To require the Secretary of Agriculture to establish an innovative agricultural technology pilot program, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

SEPTEMBER 28, 2022

Mrs. BLACKBURN (for herself and Ms. LUMMIS) introduced the following bill; which was read twice and referred to the Committee on Agriculture, Nutrition, and Forestry

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## A BILL

To require the Secretary of Agriculture to establish an innovative agricultural technology pilot program, 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; TABLE OF CONTENTS.**

4       (a) SHORT TITLE.—This Act may be cited as the  
5 “Innovative Agricultural Technology Act of 2022”.

6       (b) TABLE OF CONTENTS.—The table of contents for  
7 this Act is as follows:

See. 1. Short title; table of contents.  
See. 2. Definition of Secretary.

**TITLE I—INNOVATIVE AGRICULTURAL TECHNOLOGY PILOT  
PROGRAM**

Sec. 101. Purpose.  
Sec. 102. Definitions.  
Sec. 103. Establishment.  
Sec. 104. Applications.  
Sec. 105. Testing of innovative agricultural technologies.  
Sec. 106. Administration.  
Sec. 107. Reports.

**TITLE II—DISTRIBUTED LEDGER TECHNOLOGY APPLICATIONS  
IN AGRICULTURE**

Sec. 201. Distributed ledger technology educational program.  
Sec. 202. Study of distributed ledger technology applications in agriculture.

**1 SEC. 2. DEFINITION OF SECRETARY.**

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

**4 TITLE I—INNOVATIVE AGRICUL-  
5 TURAL TECHNOLOGY PILOT  
6 PROGRAM**

**7 SEC. 101. PURPOSE.**

8 The purpose of this title is to establish a pilot pro-  
9 gram to enable an eligible entity to obtain limited access  
10 to the market to test innovative agricultural technologies  
11 without obtaining a license or other authorization that  
12 may otherwise be required for those innovative agricul-  
13 tural technologies.

**14 SEC. 102. DEFINITIONS.**

15 In this title:

16 (1) CONSUMER.—The term “consumer” means  
17 an entity that purchases from an eligible entity a

1       product or service relating to an innovative agricultural  
2       technology under the pilot program.

3                     (2) ELIGIBLE ENTITY.—The term “eligible entity” means—

5                         (A) an individual who is a United States  
6        citizen residing in the United States; and

7                         (B) a United States corporation or other  
8        organized entity—

9                             (i) headquartered in the United  
10      States;

11                             (ii) operating in the United States;  
12      and

13                             (iii) with a physical presence, other  
14      than that of a registered office or agent or  
15      virtual mailbox, in the United States.

16                     (3) INNOVATIVE AGRICULTURAL TECHNOLOGY.—The term “innovative agricultural technology” means a technological innovation relating to  
17      agriculture in—

20                         (A) Global Positioning System-based or  
21      geospatial mapping;

22                         (B) satellite or aerial imagery;

23                         (C) yield monitoring;

24                         (D) soil mapping;

(E) sensors for gathering data on crop, soil, or livestock conditions;

(F) internet of things and telematics technologies;

(G) data management software and advanced analytics;

(H) network connectivity products and solutions;

(I) Global Positioning System guidance or  
auto-steer systems;

11 (J) supply chain platform technologies;

12 (K) distributed ledger technology applica-  
13 tions for tracing or sourcing agricultural prod-  
14 ucts;

(L) financial technology products or services specifically for agricultural producer credit and loan opportunities;

(M) variable rate technology for applying inputs, such as section control;

20 (N) nonfungible digital assets; and

(O) any other technology, as determined by  
the Secretary.

(4) PILOT PROGRAM.—The term “pilot program” means the Innovative Agricultural Tech-

1       nology Pilot Program established under section  
2       103(a).

3 **SEC. 103. ESTABLISHMENT.**

4       (a) IN GENERAL.—The Secretary shall establish a  
5       pilot program, to be known as the “Innovative Agricul-  
6       tural Technology Pilot Program”.

7       (b) CONSULTATION.—

8              (1) IN GENERAL.—In carrying out the pilot  
9       program, the Secretary shall consult with the Sec-  
10       retary of Labor, the Secretary of Transportation,  
11       the Administrator of the Environmental Protection  
12       Agency, the Federal Communications Commission,  
13       and applicable State agencies.

14              (2) FEDERAL COMMUNICATIONS COMMISSION.—  
15       The Federal Communications Commission shall ad-  
16       vise the Secretary regarding any products or services  
17       relating to innovative agricultural technologies that  
18       would need approval, including preliminary approval,  
19       of the Federal Communications Commission to be  
20       tested under the pilot program.

21 **SEC. 104. APPLICATIONS.**

22       (a) IN GENERAL.—An eligible entity shall apply to  
23       participate in the pilot program by submitting to the Sec-  
24       retary an application at such time and in such manner  
25       as the Secretary may require.

1       (b) INCLUSIONS.—An application submitted under  
2 subsection (a) shall include—  
3               (1) contact information for the eligible entity;  
4               (2) any provisions of law (including regulations)  
5               that the eligible entity seeks to make inapplicable  
6               with respect to the innovative agricultural technology  
7               to be tested because that innovative agricultural  
8               technology was not considered when the provision of  
9               law was enacted or promulgated;  
10              (3) a description of the innovative agricultural  
11               technology to be tested, including—  
12                  (A) the means by which the innovative ag-  
13               ricultural technology would benefit consumers;  
14                  (B) the means by which the innovative ag-  
15               ricultural technology would aim to reduce costs  
16               to consumers;  
17                  (C) the means by which the innovative ag-  
18               ricultural technology is different from other  
19               technologies in operation; and  
20                  (D) if the innovative agricultural tech-  
21               nology involves the use of software, hardware,  
22               or other technology developed for the purpose of  
23               implementing or operating the innovative agri-  
24               cultural technology, a detailed description of the

1           operation and general content of the software,  
2           hardware, or other technology;

3           (4) a description of the proposed plan of the eli-  
4           gible entity for testing the innovative agricultural  
5           technology, including estimated time periods for  
6           market entry and market exit;

7           (5) the means by which the eligible entity will  
8           wind down the testing and protect consumers if the  
9           testing fails to comply with the terms of the pilot  
10          program;

11          (6) sufficient information to demonstrate that  
12          the eligible entity has—

13           (A) an adequate understanding of the in-  
14           novative agricultural technology; and

15           (B) a sufficient plant to test, monitor, and  
16           assess the innovative agricultural technology  
17           while ensuring consumers are protected from  
18           harm;

19           (7) a description of the potential risk to con-  
20           sumers during testing of the innovative agricultural  
21           technology and the methods that will be used to pro-  
22           tect consumers and resolve complaints during the  
23           period of testing; and

24           (8) a description of the availability to the eligi-  
25          ble entity of the necessary personnel and adequate

1 financial and technical expertise to carry out testing  
2 of the innovative agricultural technology.

3 (c) ADDITIONAL INFORMATION.—The Secretary may  
4 request the submission of such additional information by  
5 the eligible entity as the Secretary determines to be rea-  
6 sonably necessary to evaluate an application submitted  
7 under subsection (a).

8 (d) APPLICATION FEE.—The Secretary shall collect  
9 from an eligible entity that submits an application under  
10 subsection (a) a \$500 fee for each application submitted.

11 (e) CONSULTATION.—

12 (1) PRIOR TO SUBMISSION.—An eligible entity  
13 may contact and consult with staff of the Depart-  
14 ment of Agriculture before submitting an application  
15 under subsection (a).

16 (2) AGENCIES.—The Secretary may consult  
17 with applicable agencies before approving or denying  
18 an application submitted under subsection (a).

19 (f) APPROVAL OR DENIAL.—

20 (1) DEADLINE.—Not later than 90 days after  
21 the date on which the Secretary receives an applica-  
22 tion submitted under subsection (a), the Secretary  
23 shall notify the applicable eligible entity whether the  
24 application is approved or denied.

6 (A) the eligible entity—

(ii) is financially responsible; and

(B) the health, safety, privacy, and security of consumers will be adequately protected in the testing of the applicable innovative agricultural technology.

1   **SEC. 105. TESTING OF INNOVATIVE AGRICULTURAL TECH-**

2                         **NOLOGIES.**

3                 (a) IN GENERAL.—On approval of an application

4 under section 104—

5                         (1) the applicable eligible entity shall become a  
6 participant in the pilot program;

7                         (2) the Secretary shall certify the provisions of  
8 law (including regulations) to which the eligible enti-  
9 ty and the applicable innovative agricultural tech-  
10 nology would ordinarily be subject but to which the  
11 eligible entity and the applicable innovative agricul-  
12 tural technology is not subject during the participa-  
13 tion of the eligible entity in the pilot program; and

14                         (3) during the participation of the eligible enti-  
15 ty in the pilot program, the eligible entity and the  
16 applicable innovative agricultural technology shall  
17 not be subject to the provisions of law (including  
18 regulations) certified by the Secretary under para-  
19 graph (2).

20                 (b) DURATION.—Except as provided in subsections  
21 (g) and (h)(2), the period of participation in the pilot pro-  
22 gram shall be 4 years beginning on the date on which the  
23 applicable application is approved under section 104.

24                 (c) REQUIREMENTS OF CONSUMERS.—

25                         (1) AGREEMENTS.—To participate in testing of  
26 an innovative agricultural technology under the pilot

1 program, a consumer shall enter into an agreement  
2 with the Secretary.

3 (2) RESIDENCY.—A consumer participating in  
4 testing of an innovative agricultural technology  
5 under the pilot program shall be a United States cit-  
6 izen residing in the United States.

7 (3) LIMITATION.—Not more than 25,000 con-  
8 sumers may enter into an agreement to test each in-  
9 novative agricultural technology under the pilot pro-  
10 gram.

11 (d) DISCLOSURES TO CONSUMERS.—

12 (1) IN GENERAL.—An eligible entity shall pro-  
13 vide to a consumer participating in testing of any  
14 product or service relating to an innovative agricul-  
15 tural technology under the pilot program the fol-  
16 lowing information:

17 (A) The name and contact information of  
18 the eligible entity.

19 (B) A disclosure that—

20 (i) the Secretary has authorized the  
21 product or service to be made available to  
22 consumers for a temporary period;

23 (ii) the product or service may not be  
24 required to comply with all statutory and  
25 regulatory requirements;

4 (iv) the product or service—

(I) is undergoing testing under  
the pilot program;

(II) may be discontinued at the end of the testing period;

9 (III) may not function as in-  
10 tended; and

(IV) may entail financial risk.

12 (C) The expected end date of the period of  
13 testing of the product or service.

21 (2) MANNER AND TIMING OF DISCLOSURE.—

22 The information described in paragraph (1) shall be  
23 provided—

24 (A) in writing;

(B) in such format as the Secretary may require; and

(C) before the consumer purchases, receives, or uses any product or service under the pilot program.

(e) LOANS.—An eligible entity participating in the pilot program may provide a loan to a consumer in an amount that is not more than \$75,000.

9           (f) LIABILITY IN CASE OF BODILY HARM.—If a con-  
10 sumer experiences bodily harm caused by a product or  
11 service during testing under the pilot program, notwithstanding  
12 subsection (a)(3), the Secretary may impose li-  
13 ability under any provision of law to which the applicable  
14 eligible entity and the applicable innovative agricultural  
15 technology are made not subject under that subsection.

16       (g) SUSPENSION OR TERMINATION OF PARTICIPA-  
17 TION.—The Secretary may suspend or terminate the par-  
18 ticipation of an eligible entity in the pilot program, at any  
19 time, if the Secretary determines that—

1                             (3) the eligible entity has violated the condi-  
2                             tions of participation in the pilot program.

3                             (h) EXPIRATION OR EXTENSION OF TESTING.—

4                             (1) IN GENERAL.—Not later than 1 month be-  
5                             fore the expiration of the period of participation of  
6                             an eligible entity in the pilot program described in  
7                             subsection (b), the eligible entity shall—

8                                 (A) notify the Secretary that the eligible  
9                             entity will exit the market with respect to the  
10                            applicable innovative agricultural technology at  
11                             the expiration of the period of participation;

12                                 (B) seek an extension in accordance with  
13                             paragraph (2); or

14                                 (C) notify the Secretary that the eligible  
15                             entity is seeking a license or other required au-  
16                             thorization to remain in the market with re-  
17                             spect to the applicable innovative agricultural  
18                             technology.

19                             (2) EXTENSIONS.—

20                                 (A) IN GENERAL.—An eligible entity par-  
21                             ticipating in the pilot program may submit to  
22                             the Secretary a request for not more than 1 ex-  
23                             tension of participation of not longer than 2  
24                             years to conduct additional testing or pursue a  
25                             license or other required authorization to re-

1 main in the market with respect to the applica-  
2 ble innovative agricultural technology.

3 (B) INCLUSIONS.—A request submitted  
4 under subparagraph (A) shall include a detailed  
5 description of the results of testing under the  
6 initial testing period, including—

7 (i) a description of how the applicable  
8 innovative agricultural technology—

9 (I) added value to consumers;

10 (II) was economically viable for  
11 consumers;

12 (III) brought new and reasonably  
13 priced technology to consumers;

14 (IV) did not pose an unreason-  
15 able risk of harm to consumers; and

16 (V) provided consumers protec-  
17 tion;

18 (ii) a description of statutory and reg-  
19 ulatory issues that continue to limit the  
20 applicable innovative agricultural tech-  
21 nology from being used, issued, sold, solic-  
22 ited, distributed, or advertised in the mar-  
23 ket;

24 (iii) a description of how the applica-  
25 ble innovative agricultural technology is

1                   functioning in the market and the manner  
2                   in which the applicable innovative agricul-  
3                   tural technology is offered or provided;

4                   (iv) a log of consumer complaints re-  
5                   lating to testing of the applicable innova-  
6                   tive agricultural technology and a descrip-  
7                   tion of the process for addressing those  
8                   consumer complaints; and

9                   (v) such other information as the Sec-  
10                  retary may require.

11                 (C) APPLICATION FEE.—The Secretary  
12                  shall collect from an eligible entity that submits  
13                  a request under subparagraph (A) a \$250 fee  
14                  for each request submitted.

15                 (D) APPROVAL OR DENIAL.—The Sec-  
16                  retary, in the sole discretion of the Secretary,  
17                  shall approve or deny a request submitted  
18                  under subparagraph (A).

19                 (3) CONTINUING OBLIGATIONS.—If testing  
20                  under the pilot program includes products or serv-  
21                  ices that require an eligible entity to fulfill obliga-  
22                  tions to a consumer after the expiration of the pe-  
23                  riod of testing under the pilot program, such as  
24                  servicing of a loan, that expiration shall not relieve  
25                  the eligible entity of those obligations.

## 1 SEC. 106. ADMINISTRATION.

2 (a) RECORDKEEPING.—An eligible entity participating in the pilot program shall—

4 (1) retain records, documents, and data produced in the ordinary course of business regarding an innovative agricultural technology tested under the pilot program; and

8 (2) make, maintain, and preserve books and records in accordance with regulations promulgated by the Secretary to carry out this paragraph.

11 (b) CONFIDENTIALITY.—

12 (1) DEFINITION OF RECORDS.—In this subsection, the term “records” means application materials, documents, and other records submitted to or obtained by the Secretary in administering the pilot program.

17 (2) PRIVACY.—Records shall not be public records or open to inspection by the public.

19 (3) PROPRIETARY RECORDS.—Records, other than application materials, shall be considered to be proprietary and contain trade secrets.

22 (4) LEGAL ACTION.—Notwithstanding paragraphs (2) and (3), the Secretary may use records in furtherance of regulatory or legal action brought 24 as part of the official duties of the Secretary.

1                         (5) LIABILITY.—The Secretary or a person act-  
2                         ing under the authority of the Secretary who re-  
3                         ceives or views records shall not be liable for the in-  
4                         formation or data received or viewed.

5                         (6) EFFECT.—Nothing in this subsection pre-  
6                         vents the disclosure of information that is admissible  
7                         as evidence in a civil or criminal proceeding brought  
8                         by a Federal agency to enforce or prosecute a civil  
9                         or criminal violation of law.

10 **SEC. 107. REPORTS.**

11                         (a) REPORTS TO THE SECRETARY.—

12                         (1) IN GENERAL.—Every 180 days, an eligible  
13                         entity participating in the pilot program shall submit  
14                         to the Secretary a report in such form as the Sec-  
15                         retary may require that contains the following infor-  
16                         mation:

17                         (A) The period of time that the eligible en-  
18                         tity has been marketing the applicable innova-  
19                         tive agricultural technology to consumers.

20                         (B) The successes, or failures, of the appli-  
21                         cable innovative agricultural technology.

22                         (C) The challenges, and potential future  
23                         challenges, of the applicable innovative agricul-  
24                         tural technology.

(D) The number of consumers who have received any product or service relating to the applicable innovative agricultural technology.

(F) Any other information the Secretary  
may require.

15 (A) notify the Secretary of that failure;

16 and

(b) REPORTS TO CONGRESS.—Not later than 1 year after the date of enactment of this Act, and each year thereafter, the Secretary shall submit to the Committee on Agriculture, Nutrition, and Forestry of the Senate and the Committee on Agriculture of the House of Representatives a report describing—

- 1                             (1) the pilot program, including recommenda-  
2                             tions relating to the pilot program; and  
3                             (2) any provisions of law (including regulations)  
4                             that hinder innovation in agriculture.

5                             **TITLE II—DISTRIBUTED LEDGER**  
6                             **TECHNOLOGY APPLICATIONS**  
7                             **IN AGRICULTURE**

8                             **SEC. 201. DISTRIBUTED LEDGER TECHNOLOGY EDU-**  
9                             **CATIONAL PROGRAM.**

10                         (a) IN GENERAL.—Not later than January 1, 2024,  
11                         the Secretary shall establish an online program that teach-  
12                         es agricultural producers—

13                         (1) the benefits of implementing distributed  
14                         ledger technology in agricultural production, dis-  
15                         tribution, and sales;

16                         (2) the different distributed ledger technology  
17                         programs that exist for agricultural producers; and  
18                         (3) the requirements to begin using a distrib-  
19                         uted ledger technology program for agricultural pro-  
20                         ducers.

21                         (b) CONSULTATION.—In developing the program  
22                         under this section, the Secretary shall consult with distrib-  
23                         uted ledger technology experts in the agricultural industry.

1       (c) OUTREACH.—The Secretary shall publicize, and  
2 encourage agricultural producers to participate in, the  
3 program under this section.

4 (d) TERMINATION.—This section shall cease to have  
5 effect on July 1, 2030.

## 6 SEC. 202. STUDY OF DISTRIBUTED LEDGER TECHNOLOGY

## 7 APPLICATIONS IN AGRICULTURE.

8       (a) IN GENERAL.—The Secretary, in coordination  
9 with such other relevant Federal agencies as the Secretary  
10 determines to be appropriate, shall conduct a study to  
11 identify potential applications for distributed ledger tech-  
12 nology in agricultural operations.

13 (b) INCLUSIONS.—The study conducted under sub-  
14 section (a) shall include an examination of—

15                   (1) how distributed ledger technology can be  
16                   used to trace the origin of a product;

(4) implementing the use of distributed ledger technology for data verification and certification;

24 (5) the potential use of distributed ledger tech-  
25 nology for tracking and ordering supplies;

1                         (6) the potential use of distributed ledger tech-  
2                         nology as a tool for asset exchange, including pay-  
3                         ments for sales and storage of products and equip-  
4                         ment; and

5                         (7) such other matters as the Secretary deter-  
6                         mines to be appropriate.

7                         (c) REPORT.—Not later than 1 year after the date  
8                         of enactment of this Act, the Secretary, in coordination  
9                         with the other relevant Federal agencies described in sub-  
10                        section (a), shall submit a report containing the findings  
11                        and recommendations of the study conducted under that  
12                        subsection to—

13                         (1) the Committee on Agriculture, Nutrition,  
14                         and Forestry of the Senate;

15                         (2) the Committee on Commerce, Science, and  
16                         Transportation of the Senate;

17                         (3) the Committee on Agriculture of the House  
18                         of Representatives; and

19                         (4) the Committee on Energy and Commerce of  
20                         the House of Representatives.

○