

JAN 17 2025

A BILL FOR AN ACT

RELATING TO AGRICULTURE.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that soil health is a
2 critical element of sustainable crop production, as soil can
3 directly influence biological and microbial activity that
4 supports agricultural systems. In the agricultural sector, soil
5 health and quality can be negatively impacted by certain
6 practices, such as the excessive use of chemical fertilizers
7 that deplete essential microbiological nutrients. Soil
8 degradation can be further exacerbated by soil compaction, poor
9 aggregation, high pathogen pressure, and heavy metal
10 contamination, which can lead to reduced crop yields, increased
11 disease susceptibility, and greater reliance on intensive
12 agricultural practices that can further harm the environment.

13 To prevent soil degradation, algae-based fertilizers have
14 been proven to protect soil while replenishing key nutrients
15 needed for agricultural activities. Microbial algae-based
16 fertilizers are rich in organic compounds, nitrogen,
17 phosphorous, potassium, and trace elements that improve soil



1 aeration, increase water retention, suppress harmful pathogens,
2 and boost overall agricultural fertility. Emerging research has
3 demonstrated that specific types of microalgae and seaweeds
4 offer promising solutions to improve soil health as a stimulant
5 for nutrient cycling. Additionally, microbial algae products do
6 not contain synthetic chemicals, which can harm both natural
7 physical environments and critical water resources. The
8 incorporation of microbial algae-based fertilizers is a
9 sustainable and cost-effective solution for the State's
10 agricultural industry.

11 The legislature recognizes that the agricultural industry
12 remains a critical state priority. As the State seeks to
13 increase its food resiliency and self-sufficiency while
14 promoting local produce and agricultural products, ensuring the
15 overall health of soil is imperative to achieve this goal.
16 Further, as the agricultural industry continues to innovate
17 methods suited for the State's unique natural environment,
18 recent developments, including microbial algae soil products,
19 can provide low-risk opportunities to test new practices. By
20 testing alternative agricultural methods in farms statewide, the



1 agricultural industry can continue to grow while ensuring the
2 safety of local produce and products for consumption.

3 Therefore, the purpose of this Act is to:

- 4 (1) Establish the microbial algae soil products pilot
5 program; and
6 (2) Establish the microbial algae soil products pilot
7 program special fund.

8 SECTION 2. Chapter 141, Hawaii Revised Statutes, is
9 amended by adding two new sections to part I to be appropriately
10 designated and to read as follows:

11 "§141-A Microbial algae soil products pilot program. (a)

12 There is established the microbial algae soil products pilot
13 program to be administered by the department of agriculture to
14 introduce microbial algae on agricultural lands in the State to
15 address agricultural soil health while improving nutrient
16 cycling, reducing fertilizer dependency, and enhancing overall
17 soil health.

18 (b) Farmers shall be eligible for participation in the
19 microbial algae soil products pilot program if the farmer:

- 20 (1) Operates a small to medium-sized farm of not less than
21 ten acres; provided that farmers operating larger



1 farms may participate if the total farm size does not
2 exceed one hundred acres;

3 (2) Has stable or moderate production rates among all
4 crops produced on the farm;

5 (3) Experiences yield reduction, poor soil health or
6 nutrient management, or excessive fertilizer use that
7 impacts the overall quality of soil;

8 (4) Produces high-value crops or a diverse variety of
9 crops; and

10 (5) Operates an organic farm.

11 The department of agriculture may establish additional
12 criteria for eligibility to participate in the microbial algae
13 soil products pilot program.

14 (c) The department of agriculture shall collaborate with
15 the college of tropical agriculture and human resources of the
16 university of Hawaii and laboratories at the university of
17 Hawaii engaged in the study of soil sciences. The department of
18 agriculture may collaborate with other departments,
19 laboratories, or units at the university of Hawaii whose
20 expertise is relevant to the microbial algae soil products pilot
21 program.



1 (d) The department of agriculture may adopt rules pursuant
2 to chapter 91 to implement and administer the microbial algae
3 soil products pilot program.

4 (e) The department of agriculture shall submit a report of
5 its findings and recommendations for long-term application of
6 microbial algae soil products to the State's agricultural
7 sector, including any proposed legislation, to the legislature
8 no later than twenty days prior to the convening of the regular
9 sessions of 2026 and 2027.

10 **§141-B Microbial algae soil products pilot program special**
11 **fund.** There is established within the state treasury the
12 microbial algae soil products pilot program special fund, to be
13 administered by the department of agriculture, into which shall
14 be deposited all moneys appropriated by the legislature to the
15 special fund, including gifts, donations, grants, or other
16 proceeds collected by the department for the pilot program.
17 Moneys in the special fund shall be used for the administration
18 of the microbial algae soil products pilot program established
19 pursuant to section 141-A."

20 SECTION 3. There is appropriated out of the general
21 revenues of the State of Hawaii the sum of \$1,500,000 or so much



1 thereof as may be necessary for fiscal year 2025-2026 and the
2 same sum or so much thereof as may be necessary for fiscal year
3 2026-2027 to be deposited into the microbial algae soil products
4 pilot program special fund.

5 SECTION 4. There is appropriated out of the microbial
6 algae soil products pilot program special fund the sum of
7 \$1,500,000 or so much thereof as may be necessary for fiscal
8 year 2025-2026 and the same sum or so much thereof as may be
9 necessary for fiscal year 2026-2027 for:

- 10 (1) Data collection and analysis of soil from
11 participating farms;
- 12 (2) Soil testing, bacterial counts, water retention, and
13 crop yielding from participating farms;
- 14 (3) Equipment, algae-based products, and farming supplies
15 necessary to carry out the microbial algae soil
16 products pilot program;
- 17 (4) Educational outreach, including materials and
18 informational seminars to recruit prospective farmers
19 to the microbial algae soil products pilot program and
20 education for the broader community; and



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(5) The establishment of full-time equivalent
(FTE) positions to effectuate the purposes of
the microbial algae soil products pilot program.

The sums appropriated shall be expended by the department
of agriculture for the purposes of this Act.

SECTION 5. The microbial algae soil products pilot program
special fund established pursuant to section 141-B, Hawaii
Revised Statutes, shall be abolished and repealed on June 30,
2027, and any unencumbered remaining balances shall lapse to the
general fund.

SECTION 6. In codifying the new sections added by section
2 of this Act, the revisor of statutes shall substitute
appropriate section numbers for the letters used in designating
the new sections in this Act.

SECTION 7. New statutory material is underscored.

SECTION 8. This Act shall take effect on July 1, 2025.

INTRODUCED BY:

Anthony M. Rendon *up*



S.B. NO. 517

Report Title:

DOA; UH; CTAHR; Microbial Algae Soil Products Pilot Program;
Microbial Algae Soil Products Pilot Program Special Fund; Rules;
Reports; Appropriations

Description:

Establishes a Microbial Algae Soil Products Pilot Program within the Department of Agriculture in collaboration with the University of Hawaii College of Tropical Agriculture and Human Resources and other relevant stakeholders. Establishes the Microbial Algae Soil Products Pilot Program Special Fund. Authorizes the Department of Agriculture to adopt administrative rules. Requires reports to the Legislature. Appropriates funds.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

