
A BILL FOR AN ACT

RELATING TO INDUSTRIAL HEMP.

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

1 SECTION 1. The legislature finds that section 7606 of the
2 federal Agricultural Act of 2014 authorizes institutions of
3 higher education and state departments of agriculture to conduct
4 industrial hemp research. The legislature also finds that
5 industrial hemp can be grown or cultivated for research
6 purposes.

7 The legislature further finds that the State will benefit
8 from research for phytoremediation, which is the
9 environmentally-friendly science of using plants and trees to
10 remove toxins in the soil, such as metals, pesticides, solvents,
11 explosives, and crude oil. These toxins can be reduced by
12 planting specific plants and trees, called hyper-accumulators,
13 in polluted areas. Specifically, these plants and trees draw in
14 the toxins, along with beneficial nutrients, through their roots
15 as nourishment and concentrate them in their stems, shoots, and
16 leaves, which can then be harvested and disposed of safely. The
17 nutrient uptake process leaves a clean, balanced, and nutrient



1 rich soil, which can then be safely used for agriculture or
2 improving conservation habitats.

3 The legislature also finds that hemp is a superior
4 phytoremediator because it grows quickly and can extract toxins
5 without the need to remove any of the contaminated topsoil.
6 Other factors that make hemp a superior phytoremediator are its
7 ability to grow unaffected by the toxins it accumulates, its
8 fast rate of absorption, and its ability to bind compound
9 contaminants from the air and the soil. A factor that makes the
10 State a particularly compelling candidate for hemp-based
11 phytoremediation is that the State's extensive agricultural
12 operations in the past have left toxins in vast tracts of land.
13 Phytoremediation will remove those toxins.

14 The legislature also finds that industrial hemp is an
15 environmentally friendly and efficient feedstock for biofuel.
16 Biodiesel plants already in existence in the State are capable
17 of meeting eight per cent of the State's biodiesel needs for
18 ground transportation. These biodiesel plants could increase
19 their efficiency by utilizing industrial hemp as a feedstock,
20 thus reducing the State's reliance on imported fuel.

21 The purpose of this Act is to authorize the dean of the
22 college of tropical agriculture and human resources at the



1 University of Hawaii at Manoa to establish a two-year industrial
2 hemp remediation and biofuel crop research program.

3 SECTION 2. (a) The dean of the college of tropical
4 agriculture and human resources at the University of Hawaii may
5 establish a two-year industrial hemp remediation and biofuel
6 crop research program that shall include the authority to grow
7 or cultivate industrial hemp; provided that the research project
8 shall meet the requirements established under section 7606 of
9 the federal Agricultural Act of 2014 (Public Law 113-79).

10 Through the research program, the dean may determine how
11 soils and water may be made more pristine and healthy by
12 phytoremediation, removal of contaminants, and rejuvenation
13 through the growth of industrial hemp, as well as the viability
14 of industrial hemp as a biofuel feedstock. The dean may work in
15 collaboration with the United States Army Corps of Engineers,
16 its affiliates, and the Department of Molecular Biosciences and
17 Bioengineering at the University of Hawaii John A. Burns school
18 of medicine to determine the viability of industrial hemp as a
19 biofuel feedstock.

20 (b) The dean of the college of tropical agriculture and
21 human resources at the University of Hawaii may submit a final
22 report, including any proposed legislation, to the legislature



1 no later than twenty days prior to the convening of the regular
2 session of 2016 on the following:

3 (1) The rate of contamination uptake from soil and water;

4 (2) The mode of efficient uptake from soil and water;

5 (3) The rate of carbon fixation in the Calvin cycle;

6 (4) The locations in the roots, stems, leaves, and flowers
7 of the plants at which contaminants are fixated;

8 (5) What contaminants are stabilized in the plants;

9 (6) What contaminants on the site need additional
10 treatment in order to make the soil or water healthy
11 and pristine;

12 (7) A baseline for plants cultivated in a clean soil;

13 (8) The viability of industrial hemp as a biofuel
14 feedstock; and

15 (9) Any other data deemed important by the dean.

16 SECTION 3. No person shall be subject to any civil or
17 criminal sanctions in this State for growing or possessing
18 industrial hemp; provided that the person's growing or
19 possessing of industrial hemp is part of the individual's
20 participation in the two-year industrial hemp remediation and
21 biofuel crop research program and the person's participation is
22 in full compliance with the requirements of the program.



1 SECTION 4. For purposes of this Act, the term "industrial
2 hemp" means the plant *Cannabis sativa* L. and any part of that
3 plant, whether growing or not, with a delta-9
4 tetrahydrocannabinol concentration of not more than 0.3 per cent
5 on a dry weight basis. Any plant that meets the definition of
6 "industrial hemp" under this Act shall not constitute
7 "marijuana" as defined in section 329-1 or 712-1240, Hawaii
8 Revised Statutes.

9 SECTION 5. There is appropriated out of the general
10 revenues of the State of Hawaii the sum of \$ or so
11 much thereof as may be necessary for fiscal year 2014-2015 for
12 the college of tropical agriculture and human resources at the
13 University of Hawaii at Manoa to establish a two-year industrial
14 hemp remediation and biofuel crop research program.

15 The sum appropriated shall be expended by the college of
16 tropical agriculture and human resources at the University of
17 Hawaii for the purposes of this Act.

18 SECTION 6. This Act shall take effect on July 1, 2050, and
19 shall be repealed on July 1, 2016.



Report Title:

Two-year Industrial Hemp Remediation and Biofuel Crop Research Program; Appropriation

Description:

Authorizes the dean of the college of tropical agriculture and human resources at the University of Hawaii at Manoa to establish a two-year industrial hemp remediation and biofuel research program. Makes an appropriation for the program. Effective 7/1/2050. (SD2)

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