A Bill for an Act Relating to Industrial Hemp.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. The legislature finds that Section 7606 of the United States Agricultural Act of 2014 authorizes institutions of higher education and state departments of agriculture to conduct industrial hemp research. The legislature also finds that industrial hemp can be grown or cultivated for research purposes.

The legislature further finds that the State will benefit from research for phytoremediation, which is the environmentally-friendly science of using plants and trees to remove toxins in the soil, such as metals, pesticides, solvents, explosives, and crude oil. These toxins can be reduced by planting specific plants and trees, called hyperaccumulators, in polluted areas. Specifically, these plants and trees draw in the toxins, along with beneficial nutrients, through their roots as nourishment and concentrate them in their stems, shoots, and leaves, which can then be harvested and disposed of safely. The nutrient uptake process leaves a clean, balanced, and nutrient rich soil, which can then be safely used for agriculture or improving conservation habitats.

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

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

The purpose of this Act is to authorize 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 crop research program.

SECTION 2. (a) The dean of the college of tropical agriculture and human resources at the University of Hawaii may establish a two-year industrial hemp remediation and biofuel crop research program that shall include the authority to grow or cultivate industrial hemp in accordance with the requirements established under section 7606 of the federal Agricultural Act of 2014 (Public Law 113-79), provided that the authority to grow or cultivate industrial hemp under this Act shall only apply to industrial hemp grown or cultivated for the research program established under this Act. Through the research program, the dean may determine how soils and water may be made more pristine and healthy by phytoremediation, removal of contaminants, and rejuvenation through the growth of industrial hemp, as well as the viability of industrial hemp as a biofuel feedstock. The dean may work in collaboration with the United States Army Corps of Engineers, its affiliates, and the department of molecular biosciences and bioengineering at the University of Hawaii John A. Burns school of medicine to determine the viability of industrial hemp as a biofuel feedstock.

(b) The department of agriculture shall certify that the seed stock to be used in the research program is for growing industrial hemp. The research program established under subsection (a) shall only use industrial hemp seed stock that is certified by the department of agriculture. If the seed stock cannot be verified by the department of agriculture as industrial hemp seed stock, the dean shall not commence the growing or cultivation of industrial hemp for the research program.

(c) The research program shall use only one test site to grow and culti-

vate industrial hemp.

(d) The dean of the college of tropical agriculture and human resources at the University of Hawaii shall submit a final report, including any proposed legislation, to the legislature no later than twenty days prior to the convening of the regular session of 2016 on the following:

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

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

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

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

(5) What contaminants are stabilized in the plants;

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

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

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

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

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

SECTION 3. (a) No person shall be subject to any civil or criminal sanctions in this State for growing or possessing industrial hemp; provided that the person's growing or possession of industrial hemp is part of the person's participation in the two-year industrial hemp remediation and biofuel crop research program and the person's participation is in full compliance with the requirements of the program.

(b) The department of agriculture shall test and monitor the plants growing on the test site to ensure that no marijuana is grown on the site. If marijuana is found to be growing or being cultivated on the test site, then the research

project shall cease immediately.

SECTION 4. This Act shall take effect on July 1, 2014, and shall be repealed on July 1, 2016.

(Approved April 30, 2014.)