
MORGAN STATE UNIVERSITY

GROWING THE FUTURE, LEADING THE WORLD

2019 COLLABORATIVE PROGRAM IN INDUSTRIAL HEMP GROWERS



MORGAN STATE UNIVERSITY QUICK FACT

- A Historically Black University, founded in 1867
- Doctoral Research University (R2 by Carnegie Classification)
- Maryland's Preeminent Public Urban Research University (2017 designation by the State Legislature)
- Enrolls 7800 Students; multiracial; 18% graduate students
- Offers 16 Doctorate, 34 Master's and 46 Bachelor's Programs
- Contribute \$1 Billion to Maryland Economy Yearly

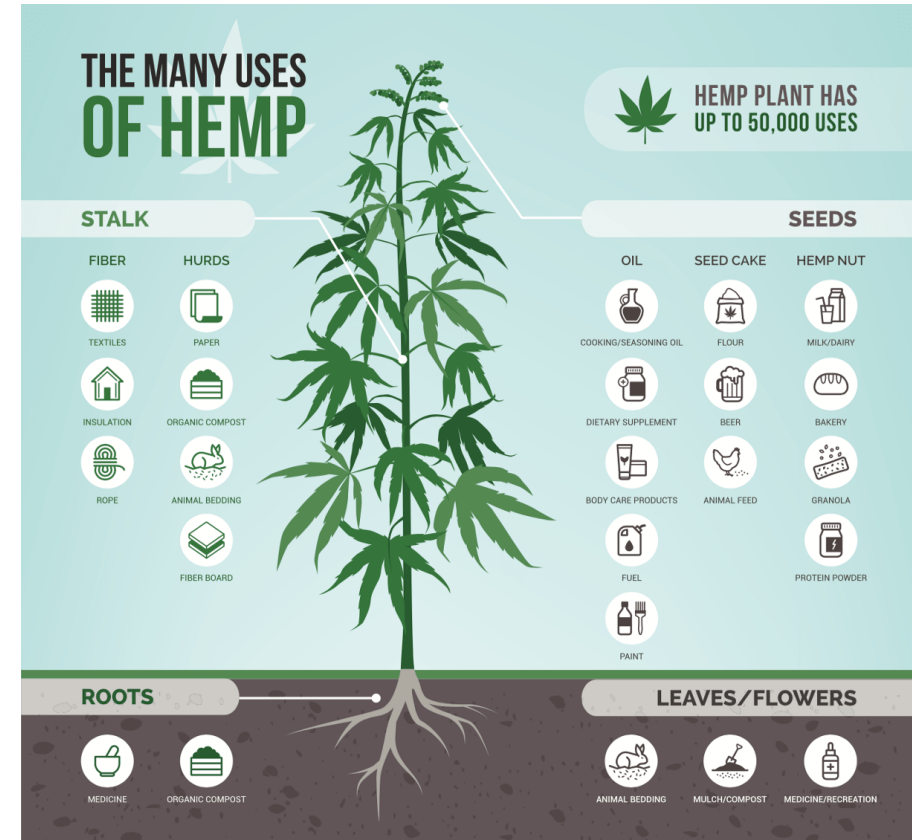
MORGAN STATE UNIVERSITY (1918 - 2019)



VISION

Morgan State University (MSU) will establish an industrial hemp program that integrates:

- Education
- Applied and academic research
- Measurement services to external customers



RESEARCH PROGRAMS:APPLIED RESEARCH (I)



■ Collaborative Agricultural Studies

- Conduct agronomy research and determine the required soil types, growing conditions, and harvest methods relating to the production of varieties of industrial hemp
- Record differences in biomass yield, CBD content, cannabinoid profiles, and high value product yields from various phenotypes grown in various soil types and environments within the State
- Study and investigate marketplace opportunities for hemp products to increase the job base in the State by means of employment, related to the production of industrial hemp

MORGAN/ GROWER COLLABORATIVE HEMP AGRICULTURAL STUDIES

Objectives:

- To Facilitate an Industrial Hemp Economy within the State of Maryland through selective collaborations with Experienced Growers.
- Record differences in biomass yield, cannabinoid profile, and high value product yield from various hemp phenotypes grown in various soil types , climate conditions, and environments, thus providing data to assist Maryland Farmers understand how the weather, soil, and environmental conditions affect the hemp crop growth and yields.

Data to be recorded:

- Soil and water conditions: N, P, K, micronutrients, pH, heavy metals
- Weather conditions: Daily sun intensity, temperature, rain days
- Rain days and how that relates to watering and fertilizer schedule
- Amount and type of fertilizers, pesticides, or herbicides used
- Microorganism varieties and concentration
- Biomass of the crop, molds, disease, pests, growth rate and finishing times
- CBD and Δ^9 -THC content

TO APPLY FOR AN INDUSTRIAL HEMP COLLABORATION WITH MORGAN STATE UNIVERSITY IN 2019

Growers Will Need To:

- Read “Vision for a Morgan State University Industrial Hemp Program”
- Submit “Grower” Proposal for Collaboration
- Complete and Sign Maryland State Department of Agriculture Form
- Sign Research Agreement with Morgan State University

Criteria Against Which Proposals Will be Scored

- **Innovation and Ability of Project to Provide New Knowledge (0-5 points)**

MSU will engage in research projects that provide new knowledge. Examples include conducting agronomical research to determine the required soil types, growing conditions, and harvest methods that result in the highest yield of various varieties of industrial hemp, or recording the differences in biomass yield or CBD content from various phenotypes grown in the various soil types and environments within the state.

- **Feasibility and Technical Merit/Innovation of the of Proposal (0-5 points)**

Feasibility will depend on several factors, including lab equipment and expertise available at MSU. Technical Merit/Innovation of the proposal will be based on our assessment of the potential of this study to generate new knowledge

- **Congruence with and Morgan State University Program Vision (0-5 points)**

MSU has prepared a detailed vision for the hemp program. The program includes research, teaching, and service elements. Projects that are more congruent with this vision will receive a higher score. For example, a project that is useful for both research and teaching purposes, or it can provide research data for several purposes, may receive a higher score.

- **Knowledge and Prior Experience with Industrial Hemp (0-5 points)**

Farmers who have prior experience with growing industrial hemp, or are working closely with those who have grown hemp in other states or countries, will receive a higher score.

- **Growing the crop in Maryland (0 or 5 points)**

As an agent of State of Maryland, Morgan State University will preferably conduct research under this Program with Farmers (Growers) who will be growing their crop in Maryland as part of the 2019 State Pilot Program.

Minimum of 15 points needed for acceptance; MSU can accommodate ~15 collaborators for the 2019 Growing Season



Thank
YOU!