

Midwestern Hemp Database: Data and Sample Collection Protocols



Thank you for your interest in participating in this research project on industrial hemp production in Illinois!

As a participant in this project, records will be kept detailing all information pertaining to the project including row spacing, planting/transplant date, 50% flowering date, flowering duration, plant height, disease and pest issues, cannabinoid production, and plant yield (lbs./acre) when appropriate. Additionally, to participate in this study, specific instructions regarding floral sampling and shipping must be followed to ensure acceptance into the program. The requested agronomic information will be entered into an online survey which will be issued later in the growing season.

Please see below for proper protocols regarding potency sampling and data collection. This information will be collected and made public via a data sharing tool (**Midwestern Hemp Database Project**). Any identifying personal information will be kept confidential and will not be shared publicly.

Cannabinoid Sampling Protocols

Floral *samples will be collected from the same plants* at multiple time points throughout flowering. As part of the partnership with Rock River Laboratories, cannabinoid analysis will only cost \$30/sample/location. There will be at a **minimum two time aggregate samples taken per variety, per location** to participate in this study. There is no upper limit to the number of samples that can be submitted per variety. Sampling may begin two weeks after the flowering period begins to test for cannabinoid accumulation in the floral material. Sampling of the floral material is described below.

Hemp Sampling Protocol

- Review the **Plant Tissue Plus App** video in order to get your account set up finalized. If you need assistance, reach out to Scott Fleming at (scott_fleming@rockriverlab.com)
 - o <https://www.youtube.com/watch?v=Xm-cPdki3NA>
- In order to have your samples submitted, you must follow the “Hemp Potency Analysis Sampling Instructions” and “Shipping Instructions for Industrial Hemp” which have been included in this packet.
 - o Here is also a video demonstrating proper sampling procedures: <https://www.youtube.com/watch?v=4W8n-u4QijA>

- In addition, you can find all of the necessary instruction at the Rock River website here:
<https://rockriverlab.com/pages/Hemp-Forms-and-Instructions.php>

Samples should be sent overnight according to instructions above to:

Rock River Laboratory

710 Commerce Dr.

Watertown, WI 53094

Agronomic Data Collection Protocols

The same 5 plants used for cannabinoid profiling will be used for data collection regarding agronomic performance. We suggest marking plants with wrap around nursery labels to make them easily identifiable.

Data collected:

- Planting Date
- Plant population (#plants/acre)
- Plant height (inches) will be recorded at 50% flowering and harvest
 - Measure and record the distance from the ground to the tallest point of each of the plants sampled for cannabinoids (5 per variety).record the average height
- Flowering Date
 - Date at which 50% of plants of the given variety have begun flowering
- Field plots will be observed for any notable insect and disease activity. As needed, samples and specimens will be submitted for plant disease or insect identification. Please take photos of observed insects/pests.
- Plant yield
 - All 5 plants will be cut by hand just below the lowest branch. Plants will then be removed and hung up for complete drying. Dried floral structures (10-15% moisture) will be stripped from all stems by hand or with simple equipment to remove these floral structures for all 5 plants per variety. The resulting biomass will include some leaf material. Please separately weigh (lbs) the plant biomass for both A) stripped floral structures and B) all remaining biomass (stems, stalk, some leaves, minor amounts of floral structures—this is important to larger operations that use whole-plant mechanical harvested). Please provide data on a lbs/plant basis.

What Happens to Information You Submit to Us?

When you submit information to us, any private information (name, address, birthdate, license number, etc.) **will not be available in the publicly accessible database** and will be used only for the purposes for which it was provided, and will not be shared with another entity, except as prescribed by law.

All other information (seed source, variety, planting date, sampling date, cannabinoid production, yield, etc.) collected will be entered into a publicly accessible database.

All information collected at this site becomes public record that may be subject to inspection and copying by the public, unless an exemption in law exists.

Limitation of Liability

The University of Illinois attempts to maintain the highest accuracy of content in its websites and documentation. Any errors or omissions should be reported for investigation.

The University of Illinois makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the contents of this website and documentation, and expressly disclaims liability for errors and omissions. No warranty of any kind, implied, expressed, or statutory, including, but not limited to, the warranties of non-infringement of third party rights, title, merchantability, fitness for a particular purpose, and freedom from computer virus, is given with respect to the contents of this website and documentation, or its hyperlinks to other Internet resources. Reference in this website to any specific commercial products, processes, or services or the use of any trade, firm, or corporation name is for the information and convenience of the public and does not constitute endorsement, recommendation, or favoring by the University of Illinois or its employees or agents.

If you have any questions, please contact me at palberti@illinois.edu or 815-599-3644.

