

Kentucky Department of Agriculture

Hemp Licensing Program

Grower Orientation

2025 Growing Season



Released 11/15/2024

Length of Online Orientation

- This online orientation is incorporated into the online application portal.
- An in-person training is not required.
- It will take at least an hour to complete.
- You may stop before completion and restart at a later time where you left off.



Overview

- Program Overview & Legal Updates
- Crop Production
- Background Checks
- Growing Locations
- Sourcing Planting Materials
- Reporting Requirements
- Sampling and THC Testing
- Restrictions on Sale and Transfer



Information Overload

- There is A LOT of information in this orientation.
- You can find all information on our website
 - We'd rather you ask KDA directly than get a second-hand answer that may be misguided.
- You do NOT have to plant every acre you have been approved to plant.
- You do NOT have to complete this Application
 - Not completing this application does NOT affect future applications.



Kentucky Hemp Program Highlights

Kentucky Department of Agriculture Hemp Program													
Annual Overview													
Production Year	University Projects	Processor / Handlers	Growers	KY Counties with Hemp	Approved Acres	Planted Acres	Harvested Acres	% Grain or Seeds	% Fiber	% CBD / Cannabinoids	% Grain & CBD	% Seed & Fiber	
2014	7	9	20	14	-	33	-	47%	32%	21%			
2015	8	29	99	41	1,742	922	500	47%	6%	47%			
2016	17	45	137	60	4,600	2,300	2,000	34%	6%	60%			
2017	17	49	204	71	12,800	3,200	2,300	36%	5%	27%	32%		
2018	14	72	210	73	16,100	6,700	6,000	18%	4%	61.5%	14%	2.5%	
2019	12	200	978	102	60,000	26,500	24,900	2%	4%	92%	0	2%	
2020	12	178	970	113	32,000	5,000	4,500	4%	4%	92%	0	0	
2021	17	140	450	99	11,500	1,800	1,700	2%	7%	91%	0	0	
2022	13	93	240	90	5,530	1,300	1,250	3%	10%	87%	0	0	
2023	14	70	170	71	4,550	1,500	1,425	0%	11%	87%	0	2%	
2024	11	60	137	58	5,500	2,600	2,550	7%	5%	87%	0	1%	



Kentucky – Law

260.858 Lawful and unlawful conduct.

(2) It is unlawful for a person who does not hold a license issued by the department, or who is not an agent of a licensee, to cultivate, handle, process, or market living hemp plants or viable seeds, leaf materials, or floral materials derived from hemp.

Penalties for persons who cultivate, handle, process, or market living hemp plants or viable seeds, leaf materials, or floral materials derived from hemp without a license are the same as those penalties that are applicable to persons who violate KRS Chapter 218A, relating to marijuana.



Kentucky – Law

260.858 Lawful and unlawful conduct.

(3) It is unlawful for a person who does not hold a license issued by the department, or who is not an agent of a licensee, to possess hemp extract material having a delta-9 tetrahydrocannabinol concentration in excess of **three-tenths of one percent (0.3%)**. Penalties for persons who possess such hemp extract materials without a license are the same as those penalties that are applicable to persons who violate KRS Chapter 218A, relating to marijuana.

(4) Nothing in this chapter authorizes any person to violate any federal or state law or regulation.



Federal Law

Definition of Hemp in 2018 Farm Bill

“The term **‘hemp’** means the plant *Cannabis sativa L.* and any part of that plant, **including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers**, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.”

(Note: Federal law requires that all compliance testing measure delta-9 THC post-decarboxylation – **That’s total THC.**
(Both delta-9 THCa and delta-9 THC must be included.)



USDA Final Rule released Jan. 19, 2021

- Final Rule took effect March 22, 2021.
- **Kentucky began operating under an approved State Plan January 1, 2022.**
- All KY hemp regulations in 302 KAR 50 are incorporated into KY's State Plan.



Hemp Licensing Program

- **Processor/Handler License**

- **NO Live Plants**
- Process Harvested Crop into Products
- Extraction of CBD
- Possess, Handle, Store, Market
- Brokers, Labs, Seed Cleaners
- Dry, Chop, Grind other person's harvest
- Handle other person's harvest

- **Grower License**

- Live Plants
- Grow in Fields
- Grow in Greenhouses
- Produce Transplants
- Store your hemp
- Dry, Chop, Grind (your own hemp)
- Market your own Crop



Questions

- Does Federal Law require testing for Total THC?
 - Yes or No

- Does a Hemp Grower License enable you to extract CBD from hemp material?
 - Yes or No



Electronic Communications

- Email is Primary Method of Communication.
- The online system will send you emails and direct you to log in to your account to address the issue.
- Hemp Staff will not send you something unless it applies and is important for your project.
- **IF WE SEND IT, READ IT!**

Make sure to add the following emails to your “safe” list, as you will be receiving emails from all of these individuals, and we don’t want you to miss any important communications from KDA:

- Hemp Program Manager: SarahJ.Gravitt@ky.gov
- Hemp Program Staff: Andrew.Glass@ky.gov
- Plant Division Director: Doris.Hamilton@ky.gov
- Hemp Inbox: hemp@ky.gov



Electronic Communications

- Email general questions to hemp@ky.gov
- Provide your name and the name of the license holder in all communications.
- Please don't send separate emails or voicemails to multiple staff members and duplicate the work. Cc to others is perfectly okay.



Seed and Transplant Providers List

- KDA maintains a public list of Growers who offer seeds and transplants for sale
- Voluntary Listing
- Designed to help with marketing efforts
- Posted on our website on the Overview program page
- If you'd like to be included, email us the specific information to hemp@ky.gov (use the format found in the existing list)



Seed and Transplant Providers

- This is not a new rule but has been historically overlooked by the hemp industry – take note!
- Any person engaging in the **distribution of hemp seeds** shall adhere to the applicable Kentucky seed laws (KRS 250.010 to KRS 250.990) and administrative regulation (12 KAR 1:116 to 175). Go to the UK Division of Regulatory Services seed program website for more details: <http://www.rs.uky.edu/regulatory/seed/>



Seed and Transplant Providers

- **This is not a new rule but has been historically overlooked by the hemp industry – take note!**
- Any person who intends to **move transplants or other living plants to a location outside Kentucky** must obtain a Class A Nursery License from the Kentucky Office of the State Entomologist. See their website for details:
<http://www.uky.edu/Ag/NurseryInspection/>



Processor List

- KDA maintains a public list of Processors/Handlers available on our website.
- This is a voluntary listing. Not a comprehensive list of ALL licensed Processors and Handlers.
- All lists are found on the Overview page of the website at www.kyagr.com/hemp.



Notes for Growers RE Processors

- KDA will not buy your hemp!
- Hemp has a limited demand, and the market is very unstable.
- You should have a contracted buyer **BEFORE** planting.
 - Read your contracts carefully.
- You can work with more than one processor.
- KDA does not limit which or how many processors you work with, but you MUST only sell to licensed processors or someone who can legally possess the materials in their jurisdiction.



A Note About Organic Hemp

- “Organic” is strictly regulated by the United States Department of Agriculture (USDA).
- **You cannot market your hemp as “organic” unless you have been Certified Organic.**
- Organic hemp products must be grown by a certified organic farm AND processed by a certified organic processor.
- KDA is a certifying agent.
- Certification can sometimes be a multi-year process.
- If you are interested in growing organic hemp, and have not yet been certified, please email KDA’s Organic Program Staff at organic@ky.gov.



Questions

- What is the best way to reach the KDA hemp program staff?
 - By Phone
 - By letter
 - By email to hemp@ky.gov
- Are the following lists of hemp license holders found on the KDA website: Processors and Handlers; Seed and Transplant Providers.
 - Yes or No



Crop Production



Three Main Harvestable Components of Hemp



Grain or Seeds.
For human food (hemp hearts, oil, and protein powder), or seeds for planting hemp.



Fiber from stalks.
Bast (bark – long, outer fibers), and Hurd (core – inner woody material).



Floral Material.
For extraction of plant resin (which includes CBD and other phytocannabinoids) for health and wellness products.



Grain Yields



- Seed/Grain Yield = Average 800-1,000 lbs. per acre, KDA max. = 1,600+
- 2020 KY hemp grower average yield = 400lbs/acre*
- Limited market for hemp grain
- Hemp Grain is high in oil and protein, consumer demand for health food

*Based on Production Reports that are self reported by license holders.



Fiber Yields

- Yields 1-5.5 tons per acre of dry matter (whole dry stems).
- 2020 KY hemp grower avg. yield = 1,113lbs/acre*
- Limited market for hemp fiber.
- Stems = 15-20% Bast, 70+% Hurd, 5-10% Waste.
- Fiber uses range from polymer composites to animal bedding.



*Based on Production Reports that are self reported by license holders.

Cannabinoid/CBD Yields

- Maximum production for one plant = approx. one pound dried floral material for extraction.
- Emerging market; prices crashed in 2019-20 due to oversupply and limited demand.
- Extract generated per lb of dried material varies widely.
- Transition to mechanized harvest will change things.





30 days post-planting

Biggest
Challenge
-Weeds

60 days post-planting, SAME field


Pesticide Use

- Very few pesticides are labeled and registered for use on hemp, see the latest guidance on our website here:
<https://www.kyagr.com/marketing/hemp-license-holders.html>
- A licensed grower shall not use any pesticide in violation of the product label.*
- The department may perform pesticide testing on a random basis or if there is reason to believe that a pesticide may have been applied in violation of the label.*
- Hemp seeds, plants, and materials bearing pesticide residue in violation of the label shall be subject to forfeiture or destruction without compensation.*

* 302 KAR 50:021 Section 16. Pesticide Use.



Crop Production Assistance




UK College of Agriculture,
Food and Environment

UK INDUSTRIAL HEMP AGRONOMIC RESEARCH

Home Grower Resources Research Reports Conferences Support KY Industrial Hemp Pilot

Hemp Extension Personnel at UK CAFE

[Dr. Bob Pearce](#), Hemp Production
[Tom Keene](#), Hemp Production
[Dr. Nicole Gauthier](#), Plant Pathology
[Dr. Raul Villanueva](#), Entomology
[Dr. Tyler Mark](#), Agricultural Economics
[Dr. Tim Stombaugh](#), Biosystems Engineering



About Us

Bob Pearce, professor of agronomy, and Tom Keene, agronomy specialist, both with the UK Department of Plant and Soil Sciences, are participants in the [Kentucky Department of Agriculture's Industrial Hemp Program](#). Their work is focused on investigating the agronomic parameters affecting field-scale production of industrial hemp. The resulting research and extension efforts are aimed at optimizing yields and profitability from grain, fiber, and cannabinoid production models for U.S. producers.

Click here for [An Introduction to Hemp and Hemp Agronomy](#).

The UK Division of Regulatory Services is leading a proficiency testing effort among laboratories assaying for cannabinoids derived from hemp. Please see this link for

The University of Kentucky has released some excellent resources to help growers with hemp crop production and budgets.
<https://hemp.ca.uky.edu/>



Crop Production Assistance



UK College of Agriculture, Food and Environment myUK

UK INDUSTRIAL HEMP AGRONOMIC RESEARCH

Home Grower Resources Research Reports Conferences Support KY Industrial Hemp Pilot Research

Home » Grower Resources

Grower Resources

Quick Links to Resources

- [Agronomy](#)
- [Agriculture Economics](#)
- [Biosystems Engineering](#)
- [Grower Training Videos](#)
- [Entomology](#)
- [Kentucky Department of Agriculture](#)
- [Plant Diseases](#)

Ag Economics Resources include Enterprise Budgets

- Grain
- Fiber
- CBD Row Crop w/ Grain
- CBD Row Crop no Grain
- CBD Tobacco Model
- CBD Plasticulture



Grow At Your Own Risk

- **LIMITED MARKETS.** Do not grow hemp without an established buyer.
- Limited production knowledge combined with an uncertain federal regulatory environment and unstable pricing creates significant risk for the grower.
- Crop failures happen.
- Crop insurance is available in a limited capacity. Contact your local crop insurance agent for details.



Grower License

- Allows you to legally grow hemp in KY
- Every provision in the Application is binding
- Keep copies of your License with you, near the crop and harvested materials
- Make as many copies as needed



Questions

- Is hemp production a low risk farm enterprise?
 - Yes or **No**
- Is it acceptable to apply pesticides to hemp or hemp fields in violation of the product label?
 - Yes or **No**



Background Checks



Background check

1. A business entity is required to submit background checks on “key participants” as well as the signing authority.
2. Background check must have occurred 60 or less days prior to the date of application.
3. Background check request form must be submitted to the Kentucky State Police as directed on the request form titled “Request for Conviction Records”.



What are key participants?

- This is a person who has direct or indirect financial interest in the entity producing hemp such as an owner or partner in a partnership.
- Key Participants include an entity's Chief Executive Officer (CEO), Chief Operating Officer (COO), Chief Financial Officer (CFO), or any other positions that have these same job responsibilities.
- Farm managers, field managers, shift managers etc. are not key participants.



Background Check for Individual Applicants

- Individual applicants are only required to submit a background check on themselves
- No need to submit background check on secondary contacts
- Remember, an individual may NOT allow another individual to operate under their license



Background Check

- Background check must be free from felony convictions and drug related misdemeanors for the past 10 years.
- Background check request forms are found on the application page of our website or on the Applicant Information tab in this application portal.
- Once your Background check is received it must be uploaded onto the Applicant Information tab of the application portal.



Questions

- As an individual applicant must you submit a background check for your secondary contacts or farmhands?
 - Yes or **No**
- To whom do I submit the Background Check request form (form titled “Request for Conviction Records”)?
 - **Submit the request to Kentucky State Police, then upload the resulting Background Check into this portal with the applicant information**
 - Submit the request form to KDA



Growing Locations



Growing Locations

- If a property does not have an address, you must enter an estimated address.
- **The Farm Serial Number is required (this number must match records at the USDA/FSA office).**
- All growing locations submitted on a Site Modification **AFTER** the application is submitted costs \$750 per GPS.
- All locations are subject to all land use restrictions found in 302 KAR 50:021 Hemp Grower Regulations.



Growing Locations

- Two license holders can grow at the same address as long as they are licensing different fields.
- The software will warn you if you enter a duplicate address and KDA must approve the use of the same address as another applicant before you proceed.
- Click the HELP button on the map screen for video instructions.



Identifying Your Locations

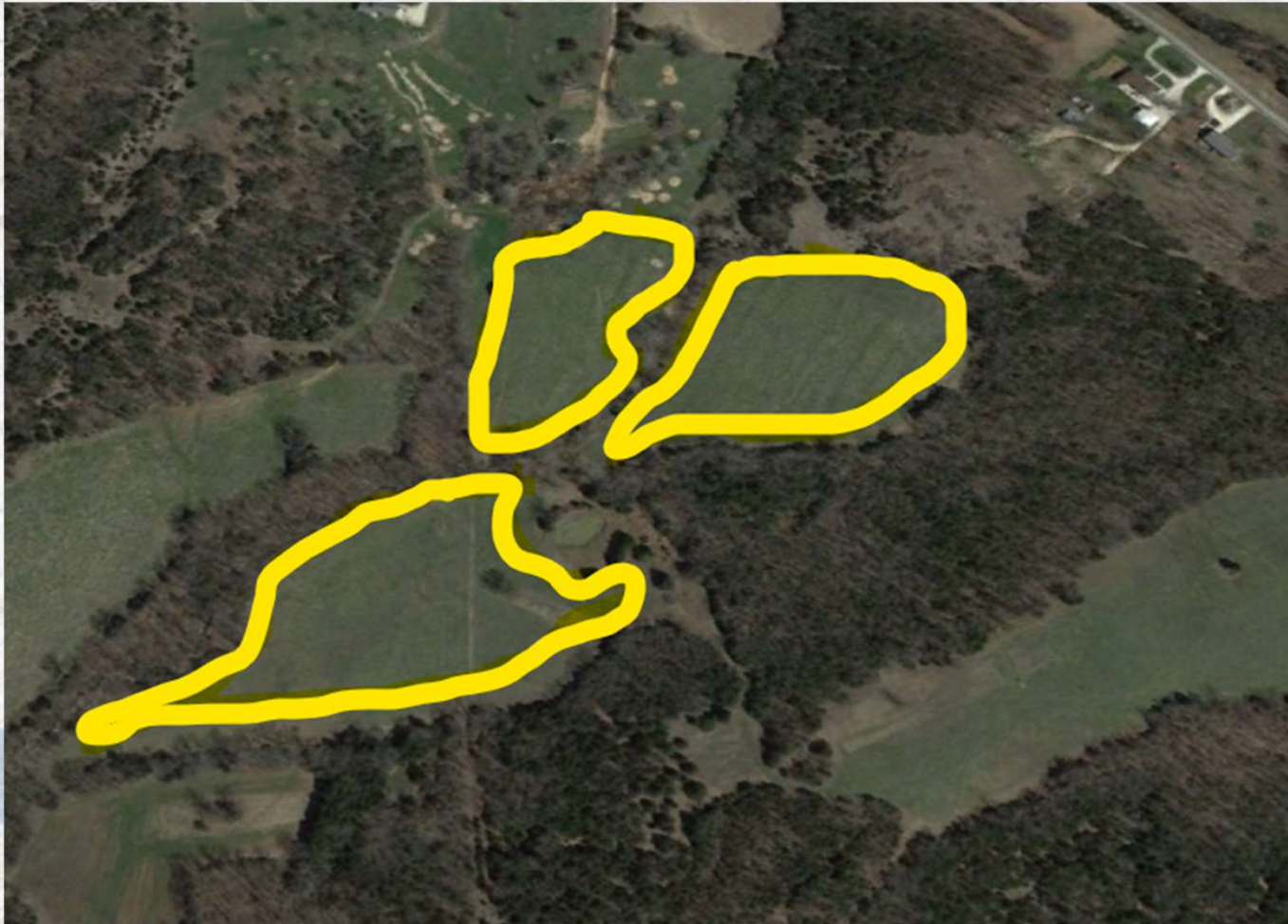


One Field?

NO, 3 Fields.



Identifying Your Locations



One Field?

NO, 3 Fields.



Land Use Restrictions

Land use restrictions for licensed growers.



(1) A licensed grower shall not plant or grow any cannabis that is not hemp.

(2) A licensed grower shall not plant or grow hemp or other cannabis on any site not licensed.



Land Use Restrictions

Land use restrictions for licensed growers (continued)

- (3) A licensed grower shall not grow hemp or other cannabis in or within 100 feet of any structure that is used for residential purposes.
- (4) A licensed grower shall not handle or store leaf or floral material from hemp or other cannabis in or adjacent to any structure that is used for residential purposes.



Land Use Restrictions

Land use restrictions for licensed growers. (continued)

- (5) Hemp shall be physically segregated from other crops unless prior approval is obtained in writing from the department.
- (6) **A licensed grower shall plant a minimum of 1,000 plants in each growing site unless prior approval is received in writing from the department. (Each greenhouse/indoor growing facility AND each field. This should be requested BEFORE planting.)**
- (7) A licensed grower shall plant a minimum of one quarter (.25) acre in each outdoor growing site unless prior approval is received in writing from the department.



Land Use Restrictions

Land use restrictions for licensed growers. (continued)

- (8) A licensed grower shall not grow hemp or other cannabis in any outdoor field that is located within 1,000 feet of a school (see regulations [Section 5(9)] for an exception for high school ag departments) or a public recreational area.
- (10) An applicant or licensed grower shall not include any property on his or her application or Site Modification Request, incorporated by reference in 302 KAR 50:080, to grow or cultivate hemp that is not owned or completely controlled by the applicant or licensed grower, as evidenced by a written lease or other document that shall be provided to the department upon request.
- (11) A licensed grower shall not grow, handle, or store hemp or other cannabis on property owned by, leased from, or previously submitted in a license application by any person who is ineligible or whose hemp license was terminated, or who was denied admission to the Hemp Licensing Program for:
 - (a) Failure to obtain an acceptable criminal background check;
 - (b) Failure to comply with an order from a representative of the department; or
 - (c) Both.



Land Use Restrictions

Land use restrictions for licensed growers. (continued)

(12) Licensed growers shall (MUST) post signage at each **greenhouse, indoor growing location, storage building, and field of one (1) acre or less**. The signage shall include the:

- (a) “Kentucky Department of Agriculture Hemp Licensing Program”;
- (b) License holder’s Name;
- (c) License holder’s license number; and
- (d) Department’s telephone number.

Signage MUST be posted on every building and field of 1 acre or less.

Kentucky Department of Agriculture



Hemp Licensing Program
(502) 782-4113

License Holder: _____

Grower License #: _____

Location ID: _____



Site Modification Request

- A Site Modification request is required to add new licensed locations after the application and/or annual renewal process is complete.
- Adding storage only locations do not incur a fee.
- Each new growing location incurs a fee of \$750.
 - \$750 fee is per GPS coordinate, not address.



Proceed With Caution

- There are no guarantees!
- This is a new industry with new companies, new production techniques.
- The price model is not well developed and many companies have failed to make payments to growers.



Questions

- What is the minimum planting requirement for Greenhouse/Indoor growing?
 - 100 plants per building
 - **1,000 plants per building**
 - 10 acres per building
- What is the minimum planting required for each Field?
 - 0.25 acre
 - 100 plants
 - **1000 plants AND 0.25 acre**



Questions

- Are licensed growers required to post signage on ALL licensed greenhouses, indoor growing sites, storage buildings, AND fields of 1 acre or less?
 - Yes or No
- What information is required on signage for greenhouses, indoor growing, storage, AND fields of 1 acre or less?
 - Kentucky Department of Agriculture Hemp Licensing Program
 - Name of License Holder
 - License Number
 - Department's telephone number
 - All of the Above



Questions

- Can two different people license the same field or greenhouse?
 - Yes or **No**
- Can a licensed grower plant hemp within 100 ft of a house, within 1,000 ft of a school or 1,000 ft of a public park?
 - Yes or **No**



Sourcing Planting Materials



Sourcing Seeds or Transplants

- First check to see if the variety or strain is on the “**Summary of Varieties List**” found on the KDA website.
- If the variety is listed, no request is required.
- IF the variety or strain is **not on the list** you will need to submit the:
“**New Hemp Variety or Strain Request Form**”
- **A Certificate of Analysis with a “TOTAL THC” of 0.3% or less is also required.**



Summary of Varieties List

- Document found on the website on the License Holder page
- More than **300** different hemp varieties, named strains have been grown and tested in the Kentucky Hemp Program
- More than 50 Varieties have been **Prohibited**; the test results proved that it was not hemp.
- Varieties are designated as **Varieties of Concern** once we have test results in KY above 0.3% THC
- Testing data within compliance can simply be because the plots were tested when premature.



Summary of Varieties List

Varieties of Concern (VOC)

The varieties or strains designated as a *Variety of Concern* (VOC) in the table on the following pages had at least one THC test result above 0.300%. Growers who are considering whether to use these varieties in the future should exercise caution and remain aware of the Department's *Varieties of Concern* designations. These varieties are at a higher risk for exceeding the THC limit that could lead to the ordered destruction of the crop. These designations are subject to change.

- **ALL high CBD strains of hemp will exceed 0.3% THC if allowed to fully mature – so they must be harvested early to remain legal.**



Summary of Varieties List

- The latest Summary of Varieties List is always available on the website.
- This information will be very important in determining your selection of planting materials.
- When buying planting materials, always demand a Certificate of Analysis on the parent plant floral material and check your THC/CBD levels and ratios.
- **It is nearly impossible to get 10% CBD without going over the legal limit of THC.**

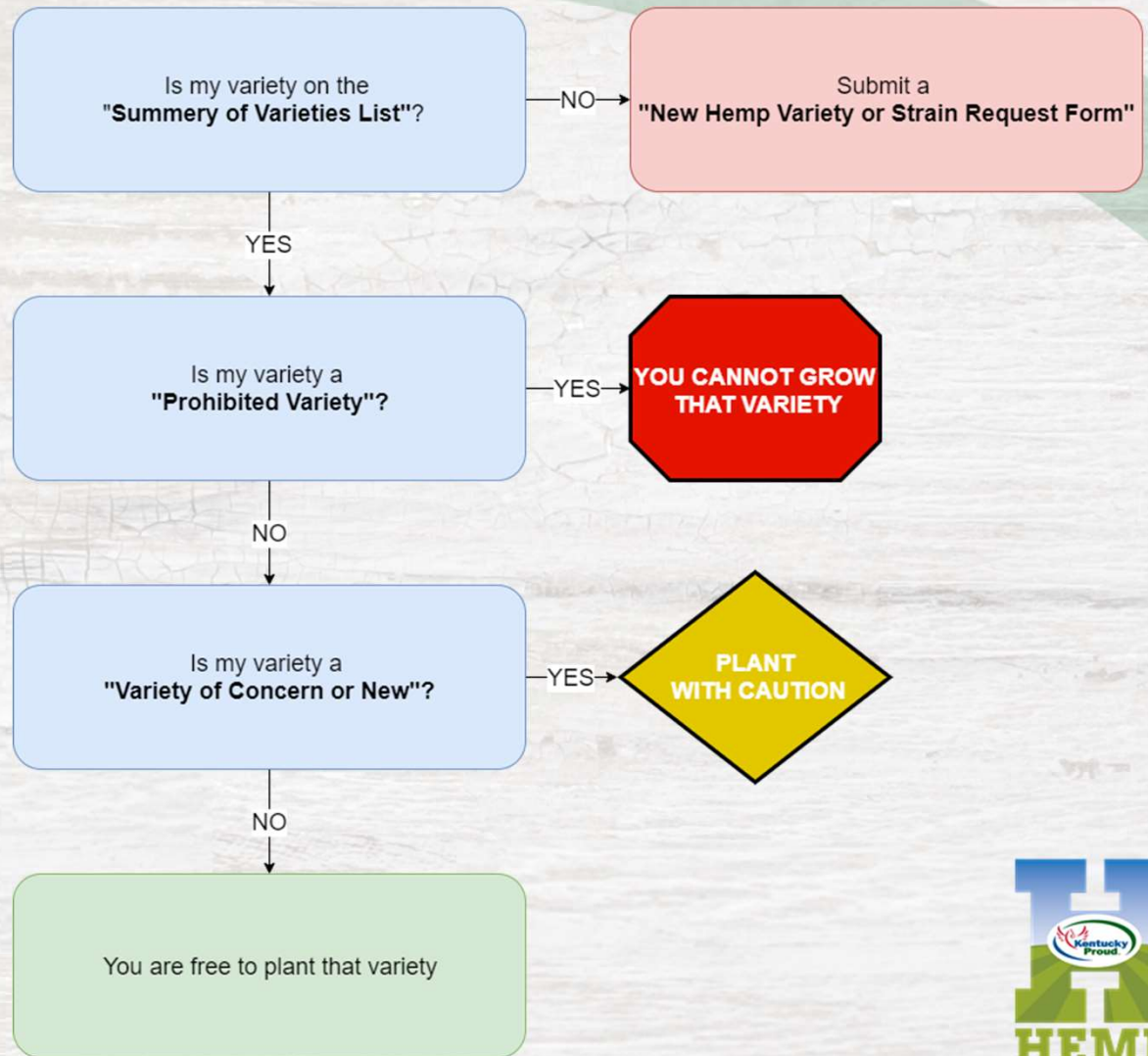


Reasons to Be Cautious in Selecting your Hemp Varieties

- Over 25% of samples tested above 0.4% THC in 2020.
- New varieties are not becoming more compliant.
- Saved seed from the year before is VERY unstable and likely to have highly elevated THC levels (We've seen THC above 3.5%!)



What do I need to do for the variety I want to plant?



New Hemp Variety or Strain Form

- This form can be completed from your User Dashboard in the online system after you obtain a license.
- Complete the information on the form documenting the intended source of the seeds or transplants (don't try to buy seeds from ebay).
- Upload a Certificate of Analysis from the source which indicates that the mature floral material from the variety/strain is not more than 0.3% Total THC.
- **CAUTION:** Watch the ratio of THC/CBD on new varieties – if you are seeking 10% CBD, calculate where that THC would be if you reached that level. THC and CBD both increase as the plant matures in relatively the same ratio.



Questions

- Can a license holder purchase and plant any variety/strain of cannabis seeds they choose?
 - Yes or **No**
- What form must be completed to request permission to bring a new hemp variety/strain into Kentucky?
 - **New Hemp Variety or Strain Request form**
 - Domestic Seed Acquisition Request
 - International Seed Acquisition Request



Reporting Requirements



Reporting Requirements

- Be aware of due dates.
- **All Reporting is done inside of the online portal.**
- Do NOT submit paper copies of reports.
- KDA does NOT recommend that any reporting be completed by another party on your behalf.



Reporting Requirements:

- **Growers must report all hemp plantings to their USDA-Farm Service Agency (FSA) office FIRST!**
 - This applies to **both** fields and greenhouse/indoor plantings (if you are harvesting from within the greenhouse/indoor location OR selling transplants).
 - Each variety must be reported separately and receive its own FSA field number and/or subfield letter.
- Your local FSA office is where you will obtain the Farm Serial Number, Tract Number, Field Number (plus Subfield letter if applicable). These numbers will be found on your FSA-578 and must be used on KDA reports.
- Once the FSA-578 report is completed at your local USDA FSA office email a copy to the Hemp Staff at Hemp@ky.gov.



Reporting Requirements:

- KDA is required to report to the USDA hemp program using the assigned FSA numbers.
 - **NOTE:** We cannot approve your planting reports until your planting is reported to your local FSA office and a copy of your FSA-578 is received.
- Refer to planting report tutorials for assistance in entering FSA numbers on KDA planting reports.
- Record retention is required for 3 years (USDA Final Rule requirement).



Reporting Requirements:

- USDA Final Rule and KDA regs requires growers to keep records regarding:
 - Acquisition of hemp plants;
 - Production and handling of hemp plants;
 - Storage of hemp plants; and
 - Disposal of all cannabis plants that do not meet the definition of hemp
- New farmers will want to visit the USDA-FSA office early to ensure you have proper records on file to report crops on the farm where you are planting hemp.



Reporting Requirements: Production Reporting

- Production information (including revenue and yields) is collected in the license renewal applications.
- Keep good records throughout the season.
- Records required to be kept for 3 years by the USDA will be audited during required random inspections conducted by the KDA.



Questions

- Where do you obtain your Farm Serial Number?
 - Kentucky Department of Ag
 - **USDA-FSA Office**
- Growers are required to keep records regarding what for 3 years?
 - Acquisition of hemp plants
 - Production and handling of hemp plants
 - Storage of hemp plants
 - Disposal records
 - **All of the above**



Questions

- Hemp growers are required to submit hemp plantings to the USDA Farm Service Agency before reporting to KDA?
 - Yes or No
- Why is it important that farmers report hemp plantings to the FSA office first?
 - The FSA office will provide the Farm Serial Number, Tract Number, and Field Number needed for the KDA reports
 - Because their deadline is first



Planting Reports

- There are two types of planting reports:
 - Greenhouse/Indoor Planting Report
 - Field Planting Report
- Please refer to planting report tutorials for guidance in completing planting reports or contact the hemp staff before submitting planting information if you are unsure.
- You will be filling out your planting reports via you User Dashboard in the online portal.



Greenhouse/Indoor Planting Report

- Greenhouse/Indoor Planting Reports are due within 15 days after your first planting in an empty greenhouse or structure.
- If instead of planting, you are moving plants from another location into your greenhouse, THAT is considered a “new” planting and must be reported.
- Greenhouse/Indoor Planting Reports are also due quarterly, March 31, June 30, Sept. 30, and December 31.
- If the “intended use” of your greenhouse/indoor planting is harvest or transplants (that will be sold to others) you must report the planting to your local USDA FSA office to obtain your Tract, Field, and Subfield (if applicable) to enter on your report.



Greenhouse/Indoor Planting Report

- Be sure to select the correct intended use for greenhouse/indoor plantings
 - **Transplants:** These will be planted in another location before they are harvested (usually transplanted to a field).
 - **Harvest:** These plants are intended to be harvested from inside the greenhouse/indoor growing facility.
 - **Breeding:** Plants used to create new genetics or varieties.
 - **Research:** This should only be selected by university researchers unless permission is obtained from KDA.
 - **Stock Plants:** These are plants generated only for the cloning of other plants.
- Often Harvest is selected incorrectly.



Field Planting Report

- Field Planting Reports are due within 15 days of each planting.
- You must report the different varieties/strains separately to you local FSA office and KDA as they will be designated as different “lots” for testing purposes.
- You must report EVERY licensed field to KDA, whether it was planted or not.
- Unplanted fields require that you indicate No Planting.
- No Planting reports for fields are due by July 31.



Questions

- When is the Field Planting Report due?
 - A month after planting
 - 15 days before planting
 - **Within 15 days following planting**
- The Greenhouse/Indoor Planting Report is due within 15 days of the first planting and Quarterly throughout the year.
 - **Yes** or No



Questions

- What is the intended use of plants in a greenhouse that will be moved to the field and harvested from the field?
 - Stock Plants
 - Harvest
 - **Transplants**
- Are unplanted fields required to be reported as “no planting”?
 - **Yes** or No



Harvest Report

- Submitted via the user dashboard in the online portal.
- **This report is due at least 15 days prior to your intended harvest.**
- Remember, THC can easily increase more than 0.1% THC per week during flowering; the rate of increase is unpredictable and is different for different varieties.
- The timing of your harvest will mean the difference between compliant hemp and non-compliant cannabis with excessive THC requiring total destruction.



Harvest Report

- The maturity or flowering of hemp is determined by day-length, not based on the number of days since planting (unless it's an autoflower strain).
- Different varieties/strains will flower at different day lengths.
- Your seed or transplant provider should be able to tell you at what day length the variety typically matures.
- This form is also used to request disposal of any failed crops.



Harvest Report

- The submission of this report form triggers an inspection and sample collection of the crop for THC testing.
- The grower cannot harvest until **AFTER** the sample collection has taken place.
- The grower must complete the harvest within **30 days of the sample collection.**
- Harvested materials may not be co-mingled, transported beyond the processor or outside the Commonwealth, nor transferred or sold until the material has been released by KDA as a result of a compliant test result (most materials are stored on-site until test results are obtained).



Questions

- When is the Harvest Report due?
 - A month after harvest
 - **At least 15 days prior to your planned harvest start date**
 - Within 15 days following planting
- What is the purpose of the Harvest Report?
 - **A Harvest Report triggers the required sample collection for THC testing**
 - The Harvest Report serves no purpose



Questions

- Can a grower harvest before KDA collects a plant sample for THC testing?
 - Yes
 - No



THC Testing



Sampling and THC Testing

- 100% of lots intended for harvest are inspected and sampled by KDA inspectors prior to harvest.
- All varieties tested for compliance with the 0.3% delta-9-THC limit set by Congress.
- Acceptable hemp THC level is 0.30% plus the Measurement of Uncertainty. The Measurement of Uncertainty is calculated and reported by the lab.
- **Federal law requires all delta-9 THC concentrations be measured post-decarboxylation (result is commonly referred to as Total THC).**
- THC Test results reported within 60 days (typically 2 weeks).



Secondary Pre-Harvest Sampling

- The Licensing fee of \$400 per address ONLY covers three pre-harvest samples.
- If a licensed address requires more than 3 samples (includes fields AND greenhouses/indoor) a Secondary Pre-Harvest Sample fee will be invoiced to the licensed grower for of \$250 PER SAMPLE above three.
- **Example:** If you plant 5 lots (contiguous planting of same variety/strain) at an address, the first 3 samples are included, but will be required to pay an additional \$500 for the 2 additional required samples.



Sampling and THC Testing

- Grower (or knowledgeable help) must be present for the inspection.
- Inspector shall be given full access to all growing, storage, and handling locations (will also be inspecting unplanted locations).
- Sample taken of each lot (contiguous planting of the same variety/strain).
- Harvest must be completed within 30 days following pre-harvest sample collection.



Sampling and THC Testing

- 0.30% THC is the legal limit set by law.
- The USDA Final Rule allows for 0.30% THC plus the “Measurement of Uncertainty” for the “Acceptable Hemp THC Level”.
- Kentucky’s “Acceptable Hemp THC Level” is calculated by the labs annually.
- Lots with pre-harvest test results below or equal to the “Acceptable Hemp THC Level” are released for transfer or sale.



Sampling and THC Testing

- Harvested hemp materials from a lot testing between the “Acceptable Hemp THC Level” and 0.999% is eligible for remediation and a Post-Harvest Retest at a cost of \$250.
- Lots testing at or above 1% are required destroyed immediately without a retest.
- Materials from lots with post-harvest retests at or above “The Acceptable Hemp THC Level” must be destroyed.
- A THC concentration of **3.0% or greater** is grounds for license suspension and revocation proceedings.



Understanding THC Analysis

- Cannabis plants only produce delta-9 THCa (tetrahydrocannabinolic acid).
- Delta-9 THCa converts to delta-9 THC, the intoxicant through a process called decarboxylation.
- Decarboxylation will happen naturally over time when exposed to air OR immediately in high heat conditions (if ignited).



Understanding THC Analysis

- Measurement of THC concentrations can be conducted with many methods
- The combined, or decarboxylated THC, is often referred to as total THC
- Federal law requires testing for total THC
- This has been the method used by KDA from the beginning



Understanding THC Analysis

- If an analysis gives only THC or delta-9 THC, that would be the total THC
- If an analysis gives THCa and delta-9 THC or THC, it must be combined mathematically
- $\text{THC} + (\text{THCa} \times 0.877) = \text{Total THC}$



Questions

- The cost of how many tests per address are included in the grower licensing fee?
 - 3 tests are included at an address (all others require \$250 Secondary Pre-Harvest Sample fee/sample)
 - All testing costs are included in the licensing fee
- State and Federal law requires hemp to have not more than 0.30% of what type of THC?
 - THCa only
 - Delta-9 THC only
 - Total THC (delta-9 THCa and delta-9 THC)



Questions

- What THC concentration for a Pre-Harvest sample will require immediate destruction without an option for remediation and a Post-Harvest Retest?
 - 1% or more
 - 0.03%
 - 0.5%
- What THC concentration will require license suspension and revocation proceedings?
 - THC of 1% or more
 - THC of 5% or more
 - THC of 3% or more



Restrictions on Sale or Transfer



Transfer Requirements

- **These requirements were designed to keep you legal.**
- Failure to comply with the *Transfer Requirements* may result in expulsion or other disciplinary measures.
- **Hemp Staff is available to help answer your questions.**



Transfer Requirements

- In KY living plants, viable seeds, leaf material, or floral material may only be transferred to or from hemp license holders – **VERIFY LICENSES.**
- Floral material is **NOT** a publicly marketable product in Kentucky. It is unlawful to sell floral material to anyone without a hemp license.
- License holders may transfer hemp plants, seeds, leaf material, or floral material to other states to those who are authorized to possess such materials under the laws of that jurisdiction.
- Must have Hemp License with shipments.
- Paperwork must document legal origin and destination.



Transfer Requirements

- Stripped stalks, fiber, dried roots, crushed or dehulled grain, seed oils, extracts <math><0.3\%</math> total THC are eligible for transfer to anyone.
- It is the License Holder's responsibility to ensure compliance with other state laws.
- All products must meet regulations of other authorities (Food Safety, FDA, etc.)



Transfer Requirements



- All floral extracts or their derivatives **MUST** be tested and ensured to be no more than 0.3% total THC.
- Testing must be kept on file for inspection by KDA.
- A licensee shall not knowingly permit hemp to be sold to or used by any person in the Commonwealth, who is involved in the manufacture of an item named on the prohibited products list in 302 KAR 50:070.



Prohibited Products

Section 1. Products Not to be Sold to Members of the Public.

- (1) The following hemp-derived products shall not be manufactured:
 - (a) Hemp cigarettes;
 - (b) Hemp cigars;
 - (c) Chew, dip, or other smokeless material consisting of hemp leaf material or hemp floral material; and
 - (d) Hemp leaf material or floral material teas.



Prohibited Products

- (2) The following hemp-derived products shall not be marketed, sold, or distributed to any person in Kentucky who does not hold a license from the Department, or any person outside the Commonwealth (but within the United States) who is not authorized by an institution of higher education, or state department of agriculture pursuant to 7 U.S.C. 5940 and the laws of that state:
- (a) Whole hemp buds;
 - (b) Ground hemp floral material;
 - (c) Ground hemp leaf material; and



Prohibited Products

(3) If the department finds that it is more likely than not that a person has manufactured, marketed, sold, or distributed a hemp-derived product in violation of this administrative regulation, the department shall assess a civil monetary penalty against that person of not less than \$100 and not more than \$1,000 per violation, in addition to possible termination of the Grower License or Processor/Handler License.



Violations, License Revocation & Civil Monetary Penalties

- **Section 22.** Violations Requiring Temporary License Suspension Procedures (followed by a revocation hearing)
- Plead guilty to, or convicted of felony or drug related misdemeanor or violation;
- Violation of state hemp laws or hemp regulations;
- Made a false statement to KDA or law enforcement;
- Found to be growing or in possession of cannabis with THC over 0.3% with a culpable mental state greater than negligence;
- Failed to comply with an order from KDA or law enforcement; or
- Found to be growing or in possession of cannabis with THC of 3.0% or greater



Violations, License Revocation & Civil Monetary Penalties

- **Section 23.** License Revocation Hearings and Consequences of Revocation.
- Revocation hearing before 3 person panel
- License revocation = ineligible for 5 years
- **Section 24.** Monetary Civil Penalties. Not to exceed \$2,500 per violation.



Bottom Line

- There have been no regulation changes for the upcoming year.
- Applicants and license holders will be notified of any changes or updates to the regulations or program operation.
- Always reach out to KDA hemp staff if you have questions about the hemp program.



Questions

- The following hemp-derived products shall not be sold to any person in Kentucky who does not hold a hemp license:
 - Whole hemp buds
 - Ground hemp floral material
 - Ground hemp leaf material
 - **All of the above**
- Was 2021 the final year for the pilot program?
 - **Yes** or No



Contact KDA Hemp Licensing Program

Kentucky Department of Agriculture

Hemp Licensing Program

111 Corporate Drive, Frankfort, KY 40601

Mainline: (502) 573-0282

Email us at:

hemp@ky.gov

