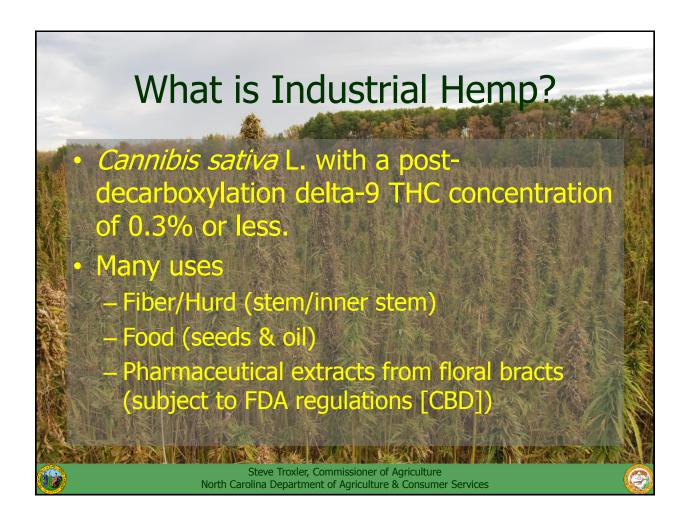
Industrial Hemp in North Carolina





Role of NCDA&CS

Research Stations

- receive industrial hemp seed shipments at secure storage site and assist Plant Industry Division with distribution to licensed growers
- work with researchers conducting work at NC Research Stations

Plant Industry Division

- Verify and process industrial hemp grower applications
- Maintain current DEA registration for NCDA&CS and acquire DEA import permits so licensed industrial hemp growers may order hemp seed from foreign sources and while overseeing industrial hemp seed distribution
- Collect license fees and transfer to the NC Industrial Hemp Commission
- Sample industrial hemp fields/greenhouses for THC levels and delivery to the Food and Drug Lab

Food and Drug Division

 Analyze Industrial hemp samples for THC levels and report to Plant Industry the findings

Agronomic Division

Work with licensed industrial hemp growers to assist with agronomic issues with this crop





RULES

 The Industrial Hemp Commission has adopted temporary rules:

<u>02 NCAC 62.0101-.0109</u>





NC Industrial Hemp License Rules Highlights

- Must meet a research objective in cooperation with NCSU or NCA&T (as identified in statute).
- All plantings subject to THC sampling at any time with no prior warning.
- Verified Propagules
 - Seed
 - Clones from an IH plant from which THC testing confirms it meets the Federal law
- One- or Three-year license option.
- Must provide all locations, storage, and intended market.
- Fees
 - \$250 (<50 acres) or \$500 (>50 acres) initial fee.
 - \$250 annual fee, plus \$2/acre or \$2/1,000 sq ft of greenhouse.



NC Industrial Hemp Program Information Websites

http://www.ncagr.gov/hemp/

https://industrialhemp.ces.ncsu.edu/





Application Highlights

- *Name and address of Applicant
- *Duration of License 1 or 3 year
- *Intended planting location-address, GPS coordinates of acreage or greenhouse sq. ft.
- *Intended Market- Seed, Fiber, Flora parts
- *Written statement of research objective
- *Evidence of Farming Income (Taxes)
- *Storage Location-GPS Coordinates required
- *Attestations



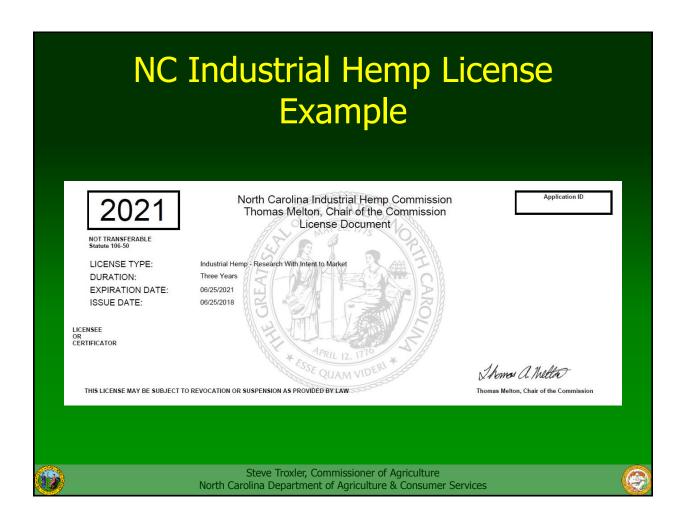


Felonies & Licensure

- *Applicants shall disclose the date and location of any conviction of any criminal offense (other than misdemeanor traffic offenses) committed in any jurisdiction. Failure to comply with this requirement in a complete and truthful manner shall be grounds for denial, suspension, or revocation of a permit, as may be determined by the Industrial Hemp Commission.
- * The following applicants shall not be granted a permit:
 - (1) Any applicants with any felony conviction in the prior 10 years or; or
 - (2) Any drug-related or controlled substance felony conviction at any time.
 - (3) Applicants that fail to complete the application process...







2017 Industrial Hemp Seeds and Plants

- Started in early 2017 to acquire Industrial Hemp Seed
- DEA issues Import Permits –April 5, 2017
- May 2017- NC Attorney General issues an advisory letter stating movement across state line within state research programs was allowed by the Farm Bill



Industrial Hemp Seed and Plant Sources 2017-18

- International
 - -Italy
 - -Canada
 - -Czech Republic
 - -Lithuania
 - -France

- Domestic*
 - -North Carolina
 - -Oregon
 - -Colorado
 - -Kentucky
 - -Tennessee

*Shipping industrial hemp is illegal according to the DEA; this is falling under the Advisory Letter.





Plant Industry Division Sampling

 Conduct Sampling of Industrial Hemp Fields for THC levels with the assistance of 9 Seed and Fertilizer Specialists along with the Seed and Fertilizer Field Supervisor







Industrial Hemp Field Sampling

- Per the adopted Temporary Rules licensees must notify the NCDA&CS at the initiation of floral buds.
- To notify the NCDA&CS about sampling the licensee should email industrialhemprequests@ncagr.gov or go to the following webform: https://apps.ncagr.gov/agrsysportal/industrial hemp/samplerequest





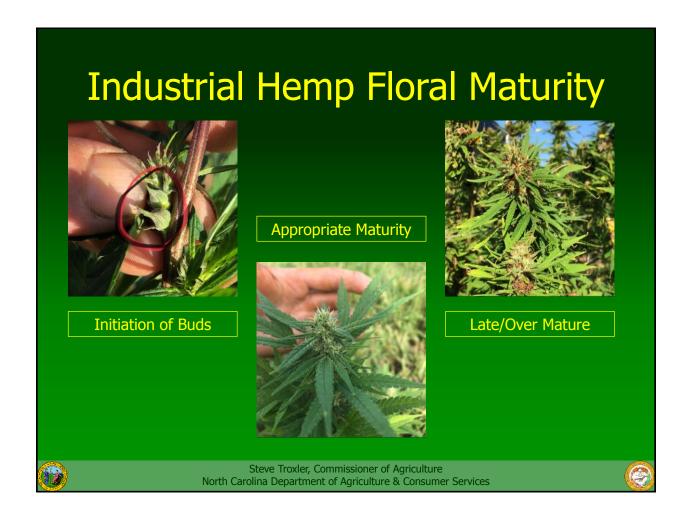
https://apps.ncagr.gov/agrsysportal /industrialhemp/samplerequest NC Industrial Hemp Sample Request Form · For multiple counties, please submit a form for each county. If more than 3 varieties are flowering, submit an additional form as needed. • Variety photos: Clear/close-up of side view of the blooming inflorescence. For further information on photos, please click here Licensee Name **Contact Name** License Number Preferred Email Preferred Phone ALAMANCE Flowering County **Harvest Date** Initiation of Flowering Date Steve Troxler, Commissioner of Agriculture North Carolina Department of Agriculture & Consumer Services

Industrial Hemp Field Sampling

- The early notification is to allow for the scheduling of sampling.
- Sampling will occur 3-5 weeks into flowering.
- This level of maturity will be more indicative of the THC levels obtainable by the plant without end of flower spiking.







Industrial Hemp Field Sampling

- If a licensee has more than one variety then all of them should be tested.
- If they mature at the same time they can be tested as one lot or separately at the licensee's discretion
- Inspector's will come out multiple times if need be.





Sample Collection

- Samples can be for a variety, the whole farm, a field of comingled varieties etc.
- Top 3-5" of the plant, specifically the flowers/inflorescences/buds because THC content is highest in these plant parts.
- Plants randomly selected among field or greenhouse





Sample Collection

- The number of buds sampled will depend on the overall sample size.
- The more acreage, the more plants need to be sampled to get a "representative" sample.
- In the case of small acreage or greenhouse setting, 10 plants is a standard number of samples





Sample Collection

- In a greenhouse situation, with say 40 plants we would opt to take less material from more plants.
- This would minimize the damage to any one plant while still obtaining the necessary amount of material and number of samples to be representative.





Industrial Hemp Compliance Testing

- North Carolina started and still tests using the GC-FID which decarboxylates THCA into delta-9 THC.
- The bulk of testing is done by a private lab that we have a contract with, allows for more samples and faster turnaround.
- However, if a sample tests above the legal limit, then a State laboratory will run a confirmation test.
- Regulatory actions for samples above the limit are based upon State Laboratory testing.





2017 Industrial Hemp Sampling Results

- 135 Industrial Hemp regulatory samples collected in North Carolina
- 14 Industrial Hemp regulatory samples tested above the 0.3% limit





2018 Industrial Hemp Sampling Results

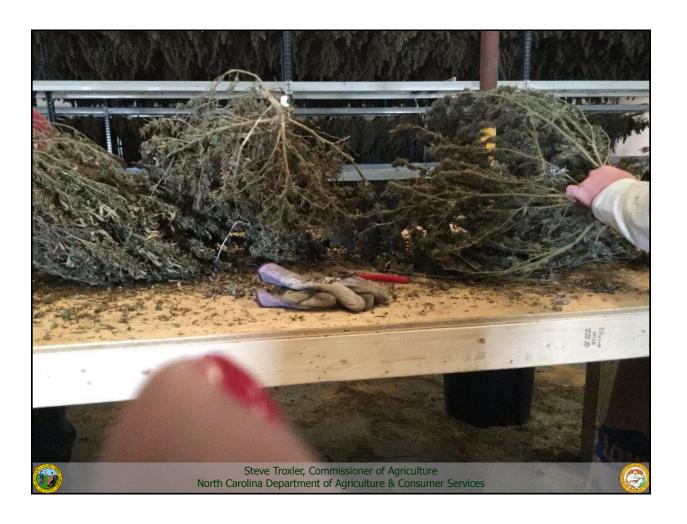
- 437 Industrial Hemp regulatory samples collected in North Carolina
- 47 Industrial Hemp regulatory samples have tested above the 0.3% limit













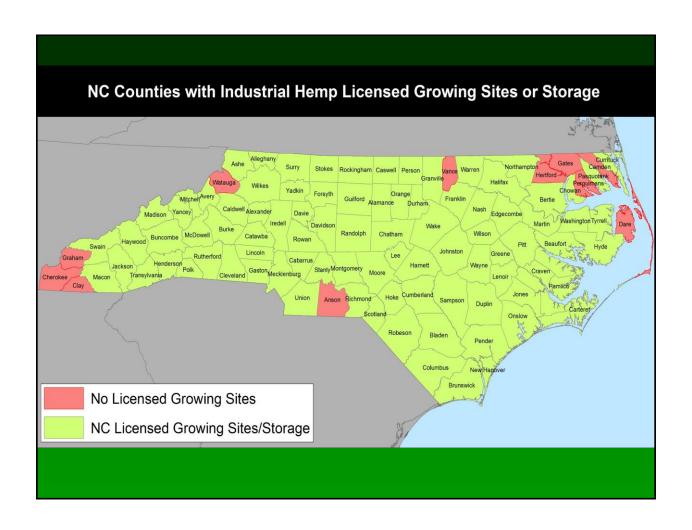


Current Industrial Hemp Program Participants

- 585 Licensed Industrial Hemp Growers
- 7189.27 Licensed Field Acres
- 3,250,094 Licensed Square Feet of Greenhouse production







2018 Farm Bill Details

- Nothing affects or changes what is currently in the Food, Drug and Cosmetic Act.
- Allows states to regulate hemp production based on a state or tribal plan submitted to USDA.
- Plan must include info on locations of hemp production, testing for THC, disposal of plants.
- States can put more restrictive parameters on the production of hemp but cannot alter the definition of hemp or put in place less restrictive policies.
- The Secretary must approve plans within 60-days. The final decision is made by the Secretary, but the Secretary must consult with the Attorney General.
- The Secretary has the authority to audit plans' compliance.

2018 Farm Bill Details

- The Secretary must provide technical assistance to states/tribes on plans.
- Any person convicted of a felony relating to a controlled substance cannot participate for a 10-year period following the conviction date – however, if they are already lawfully participating in a state hemp pilot project prior to the enactment of this bill, they can continue.
- USDA must develop a plan for those states that do not submit their own plan.
- USDA will keep and maintain "real-time information" regarding licenses.
- Encourages USDA to enter into a MOU with law enforcement.
- USDA will issue rules/guidelines, in consultation with the Attorney General.

Contact Information

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Important Email Addresses

- <u>Industrialhemprequests@ncagr.gov</u>
- Industrialhempprocessor@ncagr.gov

