

Colorado Seed Growers Association and Colorado Department of Agriculture

Application / Approval Process for CDA Approved Certified Industrial Hemp Seed Varieties in Colorado

Thank you for your interest in submitting the two applications for review by the Colorado Seed Growers Association (CSGA) Industrial Hemp Seed Variety Review Committee and the second application for entry into the Colorado Department of Agriculture (CDA) THC evaluation trials. Submission of these two applications with appropriate fees and approval by the review and successful THC evaluations will allow the variety into seed certification and be labeled by CSGA as a CDA Approved Certified class of seed. The following information provided below may be useful to you as an applicant or seed grower.

1. **Step One**-The one-time seed variety application submitted to CSGA will be reviewed by the CSGA Seed Variety Review Committee. If approved, the seed variety can be conditionally accepted into the CDA Approved seed certification program. The CDA application will provide entry into the CDA statewide THC seed variety evaluation trials. You are also reminded that the CDA will require all industrial hemp growers to be registered annually with the State of Colorado. Completion and submission of both documents is crucial for the approval process. If CSGA or the CDA has any questions in regards to your application, you will be contacted directly.
2. **Step Two**-The CSGA Industrial Hemp Seed Variety application will be reviewed by the CSGA Review Committee. If approved, then the seed variety will be accepted “conditionally” into the CDA Approved seed certification program and become eligible for CSGA field inspections. In this same timeframe the CDA application will allow the seed variety to be entered into the CDA Industrial Hemp THC evaluation trial. This CDA industrial hemp trial will evaluate the anticipated level of THC for each submitted seed variety. The actual seed production fields will be inspected by CSGA. CDA will collect plant samples and evaluate for THC compliance in all locations for the seed variety. The plant sample evaluation of this trial will help CDA determine if the seed variety can be fully accepted by CSGA and CDA as a *CDA approved certified seed variety of industrial hemp*.
3. **Step Three**- The next step for the applicant or grower will be to complete a CSGA Field Application. The “Field Application” will be completed for the seed variety and submitted with the appropriate fees to CSGA. CSGA office will schedule the field inspections to be completed. There will be at least two field inspections during the growing season. Once the field has passed the field inspection process, the grower will be notified of the progress.
4. **Step Four**- The Industrial Hemp seed field should be harvested at maturity and a representative sample of the conditioned (cleaned) seed is analyzed for purity and germination by the Colorado Seed Lab (CSL). If the sample has passed the established minimum seed standards, the field inspected seed may be eligible for labeling as a class of certified seed.
5. **Step Five** If the seed variety approved by the CSGA review committee and conditionally accepted into CDA Approved seed certification along with the same variety having passed the statewide CDA THC evaluation may become eligible to be labeled as a CDA Approved Certified Industrial Hemp seed variety by CSGA and CDA.

CDA Approved Certified Industrial Hemp Seed Process Summarized:

- a. Submit application to CSGA for the seed variety to be entered into the CSGA I-H CDA Approved Certified program.
- b. Submit application to CDA for the seed variety to be entered into the CDA I-H THC evaluation statewide trial.
- c. Submit field application for field inspection to be performed by CSGA inspector.
- d. Submit a representative clean field inspected seed sample to the Colorado Seed Lab for germination and purity evaluation.
- e. If the seed variety passes all criteria of the THC evaluation process along with the field/seed certification standards have been met, seed tags for the appropriate seed class can be issued by CSGA/CDA.

Colorado Seed Growers Association (CSGA) Application for Hemp Variety Certification Eligibility

Applicant Contact Information:

Applicant _____

Address _____

City _____ State _____ Country _____ Postal Code _____

Office Telephone _____ Fax _____ Cell number _____

Email Address _____

Crop:

Common Name for Crop Kind or Species: Industrial Hemp

Scientific Name for Crop Kind or Species: _____

Sub-Kind (eg. hybrid, inbred, forage type): _____

Experimental Designation(s): _____

Proposed Variety Name: _____

Hybrids, provide all pedigree information: _____

Derivation of Inbred / parent lines: _____

Type of Application:

Was this variety previously certified by another official certifying agency? _____

If it was previously certified, please attach proof of certification from that agency.

Has this variety been marketed in another country if any? _____

Has this variety been marketed in another country by another name: _____

- If this variety has been marketed in another country under a different name please provide written authorization with this application from the variety owner authorizing your use of the proposed name in this application.
- If the applicant is not the owner, please provide adequate documentation and signatures with this application that authorize seed multiplication and marketing of seed of this specific variety in Colorado.

Origin and Breeding:

Name of Breeding Institution _____ Breeder _____

Address _____

Office Telephone _____ Fax _____ Cell number _____

Email address _____

Provide information to fully explain the genetic back-round of this variety:

What breeding techniques were used in developing this variety?

In what generation was the selection made? _____

In what generation was the breeder seed first bulked? _____

How many lines were bulked to form this variety? _____

Seed Stock Maintenance:

Classes for Seed Certification Foundation _____ Registered _____ Certified _____

Breeder Seed Maintainer Name _____ Contact _____

Address _____

Telephone _____ Fax _____ Email _____

- If the seed stock maintainer is not the owner of the variety, a letter of authorization for maintenance from the owner will be required to be included with this application.

Additional Comments:

Variety Description:

Experimental Designation _____ Variety Name _____

Crop Kind (species) _____

Breeder (name) _____

Address _____

Applicant (name) _____

Address _____

Seed Distributor (name) _____

Address _____

Taxonomic Classification: _____

THC content: _____

Sexual Type: dioecious _____ monoecious _____ hybrid _____

Flowering Type: male _____ female _____ male & female _____

Time of Flowering: _____ number of days after planting

Disparity of Female Flowering to Male Flowering: _____ number of days

Plant Height (including inflorescence): short _____ medium _____ tall _____

Height range _____ cm to _____ cm

Plant Branching: few _____ medium _____ numerous _____

In the middle third of the plant:

Stem Internode Length: short _____ medium _____ long _____

Stem color: yellow _____ green _____ grey _____ red _____

Leaf Color: yellow _____ green _____ grey _____

Leaf Intensity: weak _____ medium _____ strong _____

Leaf Size: small _____ medium _____ large _____

Inter-Sex Combination within the Female Plant Population (Sengbusch Scale):

The Sengbusch Classification system defines five degrees of monoecious forms: Type 1, 80-90% male flowers; Type 2, 60-70% male flowers; Type 3, 40-50% male flowers; Type 4, 10-30% male flowers; Type 5 less than 10% male flowers. The second and third types are considered “ideal” for monoecious cultivation. The too male (1st degree) and predominantly female (4th and 5th degree) types are removed before flowering.

	% Female Flowers	10 to 20	30 to 40	40 to 50	70 to 90	mainly
% Male Flowers	80 to 90	type 1= %				
	60 to 70		type 2= %			
	40 to 50			type 3= %		
	10 to 30				type 4= %	
	less than 10 %					type 5= %

Stem Grooves: _____

Leaf Anthocyanin Coloration: absent _____ weak _____ medium _____ strong _____

Male Flower Anthocyanin Coloration: absent _____ weak _____ medium _____ strong _____

Hairs on Calyx: _____

Seed Size and Shape: _____

Variants and Acceptable levels: _____

Description of off-types: _____

I, the applicant do affirm the information provided in this industrial hemp cultivar application for entry into the Colorado Seed Growers Association Seed Certification Program is to the best of my knowledge is complete and accurate. I affirm that the reference seed sample submitted along with the application represents the cultivar described in this application. I accept full responsibility for any statements or claims made in this application.

Applicants Name Printed

Date

Applicants' Signature



COLORADO
Department of Agriculture

Colorado Department of Agriculture (CDA) Application for Approval of Industrial Hemp Variety Certification Eligibility

Applicant Contact Information _____

Applicant _____

Address _____

City _____ State _____ Country _____ Postal Code _____

Office telephone _____ FAX _____ Cell Number _____

Email Address _____

Industrial Hemp Proposed Variety Name _____ Year Named _____

Experimental Designation _____

Class of Seed submitted for trial and multiplication _____

Seed Lot Number _____ Year Produced _____

Class of seed to be produced _____ in growing season year 2016.

Date Colorado Seed Growers Application for Hemp Variety Certification Eligibility Filed _____

Date Variety accepted by the CSGA _____

Trial Seed Submitted for CDA trials for % THC verification YES NO DATE _____

Trial Fee of \$1500 received _____

I, the applicant do affirm the information provided in this industrial hemp cultivar application for entry into the Colorado Department of Agriculture THC evaluation trial is to the best of my knowledge is complete and accurate. I affirm that the reference seed sample submitted along with the application represents the cultivar described in this application. I accept full responsibility for any statements or claims made in this application.

Applicants Signature

Date