

**WSR 21-16-108**  
**PROPOSED RULES**  
**DEPARTMENT OF AGRICULTURE**  
[Filed August 4, 2021, 8:33 a.m.]

Original Notice.

Preproposal statement of inquiry was filed as WSR 21-12-062 [21-12-063].

Title of Rule and Other Identifying Information: Chapter 16-302 WAC, General rules for seed certification. In response to a petition submitted by the Washington state crop improvement association (WSCIA), the department is proposing the following amendments to this chapter:

- Changing the requirement for Ascochyta Blight being found anywhere on the plant to just being found on the pod;
- Allowing producers for all classes of chickpea seed to not treat for Ascochyta Blight if they have a waiver for the organic market (and/or research) and no Ascochyta Blight was found during inspection;
- Removing the additional Ascochyta Blight treatment requirement for the certified class of chickpea seed, if a grower has already applied a fungicide during the growing season and Ascochyta Blight was not found during the field inspection. This amendment would also remove the requirement for a second inspection if Ascochyta Blight is found during the field inspection and instead allow the certifying agency to determine if a second inspection is necessary;
- Standardizing how varieties containing the Clearfield and AXigen traits are certified;
- Reducing the tolerance of triticale in wheat to "None Found"; and
- Moving the reference to rye, in regards to triticale tolerance, out of the footnote and into the table.

The department is also proposing to adopt the current hemp seed certification rules established by the Association of Official Seed Certifying Agencies (AOSCA) and replace references to 'industrial hemp' with 'hemp' to align with the Federal Seed Act (FSA).

Hearing Location(s): On September 7, 2021, at 10:30 a.m., Microsoft Teams conference line, join by link [https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_ZTY4MGFLYWYtZWQ3Ni00NWE2LWI3OWEtYzVmNGZhMGMwZjg0%40thread.v2/0?context=%7b%22Tid%22%3a%2211d0e217-264e-400a-8ba0-57dcc127d72d%22%2c%22Oid%22%3a%22838c55c7-c187-44ae-8de0-2be684ce5d4a%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZTY4MGFLYWYtZWQ3Ni00NWE2LWI3OWEtYzVmNGZhMGMwZjg0%40thread.v2/0?context=%7b%22Tid%22%3a%2211d0e217-264e-400a-8ba0-57dcc127d72d%22%2c%22Oid%22%3a%22838c55c7-c187-44ae-8de0-2be684ce5d4a%22%7d), join by phone +1 564-999-2000, Conference ID 463 341 423#. Due to the ongoing COVID-19 pandemic, the public hearing will be held solely over video and teleconference.

Date of Intended Adoption: September 10, 2021.

Submit Written Comments to: Gloriann Robinson, Agency Rules Coordinator, P.O. Box 42560, Olympia, WA 98504-2560, email [wsdarulescomments@agr.wa.gov](mailto:wsdarulescomments@agr.wa.gov), fax 360-902-2092, by September 7, 2021.

Assistance for Persons with Disabilities: Contact Reanna McNamara, phone 360-902-1931, fax 360-902-2085, TTY 800-833-6388, email [rmcnamara@agr.wa.gov](mailto:rmcnamara@agr.wa.gov), by August 27, 2021.

Purpose of the Proposal and Its Anticipated Effects, Including Any Changes in Existing Rules: WSCIA is a 501c(5) nonprofit organization that works with Washington State University, Oregon State Univer-

sity and other public and private breeding programs, seed growers and conditioners to develop, produce and distribute certified seed in order to improve crop quality and yields in Washington. WSCIA is designated in WAC 16-302-010 to act as the director's duly authorized agent for the purpose of certifying seed of buckwheat, chickpeas, field peas, lentils, millet, soybeans, small grain, sorghum and forest trees, including conditional plant inspections for these crops. As part of these duties, WSCIA routinely reviews the certification rules for these crops, and petitions for changes that reflect the requirements and conditions of the industry as well as promote the well-being of the purchasers and user of seed and the members of the seed industry. This rule amendment proposes revisions to chapter 16-302 WAC that address requests made in the most recent petition by WSCIA.

This rule proposal also includes amendments to the certification and regulation of hemp seed. The Washington state department of agriculture (WSDA) has been regulating hemp production since 2017 under the industrial hemp research pilot program and more recently, the hemp program. While the hemp program has seen an increase in licensees and acres registered in Washington, none of the licensees are participating in seed certification. With a newly developed crop, there is a need to source quality seed.

The purpose of seed certification is to preserve genetic purity and varietal identity. WSDA is an official AOSCA program enabling seed companies to produce and market genetically pure seed. The mission of AOSCA is to promote and facilitate the movement of seed or plant products in local, national, and international markets through the coordinated efforts of official seed certification agencies acting to evaluate, document, and verify that a seed or plant product meets certain accepted standards. Additionally, AOSCA establishes minimum standards for genetic purity and identity and recommends minimum standards for seed quality for the classes of certified seed. They standardize seed certification regulations and procedures, as well as operational procedures in interagency seed certification, and they periodically review agency genetic standards and procedures to assure compliance with FSA.

AOSCA's requirements for producing certified hemp seed include special land requirements, planting eligible stock, field inspections, proper seed labeling and meeting standards based on complete lab analysis. The current hemp field certification standards in WAC 16-302-840 through 16-302-865 do not match the standards approved by AOSCA in June 2020. The purpose of the rule proposal is to align WSDA with all AOSCA standards for certified hemp seed.

Reasons Supporting Proposal: The department is proposing to modify the inspection standards, including clarifying language in those standards, regarding the presence, treatment, and inspection of chickpea fields where *Ascochyta Blight* is found because chemistries, management tools, and genetics available to mitigate *Ascochyta Blight* are more available now than in the past. Treating chickpea seed with fungicidal chemicals is a long-accepted practice for stopping the spread of *Ascochyta Blight* in chickpea seed and is employed throughout the industry.

While it continues to be necessary for industry to treat *Ascochyta Blight*, because of progress made by industry, WSDA is proposing to make the following changes to allow for more flexibility.

- **Changing the requirement for *Ascochyta Blight* being found anywhere on the plant to just being found on the pod.** It is well

recognized that because this disease is not systemic, seed infection does not occur when lesions are found on stems and leaves. Lesions must be present on pods in order for seed to be infected, and even then it is possible that the pathogen has not breached the pod and reached the seed. Because pod lesions are required for seed infection, the standard will be modified to clearly state that only pod lesions are taken into consideration during certification inspections. Basing inspection criteria on pod lesions parallels new standards enacted for seed certification in Idaho as well.

- **Allowing producers for all classes of chickpea seed to not treat for Ascochyta Blight if they have a waiver for the organic market (and/or research) and no Ascochyta Blight was found during inspection.** Current Ascochyta Blight requirements do not take into consideration organic farming requirements. This proposed change would provide organic producers the ability to continue to produce all classes of seed without interfering with their organic certification. If an organic grower is able to demonstrate that no organically-produced (meaning field was not organic) seed is available, the grower is allowed to use conventionally-produced seed in his or her system, as long as the seed itself is not treated with nonorganic products. In order to make certified seed available to organic producers, an exemption for seed going into organic production systems is being added to the rule.
- **Removing the additional Ascochyta Blight treatment requirement for the certified class of chickpea seed, if a grower has already applied a fungicide during the growing season and Ascochyta Blight was not found during the field inspection. This amendment would also remove the requirement for a second inspection if Ascochyta Blight is found during the field inspection and instead allow the certifying agency to determine if a second inspection is necessary.** Use of fungicides during the field production period is recognized to control infection from Ascochyta Blight. In order to prevent the establishment or spread of Ascochyta Blight in their chickpea crops most growers, where Ascochyta Blight is common, already apply fungicides regularly to their fields when conditions are conducive to infection. When a grower is managing the disease by applying a fungicide one or more times during the growing season, it is expected that the infection will not establish on seed pods, resulting in a low risk of infected seed. If growers can prove that they have applied fungicide to manage the disease and no symptoms of Ascochyta Blight are found, then no additional treatment will be required. Additionally, the required second inspection for all growers is being removed from the rule and instead it will be left up to the discretion of the certifying agency (WSCIA) to determine if a particular grower is in need of a follow-up inspection to verify compliance.

The department is proposing to standardize how varieties containing the Clearfield and AXigen trait are certified. Currently, this rule only references the standards for certifying varieties containing the Clearfield trait, however the department, upon request from the industry, has been certifying both varieties with both Clearfield traits and AXigen traits for a number of years. Both traits have their own standard requirements. Due to the increase in popularity, the department is now moving to include AXigen trait standards in rule as well. Just like seed varieties with the Clearfield trait, seed variet-

ies with the AXigen trait must pass the bioassay or polymerase chain reaction (PCR) test as defined by the trait owner. Including the testing requirement for seed varieties with the AXigen trait in the seed certification rule provides clarification and improves transparency between what is currently being required for certification and ensures that each trait-containing variety is handled in a standardized manner. The department is also removing the unnecessary reference to the herbicide Imazamox in WAC 16-302-685(2), since it only pertains to seed varieties with the Clearfield trait and not the AXigen trait (Co-AXium variety). Having generalized verbiage and a standardized description for all varieties without trade names will ensure consistent application of the standards for all small grain seed certification.

The department is proposing to reduce the tolerance for triticale from 1/1000g to "None Found" in certified class wheat seed and to move the reference to rye, in regards to triticale tolerance, out of the footnote and into the table. By reducing the tolerance for triticale in wheat seed to "None Found", the department asserts that certified seed is without triticale contaminants which will improve the seed quality and purity. Triticale is an artificial or man-made hybrid of rye and wheat. It is grown mostly for forage or animal feed. The presence of triticale is problematic because when triticale is harvested in a commercial wheat or rye crop it ends up as dockage or foreign material and therefore lowers the price the crop can be sold for. Due to its hard-seeded nature, triticale also has the ability to reseed itself in future years, allowing it to become a weedy species in the field. When growers purchase one lot of triticale-contaminated wheat seed, they may be bringing a long lasting problem to their fields. Commercial growers consider ANY amount of triticale in certified wheat seed to be a contamination of the crop and have specifically requested that the allowance for triticale be lowered to "None Found" for all classes. In registered class and foundation class seed, the tolerance for triticale is already "None Found". By reducing the tolerance in the certified seed class, we are able to align the standards between all classes of production. Currently, the tolerance for triticale in certified rye is already "None Found". However, the tolerance is listed in a footnote which is not easily identifiable for industry (WAC 16-302-685 (2)(a)). The rule amendment moves the reference to rye out of the footnote and into the table to improve readability without changing any requirements for rye.

The department is proposing to adopt all of the hemp seed certification rules established by AOSCA. Currently, WSDA's seed certification standards for hemp are more stringent than AOSCA which is the standard most states align with. Given that WSDA is more stringent, there have been no acres of certified, registered, or foundation hemp grown in Washington. This results in Washington hemp licensees having to use certified seed produced in other states, or use common seed that does not have the same seed quality and purity. In the United States Department of Agriculture (USDA) final rule that was published on January 19, 2021, USDA recommended the use of hemp seed from varieties that have undergone varietal certification following the process outlined in FSA regulations and produced by AOSCA standards. Additionally, USDA has encouraged state hemp programs, when adopting a performance-based sampling protocol, to consider seed certification processes that identify varieties that have consistently demonstrated to result in compliant hemp plants. This flexibility could significantly increase the demand for certified seed. It is important that Washing-

ton certification standards for hemp fully align with AOSCA in order to provide equal opportunity for Washington seed producers.

The department is proposing to replace references to "industrial hemp" with "hemp" to align with FSA. As a state regulatory agency, WSDA is required to monitor and enforce the standards of FSA. Chapter 15.49 RCW mirrors the labeling requirement of seed found in the FSA. RCW 15.49.005 specifies that, "To the extent possible, the department shall seek to incorporate into the rules provisions from the recommended uniform state seed law in order to attain consistency with other states." Aligning certified seed production language to FSA language is good practice, minimizes confusion and maintains consistency with other states and the seed industry.

Statutory Authority for Adoption: RCW 15.49.005, 15.49.021, 15.49.310, 15.49.370, and 15.140.030.

Statute Being Implemented: Chapters 15.49 and 15.140 RCW.

Rule is not necessitated by federal law, federal or state court decision.

Name of Proponent: WSCIA and WSDA, public.

Name of Agency Personnel Responsible for Drafting: Reanna McNamara, 1111 Washington Street S.E., Olympia, WA 98504, 360-902-1997; Implementation and Enforcement: Paula Moore, 21 North 1st Avenue, Suite 203, Yakima, WA 98902, 509-249-6950.

A school district fiscal impact statement is not required under RCW 28A.305.135.

A cost-benefit analysis is not required under RCW 34.05.328. WSDA is not a listed agency under RCW 34.05.328 (5)(a)(i).

This rule proposal, or portions of the proposal, is exempt from requirements of the Regulatory Fairness Act because the proposal:

Is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Citation of the specific federal statute or regulation and description of the consequences to the state if the rule is not adopted: Replacing references to "industrial hemp" with "hemp" is exempt under RCW 19.85.061 because it adopts terms that align with FSA. RCW 15.49.005 specifies that, "To the extent possible, the department shall seek to incorporate into the rules provisions from the recommended uniform state seed law in order to attain consistency with other states." If the rule is not adopted there will be a difference between the state language and the federal language which can lead to stakeholder confusion.

Is exempt under RCW 19.85.025(3) as the rules are adopting or incorporating by reference without material change federal statutes or regulations, Washington state statutes, rules of other Washington state agencies, shoreline master programs other than those programs governing shorelines of statewide significance, or, as referenced by Washington state law, national consensus codes that generally establish industry standards, if the material adopted or incorporated regulates the same subject matter and conduct as the adopting or incorporating rule; and rules only correct typographical errors, make address or name changes, or clarify language of a rule without changing its effect.

Explanation of exemptions: Adopting all of the hemp seed certification rules established by AOSCA is exempt under RCW 19.85.025(3), 34.05.310 (4)(c) because it incorporates standards that align with a

national consensus code that generally establishes industry standards. USDA's final rule published on January 19, 2021, recommended the use of hemp seed from varieties that have undergone varietal certification following the process outlined in FSA regulations and produced by AOS-CA standards.

In WAC 16-302-685(2), removing the reference to the product Imazomox and moving the reference to rye out of the footnote and into the table are both exempt under RCW 19.85.025(3); 34.05.310 (4)(d) because they clarify the rule without changing its effect.

The proposed rule does not impose more-than-minor costs on businesses. Following is a summary of the agency's analysis showing how costs were calculated. Changing the requirement of Ascochyta Blight being found anywhere on the plant to just the pod will allow the producer to spray the crop and continue with the certification process. Whereas now, in current rule the presence of Ascochyta Blight in the form of lesions on the leaves and stems would result in the crop being ineligible for certification. The department does not anticipate any negative impacts as a result of this amendment.

Under the current rule, for all classes of chickpea seed, treating the seed for Ascochyta Blight disqualifies the seed from being sold in organic markets. By providing a waiver of seed treatment, the grower has access to an additional market and sell conventionally grown seed in organic markets. Both tolerant and nontolerant varieties are still protected from high infection. The department does not anticipate any negative impacts as a result of this amendment.

For certified class of chickpea seed, if a grower has already applied fungicide during the growing season, no additional treatment is required if Ascochyta Blight is not found. Additionally, the rule change would remove the requirement for a second inspection if Ascochyta Blight is found during the field inspection. Instead, a second inspection would be at the discretion of the agency. This change will allow for the certification agency to deem Ascochyta Blight controlled using field fungicides, reducing the need for a later inspection and saving growers and the agency money by not conducting unnecessary inspections. The department does not anticipate any negative impacts as a result of this amendment.

Since the department is already certifying seed varieties that contain the AXigen trait, according to this standard and this rule does not impose any additional requirements or costs, it does not anticipate any negative impacts associated with this amendment.

Reducing the tolerance for triticale in wheat seed to "None Found" could result in seed lots being rejected which may have previously met the standard. However, only one lot of wheat tested for certification in the last five years would have been disqualified by the proposed "None Found" tolerance. The seed lot in question held 625,000 pounds, which is less than 0.1% of the more than 660 million pounds of seed certified for Washington planting in the same time period. Wheat grain is sold by the bushel with one bushel being equivalent to 60 US pounds. This one seed lot was the equivalent of 10,416.66 bushels. As certified seed, this lot was able to be sold for \$10.85/bu. If the lot has failed certification because this proposed rule had been in place at that time, the lot would have had to be sold as noncertified seed for only \$7.60/bu for a total cost difference of \$-33,854.17. The North American Industry Classification System code for this producer is 424510. The minor cost threshold for this industry is \$49,430.75. Therefore the department does not anticipate that this proposed amendment would exceed the minor cost threshold. Since customers of certi-

fied wheat seed already find the presence of triticale unacceptable, many seed companies will not sell wheat seed known to contain triticale. The certified seed market has been self-regulating the sale and purchase of wheat seed that contains triticale.

A copy of the detailed cost calculations may be obtained by contacting Gloriann Robinson, P.O. Box 42560, Olympia, WA 98504-2560, phone 360-902-1802, fax 360-902-2092, TTY 800-833-6388, email [wsdarulescomments@agr.wa.gov](mailto:wsdarulescomments@agr.wa.gov).

August 4, 2021  
Jessica Allenton  
Assistant Director

## OTS-3216.2

AMENDATORY SECTION (Amending WSR 18-10-055, filed 4/27/18, effective 5/28/18)

**WAC 16-302-560 Miscellaneous field and seed inspection standards for buckwheat, chickpea, field pea, lentil, millet, soybean, sorghum, small grain seed certification.** (1) Field inspection timing for buckwheat, chickpea, field pea, lentil, millet, soybean, sorghum, small grain seed entered in the certification program are:

(a) For field pea and lentil - When seed crop is in full bloom;  
(b) For chickpea (garbanzo bean) - When seed crop is mature enough to differentiate leaf type (compound or simple leaf type), with a second inspection occurring between full bloom and late pod stage for registered and foundation class. Certified class (~~requires~~) may be subject to a second inspection at the discretion of the certifying agency at late pod stage if ascochyta blight is observed during the first inspection and the crop has been treated with an EPA-approved fungicide;

(c) For soybean - When seed crop is in full bloom and of mature color;

(d) For open pollinated sorghum - When seed crop is in full bloom, and optionally again when seed crop begins to show mature color;

(e) For hybrid sorghum - Two inspections during bloom and one inspection after seed begins to show mature color;

(f) For small grains - When seed crop is fully headed and of mature color;

(g) For millet - One inspection during bloom and one inspection after seed begins to show mature color; and

(h) For buckwheat - One inspection when seed crop is in full bloom.

(2) Any condition or practice which permits or causes contamination of the seed crop, such as failure to prevent seed formation of prohibited noxious weeds, or excess weeds including excessive objectionable or restricted noxious weeds, or mechanical field mixing, is cause for rejection upon inspection. Fields rejected for jointed goatgrass or jointed goatgrass hybrids are not eligible for reinspection and must remain ineligible for any production of certified classes of small grain seed until a reclamation procedure, as specified in sub-

section (3) of this section has been completed. Fields rejected for other causes will remain eligible for reinspection.

(3) The jointed goatgrass reclamation procedure includes the following:

(a) Each grower must develop a reclamation plan for his/her affected fields. The plan must be based on the most current recommendations of Pacific Northwest scientists and Washington State University cooperative extension as well as good management practices. The plan may include use of certified seed, spring cropping practices, and late tilling and planting. No particular program is specified or endorsed and compliance with a program does not assure eligibility for the production of certified classes of small grain seed. Eligibility is based solely upon results of field inspections as provided in (b) through (e) of this subsection.

(b) The rehabilitation and inspection program duration is three years for irrigated land and five years for dryland without production of certified small grain seed and the first year of certified seed production thereafter.

(c) Annual inspections of the affected fields are conducted by the certifying agency during the prescribed rehabilitation period at such time that the jointed goatgrass or jointed goatgrass hybrids would be most visible.

(d) Following the prescribed period of rehabilitation and during the first certified seed production year, a minimum of three field inspections are conducted by the certifying agency.

(e) If jointed goatgrass or jointed goatgrass hybrids are found during any inspection as provided in (c) and (d) of this subsection, the rehabilitation program is determined unsuccessful or the field is declared ineligible and the rehabilitation and inspection program for that field must begin again at year one of the procedure.

(4) Field run lots of seed of the same variety may be commingled to facilitate storage and conditioning.

(5) No prohibited noxious weed seeds are permitted upon inspection for seed standards.

(6) Germination minimum refers to germination when sampled.

(7) If chemically controllable seed-borne diseases are noted upon inspection for field standards and seed standards for small grains, treatment of seed is required.

(8) Wild oat, isolated patches and borders must be removed or clearly marked so as to avoid harvesting with the rest of the field. If rejected, a reinspection is necessary to assure clean-up efforts are satisfactory. Spot checks are conducted on fields where heavy patches or contaminated borders were noted. Harvesting these areas with the rest of the field is cause for rejection of the entire field.

(9) The official laboratory providing seed analysis for the purpose of certification is the department.

(10) For all fields planted with varieties that contain the CLEARFIELD trait as defined in the variety description, documentation will be required to be submitted with the certification application verifying that the production field meets all production guidelines and was sprayed with the appropriate herbicide. CLEARFIELD is a trait that makes a plant resistant to the Imazamox herbicide.

(11) For all fields planted with varieties that contain the AXi-gen trait as defined in the variety description, documentation will be required to be submitted with the certification application verifying that the production field meets all production guidelines and was



sprayed with the appropriate herbicide. AXigen is a trait that makes a plant resistant to Aggressor® (Quizalofop-P-ethyl) brand herbicide.

[Statutory Authority: RCW 15.49.005, [15.49].021, [15.49].310, [15.49].370, and chapter 34.05 RCW. WSR 18-10-055, § 16-302-560, filed 4/27/18, effective 5/28/18. Statutory Authority: RCW 15.49.005, 15.49.081, 15.49.310, 15.49.370(3), and chapter 34.05 RCW. WSR 14-20-050, § 16-302-560, filed 9/25/14, effective 10/26/14. Statutory Authority: Chapters 15.49 and 34.05 RCW. WSR 10-08-028, § 16-302-560, filed 3/31/10, effective 5/1/10. Statutory Authority: RCW 15.49.005, 15.49.081, 15.49.310, 15.49.370(3) and chapter 17.24 RCW. WSR 00-24-077, § 16-302-560, filed 12/4/00, effective 1/4/01.]

AMENDATORY SECTION (Amending WSR 14-20-050, filed 9/25/14, effective 10/26/14)

**WAC 16-302-685 Small grains standards for seed certification.**

(1) Land, isolation, and field standards for small grains (barley, oat, rye, triticale, and wheat) seed certification are:

**LAND, ISOLATION, AND FIELD STANDARDS**

CLASS	LAND STANDARDS MINIMUM YEARS	ISOLATION STANDARDS MINIMUM FEET	OFF-TYPE MAXIMUM HEAD RATIO	OTHER CROP MAXIMUM HEAD RATIO	((TRITICALE PLANTS PER ACRE IN BARLEY, WHEAT, AND OAT))	WILD OAT MAXIMUM PLANTS/ACRE
Foundation	2 (a)	50 same genus (b) 3 different genus	None found	None found (c), (d)	((None found (d)))	None found
Registered	1 (a)	10 same genus 3 different genus (b)	1/148,000	1/148,000 (c)	((None found (d)))	5
Certified	1 (a)	10 same genus 3 different genus (b)	1/49,000	1/49,000 (c)	((None found (d)))	5

- (a) Waived if the previous crop is grown from an equal or higher certified class of seed of the same variety.
- (b) Each rye field for certification must be isolated by three feet from fields producing a certified class of the same variety, and by six hundred sixty feet from other rye fields. Each triticale field for certification must be isolated by three feet from fields producing a certified class of the same variety, and by three hundred feet from other triticale, rye and wheat fields for foundation and registered class, and ten feet for certified class, unless otherwise stated by the plant breeder.
- (c) Refers to other small grains, except that no rye or triticale is permitted in barley, oat, or wheat; and no vetch is permitted in barley, oat, rye, triticale, or wheat.
- (d) Only one reinspection is allowed for foundation fields when triticale is found in the first inspection. Additional inspections are allowed if the field is downgraded to the registered or certified class.

(2) Small grains - Seed standards:

For CLEARFIELD and CoAXium varieties: For all classes - Each lot must pass ((~~the CLEARFIELD Confirm test by~~)) bioassay or PCR as defined by the trait owner. ((~~The CLEARFIELD Confirm test verifies that the seed is resistant to the Imazamox herbicide.~~))

Class	Foundation	Registered	Certified
Pure seed % (minimum)	98	98	98
Inert % (maximum)	2	2	2
Off-type (a) % (maximum)	None found	2/lb	4/lb
Other small grain excluding triticale and rye (a) (maximum)	None found	1/lb	2/lb
Triticale allowed in wheat (( <del>(f)</del> )) and rye	None found	None found	(( <del>(1/1000 grams)</del> )) None found
Triticale allowed in oats and barley	None found	None found	1/lb
Other crop (b) % (maximum)	None found	0.03	0.05
Weed seed % (maximum)	0.01	0.01	0.03

Class	Foundation	Registered	Certified
Objectionable weed seed (c) (maximum)	None found	None found	None found
Wild oat (maximum)	None found	None found	None found (d)
Viability (e) % (minimum)	85	85	85

- (a) The combination of other small grain and off-type must not exceed 2/lb for registered class, and 4/lb for certified class. The tolerance for rye is none found in barley, oat, triticale, or wheat. ~~((The tolerance for rye is none found in triticale. The tolerance for triticale is none found in rye.))~~
- (b) Excluding off-type and other small grain. No vetch is allowed in small grain seed.
- (c) Excluding wild oat.
- (d) 1/lb for certified class oat.
- (e) A certification certificate is issued upon receipt of either an official AOSA tetrazolium or germination test which meets minimum Washington viability standards. NOTE: State and federal seed laws require seed be labeled based on a germination test.
- ~~((f) In wheat, the foundation standard is based on a 1000 gram crop exam. The registered standard is based on a 500 gram crop exam. The certified standard is based on a 500 gram crop exam. If one triticale seed is found in 500 grams, a second 500 gram crop exam is required for a total 1000 gram crop exam. No triticale is allowed in the second 500 grams with the total standard of 1 triticale seed per 1000 grams allowed.))~~

Note: For all classes the purity analysis is based on 100 grams examined. For registered and certified classes, noxious weed, vetch, off-type, and other small grain determinations are based on 500 grams ~~((examined except as allowed in footnote (f) of this subsection))~~. For foundation class, noxious weed, vetch, off-type, and other small grain determinations are based on 1000 grams examined.

[Statutory Authority: RCW 15.49.005, 15.49.081, 15.49.310, 15.49.370(3), and chapter 34.05 RCW. WSR 14-20-050, § 16-302-685, filed 9/25/14, effective 10/26/14. Statutory Authority: Chapters 15.49 and 34.05 RCW. WSR 10-24-102, § 16-302-685, filed 12/1/10, effective 1/1/11; WSR 10-08-028, § 16-302-685, filed 3/31/10, effective 5/1/10. Statutory Authority: RCW 15.49.370(3), 15.49.310 and chapter 34.05 RCW. WSR 04-06-018, § 16-302-685, filed 2/23/04, effective 3/25/04. Statutory Authority: Chapters 15.49 and 34.05 RCW. WSR 02-12-060, § 16-302-685, filed 5/30/02, effective 6/30/02. Statutory Authority: RCW 15.49.005, 15.49.081, 15.49.310, 15.49.370(3) and chapter 17.24 RCW. WSR 00-24-077, § 16-302-685, filed 12/4/00, effective 1/4/01.]

AMENDATORY SECTION (Amending WSR 18-10-055, filed 4/27/18, effective 5/28/18)

**WAC 16-302-690 Chickpea standards for seed certification.** (1) Land, isolation, and field standards for chickpea seed certification are:

**FIELD STANDARDS**

Land Requirements (a) (minimum years)	Isolation (minimum feet) <del>((e))</del> (b)	Off-type (plants/acre)	Inseparable Other Crop <del>((b) (plants/acre))</del>	Noxious (c) Weeds (plants/acre)	Pods with Ascochyta Blight (d)
Class					
Foundation	2	25	none found	(c)	none found
Registered	1	10	5	(c)	none found
Certified	1	10	10	(c)	10 plants/acre

- ~~((a) Waived if the previous crop is grown and passes certification field standards of equal or higher certified class of seed of the same variety.~~
- ~~(b) Inseparable other crops.~~
- ~~(c) Prohibited, restricted, and other weeds difficult to separate must be controlled.~~
- ~~(d) None found in all classes of varieties not tolerant to ascochyta.~~
- ~~(e) Reduce to three feet from fields producing a certified class of the same variety. In addition, each chickpea field for certification must be isolated by three feet from small grain fields. To prevent mechanical field mixing of swathed chickpea seed crop, the planting of small grain between fields, except for three feet of isolation, is recommended.))~~
- (a) Waived if the previous crop is grown and passes certification field standards of equal or higher certified class of seed of the same variety.
- (b) Reduce to three feet from fields producing the same variety. In addition, each chickpea field for certification must be isolated by three feet from small grain fields. To prevent mechanical field mixing of swathed chickpea seed crop, the planting of small grain between fields, except for three feet of isolation, is recommended.
- (c) Prohibited, restricted, and other weeds difficult to separate must be controlled.

- (d) If an EPA-approved product for control of *Ascochyta rabiei* (ascochyta blight) was applied according to labeled rate during the growth cycle, and followed by additional application(s) if infection is found at field inspection, there is no standard to apply in certified class fields.

(2) Seed standards for chickpea seed certification are:

SEED STANDARDS

	Pure seed %	Inert %	Other Crop	Weed Seed	Germination %
Class <del>((e))</del> (a)					
Foundation	99	1	none found	none found	85
Registered	99	1	none found	none found	85
Certified <del>((d))</del>	99	1	2 seeds/lb <del>((a))</del> (b)	2 seeds/lb <del>((b))</del> (c)	85

- ~~((a)) None found for Austrian pea, rye, or vetch.~~
- ~~(b) None found for nightshade berries or prohibited noxious weed seeds.~~
- ~~(e) All classes of varieties not tolerant to ascochyta must be treated with a fungicide registered to control ascochyta at the labeled rate.~~
- ~~(d) Seed from a field where ascochyta was found at inspection must be treated with a fungicide registered to control ascochyta at the labeled rate.))~~
- (a) All classes must be treated with a fungicide registered to control ascochyta blight at the labeled rate. A seed treatment waiver can be obtained if no ascochyta blight was observed at field inspection. This is an allowance for seed intended for organic markets and/or research.
- (b) None found for Austrian pea, rye, or vetch.
- (c) None found for nightshade berries or prohibited noxious weed seeds.

[Statutory Authority: RCW 15.49.005, [15.49].021, [15.49].310, [15.49].370, and chapter 34.05 RCW. WSR 18-10-055, § 16-302-690, filed 4/27/18, effective 5/28/18. Statutory Authority: RCW 15.49.005, 15.49.081, 15.49.310, 15.49.370(3), and chapter 34.05 RCW. WSR 14-20-050, § 16-302-690, filed 9/25/14, effective 10/26/14. Statutory Authority: RCW 15.49.005, 15.49.081, 15.49.310, 15.49.370(3) and chapter 17.24 RCW. WSR 00-24-077, § 16-302-690, filed 12/4/00, effective 1/4/01.]

**Standards for ~~((Industrial))~~ Hemp ~~((Seed))~~ Certification**

AMENDATORY SECTION (Amending WSR 17-08-090, filed 4/5/17, effective 5/6/17)

**WAC 16-302-840** ~~((Standards for industrial hemp seed production.))~~ **Hemp (*Cannabis sativa* L. subsp. *sativa*) certification standards.** (1) ~~((The general seed certification definitions and standards in this chapter are basic and together with WAC 16-302-845 through 16-302-865 constitute the standards for industrial hemp seed certification.~~

~~(2) Fees for seed certification are assessed as established in chapter 16-303 WAC.~~

~~(3) All growers of industrial hemp certified seed crops are required to be licensed under the department's industrial hemp licensing rules adopted under chapter 15.120 RCW.~~

~~(4))~~ The general requirements for seed certification found in WAC 16-302-005 through 16-302-130 of the genetic and crop standards apply to (are basic) all crops, and together with the following specific standards, constitute the certified hemp standards.

(2) The genetic and crop standards are modified as follows:

(a) All production of hemp crops are subject to license application approval under the department's hemp licensing rules adopted under chapter 15.140 RCW.

~~(b) Only varieties of ((industrial)) hemp approved by the ((department)) association of official seed certifying agencies shall be eligible for certification. ((An approved variety must be a variety recognized by an international organization recognized by the department, such as the association of official seed certifying agencies or the organization for economic cooperation and development (OECD) seed scheme.~~

~~(5)) (c) The allowable area of ((an industrial hemp seed crop area or seed production field)) hemp production may be determined ((and limited)) by the department under the terms of rules adopted under chapter ((15.120)) 15.140 RCW.~~

~~((6) All industrial hemp fields established for seed certification shall be planted with thirty-inch row spacing to facilitate inspection, roguing, and harvesting.~~

~~(7) Growers must post signage approved by the department on at least four sides, including the main entry point of each authorized field.~~

~~(8)) (d) Growers are required to obtain tetrahydrocannabinol (THC) test results as required by ((rules adopted under)) chapter ((15.120 RCW)) 16-306 WAC.~~

(e) Fees for seed certification are assessed as established in chapter 16-303 WAC.

[Statutory Authority: RCW 15.120.030(3), 15.49.021, 15.49.310, and chapter 34.05 RCW. WSR 17-08-090, § 16-302-840, filed 4/5/17, effective 5/6/17.]

AMENDATORY SECTION (Amending WSR 17-08-090, filed 4/5/17, effective 5/6/17)

**WAC 16-302-845 Definitions specific to ((industrial)) hemp ((seed production)) certification standards.** (("Dioecious type" means a type of industrial hemp that has male and female flowers on separate plants.

~~"Industrial hemp" means all parts and varieties of the genera Cannabis, cultivated or possessed by a grower, whether growing or not, that contain a THC concentration of 0.3 percent or less by dry weight. Industrial hemp does not include plants of the genera Cannabis that meet the definition of "marijuana" as defined in RCW 69.50.101.~~

~~"Industrial hemp seed production" means an industrial hemp seed production field established with an appropriate generation of certified seed intended to produce a subsequent generation of certified seed.~~

~~"Monoecious type" means a type of industrial hemp that has male and female flowers on the same plant.~~

~~"Too male" means an intersexual plant that exceeds the ratio of male and female flowers as described in the variety description.~~

~~"Unisexual female" means a monoecious type of industrial hemp plant that has sterile male and fertile female flowers.~~

~~"Unisexual female hybrid" means a hybrid where the A line is a unisexual female type and the B line produces male fertile flowers.))~~

"Approved cultivar" means any variety designated as eligible for production by federal or state regulatory authorities.

"Hemp" (Cannabis sativa L. subsp. sativa) includes varieties of these kinds:

(a) Dioecious type: With male and female flowers on separate plants.

(b) Monoecious type: With male and female flowers on the same plant.

(c) Hybrids (unisexual female): With sterile male and fertile female flowers on the same plant.

Note: Although traditionally a crop with a dioecious plant type, many monoecious varieties of hemp (Cannabis sativa L. subsp. sativa) have been developed. Hemp is sexually polymorphic and often produces many different ratios of intersexual plant types that can increase roguing requirements. Variety descriptions normally define these ratios.

"Hemp seed production" means a hemp seed production field established with an appropriate generation of certified seed intended to produce a subsequent generation of certified seed.

"THC" means delta-nine (Δ9) tetrahydrocannabinol, which is the component of hemp regulated by federal or state regulatory authorities.

"Variety" means a subdivision of a kind that is distinct, uniform, and stable; "distinct" in the sense that the variety can be differentiated by one or more identifiable morphological, physiological, or other characteristics from all other varieties of public knowledge; "uniform" in the sense that variations in essential and distinctive characteristics are describable; and "stable" in the sense that the variety will remain unchanged in its essential and distinctive characteristics and its uniformity when reproduced or reconstituted as required by the different categories of varieties.

"Volunteer plant" means an industrial hemp plant that was not intentionally planted and results from a previous crop.

[Statutory Authority: RCW 15.120.030(3), 15.49.021, 15.49.310, and chapter 34.05 RCW. WSR 17-08-090, § 16-302-845, filed 4/5/17, effective 5/6/17.]

AMENDATORY SECTION (Amending WSR 17-08-090, filed 4/5/17, effective 5/6/17)

**WAC 16-302-850 Land requirements for ~~((industrial))~~ hemp ~~((seed))~~ certification standards.** Land requirements for the production of ~~((an industrial))~~ a hemp seed crop are as follows:

~~(1) ((Crops must not be planted on land where foreseeable volunteer growth from a previous crop may cause contamination detrimental to certification.~~

~~(2) Fields for foundation and registered classes must not be planted on land which in the previous five years grew a different crop of industrial hemp or marijuana.~~

~~(3) Crops for certified class must not be planted on land which in the previous three years produced a crop of industrial hemp or marijuana.)~~ Hemp crops for foundation and registered classes must not be grown on land which in any of the preceding three years produced a crop of hemp.

(2) Hemp crops for certified classes must not be grown on land which:

(a) In the preceding year produced a certified crop of the same variety.

(b) In either of the preceding two years produced a noncertified crop of hemp or a different variety of hemp.

(3) Weeds: The presence of broomrape (Orobanche spp.) in hemp crops is cause for declining certified status.

[Statutory Authority: RCW 15.120.030(3), 15.49.021, 15.49.310, and chapter 34.05 RCW. WSR 17-08-090, § 16-302-850, filed 4/5/17, effective 5/6/17.]

AMENDATORY SECTION (Amending WSR 17-08-090, filed 4/5/17, effective 5/6/17)

**WAC 16-302-855 Isolation requirements for ((industrial)) hemp ((seed)) certification standards.** ((Isolation requirements for industrial hemp seed production are as follows:

~~(1) Isolation areas must be kept free of any harmful plants that can cause contamination. Not more than one plant per eleven square feet of harmful contaminants (species that can cross pollinate with the inspected crop) is permitted within the required isolation distance(s) adjacent to the inspected crop. The conditions of each crop are assessed by the department, which may alter this standard, usually by reducing the number of contaminant plants permitted per square yard, according to identified contamination risks.~~

~~(2) Foundation, registered and certified industrial hemp must be isolated from any marijuana production licensed by the liquor and cannabis board by a distance of fifteen miles.~~

~~(3) Industrial hemp seed production crops for certification must be isolated from all other industrial hemp varieties or fields not meeting the varietal purity requirements for certification as follows:~~

Inspected Crop	Isolation Factor	Isolation Distance in Feet
Dioecious type: Foundation and Registered	Different varieties of industrial hemp	16,150
	Nonecertified industrial hemp	16,150
	Lower certified class of same variety	6,460
	Same class of same variety	3
Dioecious type: Certified	Different varieties of industrial hemp	16,150
	Nonecertified industrial hemp	16,150
	Certified class of the same variety	3
Monoecious type and hybrids: Foundation and Registered	Dioecious variety of industrial hemp	16,150
	Nonecertified industrial hemp	16,150
	Different varieties of monoecious or female hybrid	6,460
	Certified class of same variety	3
Monoecious type and hybrids: Certified	Dioecious variety of industrial hemp	3,230
	Nonecertified industrial hemp	3,230
	Different varieties of monoecious or female hybrid	646
	Certified class of same variety	3))

(1) The area, density, stage of maturity and location of any contaminating pollen source is an important factor in cross pollinations, and therefore must be noted on the seed crop inspection report for

consideration in determining certification status. There shall not be any Cannabis sativa L. plants within 100m (328.08 feet) of the crop and not more than ten plants/ha beyond 100m within the isolation requirement.

(2) The required isolation must be present prior to flowering and crop inspection.

**Table 1: Minimum Isolation Distances Required Between Inspected Hemp and Other Crops**

<b>Inspected Crop</b>	<b>Other Crops</b>	<b>Isolation Distance Required (feet)</b>
<b>Dioecious type – Foundation</b>	- Different varieties of hemp - Noncertified crop of hemp	15,748
	- Lower certified class seed crop of same variety	6,460
	- Same class of certified seed crop of same variety	10
<b>Dioecious type – Registered</b>	- Different varieties of hemp - Noncertified crop of hemp	15,748
	- Seed crop of same variety that meets certified standards for varietal purity	5,249
	- Seed crop of same variety that meets registered standards for varietal purity	3
<b>Dioecious type – Certified</b>	- Different varieties of hemp - Noncertified hemp	2,624
	- Planted with certified seed of the same variety that meets certified standards for varietal purity	656
	- Seed crop of same variety that meets certified standards for varietal purity	3
<b>Monoecious type – Foundation</b>	- Dioecious variety of hemp - Noncertified crop of hemp	15,748
	- Other monoecious varieties - Lower certified class seed crop of same variety	9,690
	- Same class of certified seed of same variety	16
<b>Monoecious type – Registered</b>	- Dioecious variety of hemp - Noncertified crop of hemp	15,748
	- Different varieties of the same type of hemp (monoecious or female hybrid)	6,460
	- Seed crop of same variety that meets certified standards for varietal purity	3,230
	- Seed crop of same variety that meets registered standards for varietal purity	3
<b>Monoecious type – Certified</b>	- Dioecious variety of hemp - Noncertified crop of hemp	3,230
	- Different varieties of the same type of hemp (monoecious or female hybrid) - Planted with certified seed of the same variety that meets certified standards for varietal purity	656
	- Seed crop of same variety that meets certified standards for varietal purity	3

[Statutory Authority: RCW 15.120.030(3), 15.49.021, 15.49.310, and chapter 34.05 RCW. WSR 17-08-090, § 16-302-855, filed 4/5/17, effective 5/6/17.]

AMENDATORY SECTION (Amending WSR 17-08-090, filed 4/5/17, effective 5/6/17)

**WAC 16-302-860 Field ((inspection)) standards ((and tolerances)) for ((industrial)) hemp ((seed)) certification.** ((-1) Industrial hemp seed production crop fields shall be inspected by the department in three stages.

(a) ~~The first inspection should be conducted before female (pistillate) flowers of the inspected crop are receptive and after the formation of male (staminate) flowers before pollen is shed.~~

(b) ~~The second inspection should be conducted during the receptive stage of the female plants in the inspected field, normally within three weeks of first inspection.~~

(c) ~~The third inspection should be conducted within ten days prior to harvest. The grower must notify the department of anticipated harvest date. Fields not harvested within ten days of the third inspection will require an additional inspection and THC test.~~

(d) ~~Isolation areas will be inspected for volunteer plants and harmful contaminants at each department inspection.~~

(2) ~~Off-type male flowers must be removed by the grower prior to producing pollen and evidence of removal must be identifiable during the department's crop inspection.~~

~~Rogued male flowers must be removed from the field and buried or otherwise destroyed by the grower to prevent pollen production.~~

(3) ~~If dioecious male plants start flowering before removal from field, all plants around them must be destroyed by the grower within a radius of ten feet for foundation seed, six feet for registered seed and three feet for certified seed.~~

~~If dioecious male plants or if other off-type male flowers are found to be shedding pollen during any inspection, an additional inspection will be required within seven days to verify adequate control of detrimental pollen. An additional reinspection fee will be assessed by the department.~~

(4) ~~Plant samples will be taken by the department for THC testing at the third inspection. Test results in excess of 0.3% THC will be cause for rejection and the field may be subject to destruction.~~

~~The seed crop for certification may be harvested after the third inspection and the THC sample has been submitted for testing. However, no seed or other industrial hemp by-products may be transported off of the registered land area until THC testing with a result of 0.3% THC or less has been received and a release notice to the grower has been issued by the department.~~

(5) ~~Intersexual plant type ratios shall not exceed the limits when defined in the variety description by the breeder.~~

(6) ~~Excessive weeds or other factors that prevent varietal purity and identity determination shall be cause for the department to reject the affected field for certification purposes.~~

(7) ~~Fields planted in such a manner that prevents inspector access shall be cause for the department to reject the affected field for certification purposes unless the grower remedies the condition in a timely manner as required by the department.~~

(8) ~~Maximum impurity standards must not be exceeded based on six replicated counts of ten thousand plants according to the following table:~~



	Maximum impurity standards per 10,000 plants		
	Maximum number of "too male" monoecious plants	Maximum number of dioecious male plants shedding pollen	Maximum number of other impurities including other varieties
Dioecious type: Foundation	-	-	3
Dioecious type: Registered and Certified	-	-	10
Monoecious: Foundation	500	1	3
Monoecious: Registered	1000	2	10
Monoecious: Certified	2000	100	10))

(1) Crop inspection:

(a) It is the grower's responsibility to ensure that fields are inspected by an authorized inspector at least once prior to swathing or harvesting, except in the case of foundation, registered, and certified monoecious types and unisexual hybrids and foundation dioecious types, in which two inspections are required.

(b) A field that is cut, swathed, or harvested prior to crop inspection is not eligible for certification.

(c) Fields must be inspected at a stage of growth when varietal purity is best determined. Crops not inspected at the proper stage for best determining varietal purity may be cause for declining certified status.

(i) First inspection for all classes of monoecious types must be made just before or at early flowering. First inspection for all classes of dioecious types must be made after flowering when male plants are beginning to senesce.

(ii) Second inspection for all classes of monoecious types, and the foundation class of dioecious types must be made when seeds are well forming.

(iii) Isolation areas will be inspected for volunteer hemp plants on each inspection.

(iv) Excessive weeds or other factors that prevent varietal purity and identity determination shall be cause for the department to reject the affected field for certification purposes.

(v) Fields planted in such a manner that prevents inspector access shall be cause for the department to reject the affected field for certification purposes unless the grower remedies the condition in a timely manner as required by the department.

(2) Impurity standards:

(a) Impurities should be removed prior to crop inspection.

(b) Any combination of impurities may be reason for declining certified status.

(c) Table 2 indicates the maximum number of impurities permitted in approximately ten thousand plants of the inspected crop. The inspector makes at least six counts (ten thousand plants each) or the equivalent to determine the number of impurities. The resulting average of these counts must not exceed the maximum impurity standards in Table 2.

**Table 2: Maximum Impurity Standards**

Plot Crop	Maximum Impurity Standards per 10,000 plants in Hemp Seed Crops	
	Maximum Number of Dioecious Male Plants Shedding Pollen	Maximum Number of Off-Types or Other Varieties
Dioecious type - Foundation	=	3

Plot Crop	Maximum Impurity Standards per 10,000 plants in Hemp Seed Crops	
	Maximum Number of Dioecious Male Plants Shedding Pollen	Maximum Number of Off-Types or Other Varieties
<u>Dioecious type - Registered</u>	=	<u>10</u>
<u>Dioecious type - Certified</u>	=	<u>20</u>
<u>Monoecious type - Foundation</u>	<u>1</u>	<u>3</u>
<u>Monoecious type - Registered</u>	<u>2</u>	<u>10</u>
<u>Monoecious type - Certified</u>	<u>100</u>	<u>20</u>

[Statutory Authority: RCW 15.120.030(3), 15.49.021, 15.49.310, and chapter 34.05 RCW. WSR 17-08-090, § 16-302-860, filed 4/5/17, effective 5/6/17.]

AMENDATORY SECTION (Amending WSR 17-08-090, filed 4/5/17, effective 5/6/17)

**WAC 16-302-865 Seed standards for ((industrial)) hemp ((seed)) certification.** ((Seed standards for industrial)) Hemp seed ((production crops)) standards for each class are as follows:

	Foundation	Registered	Certified
Pure seed (minimum)	98.00%	98.00%	98.00%
<u>Inert matter (maximum)*</u>	<u>2.00%</u>	<u>2.00%</u>	<u>2.00%</u>
<u>Weed seed (maximum)</u>	<u>0.10%</u>	<u>0.10%</u>	<u>0.10%</u>
Total Other crop (maximum)	0.01%	0.03%	0.08%
<del>((Inert matter (maximum)*</del>	<del>2.00%</del>	<del>2.00%</del>	<del>2.00%</del>
<del>Weed seed (maximum)</del>	<del>0.10%</del>	<del>0.10%</del>	<del>0.10%)</del>
<u>Other varieties (maximum)</u>	<u>0.005%</u>	<u>0.01%</u>	<u>0.05%</u>
Other kinds (maximum)**	0.01%	0.03%	0.07%
<del>((Other kinds (maximum)</del>	<del>2 per lb.</del>	<del>6 per lb.</del>	<del>10 per lb.</del>
<del>Other varieties (maximum)**</del>	<del>None found</del>	<del>0.01%</del>	<del>0.05%)</del>
Germination (minimum)**	80.00%	80.00%	80.00%

(\* Inert matter shall not contain more than 0.50% of material other than seed fragments.

\*\* Other varieties when distinguishable.)

- \* Inert matter shall not include more than 0.5 percent of material other than seed fragments of the variety under consideration.
- \*\* Other kinds shall not exceed 2 per lb. (454 grams) for foundation; 6 per lb for registered; 10 per lb for certified.
- \*\*\* Exclusive of dormancy, firm or hard seed, or any other reference to viability.

(1) Foundation seed production: Any means of processing or conditioning of seed from a foundation production area which may contaminate the varietal purity of the seed is prohibited.

(2) Area of foundation fields:

(a) When unforeseen circumstances do not permit proper maintenance of the entire field, it is recommended that the area be reduced by destroying part of the field or by isolating a part to meet the requirements of a lower status of certified seed. The remainder of the field must meet the requirements for foundation field production.

(b) The area of a foundation field includes the "walkways" provided within the field to facilitate effective roquing.

(3) Recommended production procedures:

(a) Field planting:

(i) Fields should be planted to facilitate inspection, roquing, and harvesting.

(ii) Fields should be planted in areas easily accessible for frequent maintenance and to provide the maximum protection from outside sources of contamination, such as roadways and building sites.

(iii) Regulations for land requirements are minimum standards and caution is necessary in choosing land, as volunteer growth from previous crops may vary according to local conditions.

(iv) The regulations for isolation are minimum standards. It is always to the grower's advantage to provide more isolation than required. When planting foundation fields, specific requirements may influence the location and size of the field. It is a safeguard if adjacent crops are the same variety as the field and are inspected for certified status.

(b) Roguing:

(i) The field must be thoroughly and intensively rogued many times throughout the crop season.

(ii) Off-type male flowers must be removed before the receptive stage of female flowers in the inspected crop.

(iii) The numbers and kinds of plants removed should be recorded and described on the appropriate forms.

(iv) All male flowers rogued from the crop must be removed from the production area and burial is recommended.

(v) Regrowth of rogued flowers or plants must be prevented.

(c) Harvesting, cleaning, and storing:

(i) A seed grower should have access to the necessary equipment for harvesting and cleaning the seed from the field in such a manner as to ensure that the varietal purity of the seed is maintained.

(ii) The seed should be stored, in compliance with federal or state regulations, in a clean, cool, dry area.

(iii) The seed containers should be labeled for identification in compliance with chapter 16-301 WAC.

[Statutory Authority: RCW 15.120.030(3), 15.49.021, 15.49.310, and chapter 34.05 RCW. WSR 17-08-090, § 16-302-865, filed 4/5/17, effective 5/6/17.]

**VEGETATIVELY PROPAGATED HEMP (CANNABIS SATIVA L. SUBSP. SATIVA) CERTIFICATION STANDARDS**

NEW SECTION

**WAC 16-302-870 General standards specific to vegetatively propagated hemp.** The general requirements for seed certification found in WAC 16-302-005 through 16-302-130 of the genetic and crop standards apply to (are basic) all crops, and together with the following specific standards, constitute the certified vegetatively propagated hemp standards.

[]

NEW SECTION

**WAC 16-302-875 Definitions specific to vegetatively propagated hemp.** "Clones" are asexually propagated progeny genetically identical to the stock plant.

"Cuttings" are portions of stems containing leaves which are rooted to produce clones.

"Micropropagation" is the science of plant multiplication in-vitro.

"Structure or field" is the production area enclosed by natural borders such as ditches, tree lines, buildings, roads, or an enclosed growth facility.

[]

NEW SECTION

**WAC 16-302-880 General planting stock certification standards for vegetatively propagated hemp.** The general planting stock certification standards are further defined to apply specifically to hemp planting stocks. Classes and sources of certified planting stocks are:

(1) Breeder plant stock (source seed) is propagation material identified by the breeder, or the breeder's representative. The breeder must also declare and document the way parent lines are selected and how the plant stock is maintained.

(2) Mother plant is a plant produced from a breeder plant stock.

(3) Certified plants are plants produced from mother plants. Certified plants may be used to produce certified stock in the growth facility or D1 daughter stock. Certified plants are propagated as follows:

(a) Mother plants may be cut repeatedly to produce D1 daughter plants. D1 daughter plants are produced by cuttings from mother plants.

(b) D1 daughter plants may be cut repeatedly to produce D2 daughter plants. D2 daughter plants are produced by cuttings from D1 daughter plants.

(c) D2 daughter plants may be cut repeatedly to produce D3 daughter plants. D3 daughter plants are produced by cuttings from D2 daughter plants.

(4) The grower shall retain documentation of the parent being used to generate clones.

(5) All grower records and grower developed best management practices (BMPs) related to the production of hemp clones shall be available for inspection by the certifying agency.

[]

#### NEW SECTION

#### **WAC 16-302-885 Production certification standards for vegetatively propagated hemp.** (1) Mother plant production:

(a) All Mother plants are to be inspected by a certifying agency periodically.

(b) Inspection of structures and fields will conform to documented and verifiable production standards listed below.

(2) Growth facilities and field production:

(a) Production requirements for growth facility production:

(i) Facility is to be apparently free of diseases, insects, and other pests.

(ii) Hemp clones are to be handled in such a manner as to prevent co-mingling of varieties or types.

(iii) Facility is to have sufficient physical barriers between growth areas of hemp and other potential contaminating crops prior to flowering and inspection to prevent cross-contamination of type.

(b) Production requirements for open field production:

(i) Field eligibility - Crops should not be grown on land where remnant seed from a previous crop may germinate and produce volunteers that may cause contamination. Crops for mother plants must not be grown on land that produced another crop of hemp within the previous five years. Crops for certified class must not be grown on land that had a hemp crop in the preceding three years.

(ii) Field isolation - Ten feet or an appropriate barrier to alleviate accidental mixing of plants.

[]

#### NEW SECTION

#### **WAC 16-302-890 Inspection standards for vegetatively propagated hemp.** (1) Grower responsibility: Maintain certification standards.

(2) Certifying agency responsibility:

(a) The agency will inspect growth facilities and fields and to audit compliance with the grower developed BMPs and their effectiveness.

(b) Mother plants are inspected within seven days before first cutting of daughters for certification.

(c) Daughter plants are inspected within seven days after planting.

(3) General requirements: Plant increase standards are described in WAC 16-302-880 (1)(c)(i), (ii), and (iii) (General planting stock certification standards for vegetatively propagated hemp).

(4) General inspection standards of plants:

(a) Apparently free of diseases, insects, and other pests.

(b) True-to-type characteristics.

[]

### HEMP TRANSPLANTS (CANNABIS SATIVA L. SUBSP. SATIVA) CERTIFICATION STANDARDS

#### NEW SECTION

**WAC 16-302-895 General certification standards specific to hemp transplants.** (1) The general requirements for seed certification found in WAC 16-302-005 through 16-302-130 of the genetic and crop standards apply to (are basic) all crops, and together with the following specific standards, constitute the standards for certification of hemp transplants (including seedlings and plugs).

(2) All certified transplants must be grown from a class of certified seed or certified clones. Proof of seed/clone eligibility shall be established by providing either a certified tag/label with invoice showing the lot number and pounds received or documentation of clone propagation under clone standards found in the hemp section of the *AOSCA Seed Certification Handbook* published in June 2020. This section of the handbook will be provided by the department upon request.

(3) Seed coated or pelleted by nonapproved conditioners will not be eligible for certification.

(4) All containers must be labeled in a manner that maintains the source, identity, and certification eligibility of the transplants. All containers offered for sale must be identified by the official seed certification tag/label. The tag/label must be affixed (stapled, for example) to trays so tags/labels are not misplaced.

[]

#### NEW SECTION

**WAC 16-302-900 Definitions specific to hemp transplants (Cannabis sativa L. subsp. sativa) certification standards.** "Clones" are asexually propagated progeny genetically identical to the stock plant.

"Plugs" are young plants raised in small, individual cells, intended for transplanting at another production site.

"Seedlings" are plants grown from seeds.

"Transplants" means hemp plants that originate from either seed or clones that are kept in a vegetative state (before flowering) that will be moved to another production site.

[]

NEW SECTION

**WAC 16-302-905 Growth facility, field and transplant standards.**

(1) Traditional outdoor plant beds (fields) will be inspected at least two times for phenotypic purity, isolation, general physical condition, and appearance of plants.

(2) Growth facility produced plants shall be inspected at least two times for varietal labeling, phenotypic purity, isolation, general physical condition, and appearance of plants.

(3) Maximum off-type or other variety shall not exceed 0.2%, or 20 in 10,000. Nonconforming plants must be removed and destroyed.

(4) At the time of the final inspection, the number of transplants produced must be verified by agency personnel.

(5) Transplants may be rejected for noncompliance with these standards.

(6) Inspectors may also reject transplants due to unsatisfactory appearance such as any plants that are diseased, insect infestation, or otherwise stressed or any condition which prevents thorough inspection.

(7) Unlabeled or inadequately labeled transplants will be ineligible for certification.

(8) At the final inspection, transplants may be collected for post-control grow outs or other identification verification tests if required by agency.

(9) Certifying agency personnel may conduct additional inspections as necessary to ensure certification standards are met.

[]

NEW SECTION

**WAC 16-302-910 Growth facility isolation standards.** (1) When two or more varieties are being grown in the same greenhouse or traditional outdoor plant bed (field), there must be an eighteen-inch unplanted area between the varieties. The production area, flats, and/or containers for each variety must be clearly labeled in a manner that prevents mixing or misidentification.

(2) Growers must handle transplants throughout the growing, harvesting, and transplant sales in a manner that prevents the accidental or mechanical mixture of containers of different varieties.

[]

NEW SECTION

**WAC 16-302-915 Labeling standards for certified transplants.**

All certified transplants offered for sale must be labeled with official certification tags or labels. Each container of transplants must have an agency certification label firmly attached to be sold as certified transplants. Failure to properly label transplants at the time of sale, will revoke the certification status and will result in not being eligible for sale as certified transplants.

[]

**FEMINIZED HEMP SEED (FHS) (CANNABIS SATIVA L. SUBSP. SATIVA) CERTIFICATION STANDARDS**

NEW SECTION

**WAC 16-302-920 Application of genetic certification standards specific to feminized hemp seed (FHS).** (1) The general requirements for seed certification found in WAC 16-302-005 through 16-302-130 of the genetic and crop standards apply (and are basic) to all crops, and together with the following specific standards, constitute the certified feminized hemp seed standards.

(2) The genetic and crop standards are modified as follows:

(a) To be eligible for seed certification under this standard, hemp varieties must have received favorable action by one or more of the following processes recognized by AOSCA, including:

(i) AOSCA variety review board; or

(ii) Plant variety protection office or breeder rights statements; or

(iii) Any individual AOSCA vested member agency; or

(iv) Acceptance for certification under the OECD seed schemes.

(b) Designation of classes of seed:

(i) Only the certified class is recognized in the production of feminized hemp seed. The foundation class is allowed for the purpose of variety maintenance.

(ii) A feminized seed variety to be certified must be produced from seed or clonal stocks approved by the official certifying agency. These seed and clonal stocks shall consist of female lines and chemically assisted pollen shedding female lines of any class of certified seed or clones.

(c) Growers are required to obtain tetrahydrocannabinol (THC) test results as required by chapter 16-306 WAC.

[]



NEW SECTION

**WAC 16-302-925 Definitions and common terms specific to feminized hemp seed (*Cannabis sativa* L. subsp. *sativa*) certification standards.** "Approved cultivar" is any variety designated as eligible for production by federal or local regulatory authorities.

"Dioecious type" means with male and female flowers on separate plants.

"Feminized hemp seed (FHS)" is the progeny of a dioecious female plant that has been pollinated with pollen derived from the same or another dioecious female plant that has been induced to produce pollen. It is a true female plant with XX chromosomes.

"Hemp" is defined by the U.S. Domestic Hemp Production Program as the plant species *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 or as otherwise defined by federal law.

"Hermaphroditic plants" are plants exhibiting male and female flowers, not true females.

"Monoecious type" means with male and female flowers on the same plant.

"Pollen parent" means a reversed female plant from the female line or another reversed female line to create a hybrid.

"Reversed female" means female plants that are induced to produce pollen in replacement of true male plants.

"Seed parent" means female plants used to produce feminized hemp seed.

"Sporting male" is a female plant that produces sterile male flowers.

"THC" means delta-nine ( $\Delta 9$ ) tetrahydrocannabinol, which is the component of hemp regulated by federal or local regulatory authorities.

"Variety" means a subdivision of a kind that is distinct, uniform, and stable; "distinct" in the sense that the variety can be differentiated by one or more identifiable morphological, physiological, or other characteristics from all other varieties of public knowledge; "uniform" in the sense that variations in essential and distinctive characteristics are describable; and "stable" in the sense that the variety will remain unchanged in its essential and distinctive characteristics and its uniformity when reproduced or reconstituted as required by the different categories of varieties.

"Volunteer plant" is a hemp plant that was not intentionally planted and is the result from a previous crop.

[]

NEW SECTION

**WAC 16-302-930 Growth facility and land requirements specific to feminized hemp seed (*Cannabis sativa* L. subsp. *sativa*) certification standards.** (1) Growth facility must only contain certified hemp production. Multiple FHS varieties may be present but no other hemp plants are allowed except for pollen parent plants that are the pollen source.

(2) Growth facility must be free of all plants for a minimum of six weeks prior to receiving plants at the beginning of the crop year or production season unless the previous crop was the same variety. If sanitation is used to reduce the hemp free period, a sanitation plan must be submitted to the certifying agency. Pollen sanitation is not required if the entire greenhouse facility produces only one pollen source and other female lines are continually rogued to prevent contaminating pollen sources.

(3) Certified feminized hemp seed crops must not be grown on land which:

(a) In either of the preceding two years produced a noncertified crop of hemp or a different variety of hemp.

(b) In the preceding year produced a certified crop of a different variety.

(4) Weeds:

(a) The presence of broomrape (*Orobanche* spp.) in hemp crops is cause for rejection.

(b) Excessive weeds obscuring field inspection shall be grounds for rejection.

[ ]

#### NEW SECTION

**WAC 16-302-935 Growth facility and field standards specific to feminized hemp seed (*Cannabis sativa* L. subsp. *sativa*) certification standards.** (1) Crop inspection:

(a) It is the grower's responsibility to ensure that growth facility and field inspections are conducted by the authorized inspector at least twice prior to swathing or harvesting.

(b) A growth facility or field that is cut, swathed, or harvested prior to crop inspection is not eligible for certification.

(c) Inspections of pollen parent plants and seed parent plants must be at a stage of growth when varietal purity is best determined. Crops not inspected at the proper stage for best determining varietal purity may be cause for rejection. A minimum of two inspections are required.

(i) First inspection for pollen parent and seed parent plants must be made just before or at early flowering. The pollen parent must be inspected prior to pollen collection or dispersal.

(ii) Second inspection for pollen parent and seed parent types must be completed after pollen shed and seed fill.

(iii) Isolation areas will be inspected for any volunteer hemp plants on each inspection.

(2) Specific: For the production of FHS varieties via pollen shedding by the chemically reversed female plants:

(a) Detailed records shall be created and maintained on the pollen parent, such as the chemical application dates, concentration, and the pollen collection date.

(b) Pollen storage containers (if used) must be marked with lot number and source.

(c) Chemically reversed female plants (pollen parent) must be removed and destroyed after pollen collection is complete.

(d) Male, sporting male, and hermaphroditic plants must be removed from the growth facility or field and a record of roguing activities must be maintained.

(3) Isolation:

(a) Certified feminized hemp seed fields must be isolated from all other contaminating pollen sources by the distances provided in Table 1. Roguing to eliminate all possible contaminating pollen must be accomplished prior to visible flower formation.

(b) Greenhouse production of certified feminized seed is allowed if mechanical isolation of pollen sources is provided. Additional greenhouse requirements include:

(i) Method of pollen exclusion must be documented and submitted to the certifying agency.

(ii) Each greenhouse facility is limited to one variety or multiple varieties when one pollen parent is utilized for all varieties.

(iii) Each variety must be clearly labeled and easily identifiable from one another.

(c) Off season greenhouse production when outside pollen sources are not alive may reduce the isolation requirement.

**Table 1: Minimum Isolation Distances Required Between Inspected Hemp and Other Crops**

Inspected Crop	Other Hemp Crops	Isolation Distance Required (feet)
Feminized hemp seed	- Variety of hemp, or other contaminating pollen source that has pollen shedders present, this includes other greenhouse complexes - Noncertified crop of hemp - Different varieties of the same type of hemp with no male shedders present in field that is not for seed production - Planted with certified seed of the same variety that meets certified standards for varietal purity and no male shedders present in field	15,748
	- Certified seed crop of the same variety that meets certified standards for varietal purity	3

(4) Impurity standards:

(a) Impurities should be removed prior to crop inspection.

(b) Any combination of impurities may be reason for declining certified status.

(c) Table 2 indicates the maximum number of impurities permitted in approximately ten thousand plants of the inspected crop. The inspector makes at least six counts of a total of at least ten thousand plants to determine the number of impurities. The resulting average of these counts must not exceed the maximum impurity standards in Table 2.

**Table 2**

Inspected Crop	Maximum Impurity Standards per 10,000 plants in Hemp Seed Crops	
	Maximum Number of Plants Shedding Pollen	Maximum Number of Off-Types or Other Varieties
Feminized hemp seed	0	20

[]

NEW SECTION

**WAC 16-302-940 Seed standards for feminized hemp seed (*Cannabis sativa* L. subsp. *sativa*) certification standards.**

**Feminized Hemp Seed Standards  
Standards for Each Class**

<b>Factor</b>	<b>Foundation</b>	<b>Certified</b>
Pure seed (minimum)	98.00%	98.00%
Inert matter (maximum)*	2.00%	2.00%
Weed seed (maximum)	0.10%	0.10%
Total other crop (maximum)	0.01%	0.08%
Other varieties (maximum)	0.005%	0.05%
Other kinds (maximum)**	0.01%	0.07%
Germination (minimum)***	80.00%	80.00%
Feminized Seed***	99.00%	99.00%

\* Inert matter shall not include more than 0.5 percent of material other than seed fragments of the variety under consideration.

\*\* Other kinds shall not exceed 2 per lb. (454 grams) for foundation; 10 for certified.

\*\*\* Determined by variety verification trial or approved molecular testing.

[ ]