

HYBRID WATERMELON

Citrullus lanatus var. lanatus

Seed Certification Standards in California

GENERAL STANDARDS -- The standards on this sheet are in part condensed and apply to hybrid watermelons. For open-pollinated watermelon refer to watermelon standards. For greater detail and additional provisions, see the General Standards.

DEFINITIONS OF TERMS -- Breeder Seed - as applied to hybrid varieties is seed maintained by the breeder and is the source for all classes of certified seed. Foundation Seed - as applied to hybrid varieties is the source of Foundation and Certified class seed. Certified Seed - as applied to hybrid varieties is the certification class for commercial hybrids. Hybrid - the first generation of seed of a cross produced by controlled pollination and by crossing two or more lines, varieties, or species. Commercial Hybrid - is the seed planted for any use other than seed production. Only the class Certified is recognized in commercial hybrid seed.

PLANTING STOCK -- In most varieties Breeder seed must be planted to produce Foundation seed. Foundation seed must be planted to produce Foundation or Certified seed. Foundation seed of wilt resistant varieties planted for certification shall be tested for its wilt resistance.

APPLICATION -- Applications should be submitted electronically on CCIA's website (<http://ccia.ucdavis.edu>) no later than three (3) weeks after planting. New applicants should contact the CCIA office for instructions.

FIELD ELIGIBILITY -- The land must not have grown the same crop during the previous three (3) years.

ISOLATION -- To be eligible for certification a seed field or plot must be isolated from fields of any other variety or strain, including citron plants, or noncertified crops of the same variety. Isolation may be established by isolation cages or by the following distances:

Foundation	Certified
2 miles	½ mile

MANAGEMENT -- Fields designated for seed production shall have no fruits removed for marketing purposes.

FIELD INSPECTION -- Each field intended for certification must be inspected twice prior to harvest. The first inspection should be made from the 3rd leaf stage to flower and early set. The

second and mature melon inspection should be made when the fruit has reached a good marketable condition. In some cases, earlier and later inspections may be made.

Off-Types -- Every field should be rogued to remove any plants of another crop or variety, including volunteers. Varieties cannot always be differentiated at field inspection. When differences can be distinguished, the maximum mixture of plants or fruits permitted is as follows:

	Foundation	Registered	Certified
Other Varieties	None	None	1:1,000
White Hard Fruits	1:1,000	1:500	1:500
Citron or Hard Rind	None	None	None

Weeds --Fields must be free of any prohibited noxious weeds. Restricted noxious weeds, and common weeds difficult to separate must be controlled. Prohibited and Restricted noxious weeds are listed in the California Seed Law/CA Code of Regulations/Sections 3854 and 3855.

Diseases -- **Fields must be free of watermelon fruit blotch, WFB (*Acidovorax avenae* subsp. *citrulli*).**

Fields may be refused certification due to unsatisfactory appearance caused by weeds, poor growth, poor stand, disease, insect damage, and any other condition which prevents accurate inspection or creates doubt as to identity of the variety. A field inspection report will be sent to the applicant. If the field is approved, a certification number will be assigned. This number must be on all containers of seed before they leave the field. It is the responsibility of the applicant to make sure his field has been inspected before it is harvested.

HARVESTING -- Harvesting is subject to the supervision of the County Agricultural Commissioner who must be contacted prior to harvest or must be conducted using an accredited harvesting procedure approved by the CCIA.

CONDITIONING AND SAMPLING -- Conditioning of seed for certification may be done only in facilities approved for this purpose by the California Crop Improvement Association. It is the responsibility of the applicant to determine if the plant is eligible before delivering seed for conditioning. Conditioning, sampling, reconditioning, and blending must be supervised by the County Agricultural Commissioner. Conditioning equipment must be free from contaminating seed to the satisfaction of the supervising inspector.

SEED INSPECTION -- All seed must be sampled and tested after conditioning and the seed lot must meet or exceed seed certification standards for that crop. A seed lab using the Association of Official Seed Analyst "Rules for Testing" must test the sample. A Registered Seed Technologist must sign each lab analysis. In addition to AOSA rules, specific seed testing may be required to meet CCIA seed certification standards.

The conditioner is required to submit a 500 gram sample to the laboratory for analysis. In some instances, varietal identity cannot be determined by visual seed inspections. Seed must be well screened and graded, bright in color, of good appearance and meet the following standards. A sample of each lot must be tested for BFB by an accredited Pathology Testing Laboratory or Facility. Prior to the issuance of a seed inspection report the results of a 30,000 - seedling growout (or 10% by seed count on lots smaller than 300,000 seeds) for BFB must be provided to the CCIA. The applicant is also responsible for maintaining a 10% by seed count) for the duration of the marketing of the seed lot.

	Foundation	Certified
Pure Seed (Minimum)	N.S.	98.00%
Inert Matter (Maximum)	N.S.	2.00%
Weed Seed (Maximum)	N.S.	0.02%
Noxious Weed Seed	None	None
Total Other Crop Seed (Maximum)	None	0.50%
Other Varieties (Maximum)	None	0.50%
In some instances, varietal identity cannot be determined by visual seed inspections.		
Other kinds (Maximum)	None	0.05%
Germination (Minimum)	N.S.	85.00%
Triploids	N.S.	80.00%
Watermelon Fruit Blotch***	None	None

"N.S." -- No standards.

*Other varieties shall be none per two (2) pounds in the Foundation class and shall not exceed two (2) seeds per pound in the Certified class.

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*** *Acidovorax avenae* subsp. *Citrulli*

RETAINED SAMPLES – The conditioner must also retain in storage a 500 gram sample of each lot certified. These shall be maintained for one year and be made available for any CCIA audits and reference testing.

FINAL CERTIFICATION AND TAGGING -- If the seed sample meets all standards a seed inspection report is issued. Before certification is complete, however, each container must have an official tag or label attached. Certified seed may be sold to a grower in bulk without tagging if a properly filled out Bulk Sale Certificate accompanies the shipment. The tags and Bulk Sale Certificates are issued by the California Crop Improvement Association to the County Agricultural Commissioner who supervises their attachment.

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