

# HYBRID CORN

*Zea mays*

## SEED CERTIFICATION STANDARDS IN CALIFORNIA

**GENERAL STANDARDS** -- The standards on this sheet are in part condensed and apply to the production of hybrid corn (including open-pollinated inbred lines). For open-pollinated varieties in non-hybrid production refer to corn standards. For greater detail and additional provisions, see the General Standards.

**DEFINITIONS OF TERMS** -- Breeder Seed - as applied to hybrid varieties, is seed of male-sterile, maintainer, and restorer lines maintained by the breeder. Foundation Seed - as applied to hybrid varieties, is seed of male-sterile, maintainer, and restorer lines produced from Breeder or Foundation seed. Commercial Hybrid Seed (Certified Class) - is seed that is planted for any use except seed production, and is the first generation of seed of a cross produced by controlling the pollination and by combining two (2) or more lines, varieties, or species. Controlling pollination is the use of a method which will produce pure seed which is at least seventy-five percent (75%) hybrid seed.

**PLANTING STOCK** -- Breeder or Foundation seed must be planted to produce Foundation seed. Foundation seed, as applied to hybrid varieties, is seed of male-sterile, maintainer, and restorer lines. Breeder or Foundation seed must be planted to produce the Certified class of a commercial hybrid.

**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** -- Corn may be grown for certification only on land where no other corn of the same color or endosperm type has been grown in the preceding crop year.

**ISOLATION** -- All fields or portions of fields of any class must be isolated from other varieties of corn with the same color or texture by a minimum of 660' and 1320' from varieties that have a different color or texture. If the corn is the same variety, only a definite separation is required.

**FIELD INSPECTION** -- For all classes of certified seed there shall be a minimum of four (4) inspections, with at least one (1) inspection before pollination to check for isolation and plant type, and at least three (3) inspections during pollination.

**Off-Types** -- Every field should be rogued to completely destroy any plants of other varieties of corn prior to pollen dispersal. Varieties cannot always be differentiated at field inspection. When differences can be distinguished, the maximum mixture of other varieties, distinct off-types, and inseparable other crops permitted is as follows:

	1 <sup>st</sup> inspection	Last inspection
Pollen parent	1:1000*	-
Seed parent	N/A	1:1000

\* At a time when more than 5% of the seed parent plants have receptive silks

**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.

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 available to the applicant online. 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 local County Agricultural Commissioner who must be contacted prior to harvest. Any seed moved out of the county must be accompanied by an Inter-County Permit or Interstate Transfer of Seed Certificate issued by the commissioner.

**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 facility 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 1,000 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:

	Foundation	Certified
Pure Seed (Minimum)	99.0%	99.0%
Inert Matter (Maximum)	1.0%	1.0%
Weed Seed (Maximum)	None	None
Total Other Crop Seed (Maximum)	0.5%	0.5%
- Castor Bean seed	None	None
Other Varieties (Maximum)	None	0.5%
Moisture (Maximum)	14%	14%
Germination (Minimum).	90.0%	90.0%

**RETAINED SAMPLES** – The conditioner must also retain in storage a 1,000 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.

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