

California Certified Seed Potato

**Applicant Directory
2023**





**California Crop Improvement Association
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CERTIFICATION LIST

2023

**CALIFORNIA CROP IMPROVEMENT ASSOCIATION
RULES OF CERTIFICATION
for
SEED POTATOES IN CALIFORNIA**

PART I - GENERAL INFORMATION

I. Definition of terms used in California Rules of Certification for Seed Potatoes

A. General

1. Certification

The attaching of the official California certification tag to a sack or bulk container of seed potatoes certifies the potatoes have met the California Rules of Certification. Certification is not complete until all requirements have been fulfilled and the certification tag is attached.

2. Certified Seed

Potatoes that have met the California Rules of Certification.

3. General Seed Certification Standards

The set of California rules and regulations common to all certified seed grown in California.

4. Rules of Certification for Seed Potatoes in California

The set of rules for seed potatoes grown in California.

5. California Crop Improvement Association, Inc. (CCIA)

The certification of seeds in California is performed by the California Crop Improvement Association, a nonprofit corporation officially recognized as the seed certifying agency under the California Seed Law. Seed certification is conducted with the supervision and cooperation of the California Agricultural Experiment Station, the California Department of Food and Agriculture, members of Cooperative Extension, and County Agricultural Commissioners.

6. Inspector

An individual authorized and trained by CCIA to perform and conduct various inspections or other evaluations of seed lots entered for certification.

7. Recertification

The process of certifying a seed lot that was certified the previous year.

8. California Seed Potato Quality Assurance Manual

A California Department of Food and Agriculture procedural handbook used by CCIA inspectors during the inspections of seed potatoes entered for certification.

B. Seed Potatoes

1. Clonal Line Selection

An improved variety developed by a grower through a series of plant (hill) selections, growouts and reselections based on plant and/or tuber characteristics. A tuber from each selection is laboratory tested for viral and bacterial pathogens.

2. Eligibility

The term used to identify the acceptability of a particular seed lot to continue in the certification process that meets all the requirements of the California Rules of Certification relative to entry into the certification program.

3. Farming Operation

A seed potato enterprise that includes all land, equipment, storage facilities and labor that are utilized in a common effort to produce certified seed potatoes.

4. Generation

A classification scheme of seed potatoes based on the number of field production years completed. California has a scheme based on a maximum of six (6) field production years. Seed from each production year carries a different designation, i.e., Nuclear, Generation 1, Generation 2, Generation 3, Generation 4, or Generation 5. The terms "earlier" or "later" generation are comparative terms used to relate the number of years a particular seed lot has been in field production since its pre-nuclear origination.

5. Limited-Generation Seed

Seed potatoes grown for a specific maximum number of field production years. In California, the Limited-Generation Program provides for six (6) field production years. Seed stocks in this program originate from a pathogen-tested source. Limited-Generation seed carries the designation of Nuclear or Generation 1 through Generation 5.

6. Seed

The vegetatively propagated tubers used for potato production rather than true botanical seed sexually produced from potato flowers.

7. Seed Farm

A field or group of fields entered for certification on a single application. A farming operation may enter seed potatoes for certification from more than one seed farm.

8. Seed Lot

A field or a group of fields producing seed potatoes or the potatoes (tubers) harvested from a seed potato field.

9. Seed Stock

Seed potatoes intended for use as a planting source.

C. Certification**1. Applicant**

The grower, growers or entity that enters seed potatoes for certification.

2. Application

The form an applicant completes and submits to CCIA to request certification, which includes a map of the field location.

3. Certification Process

The series of four (4) inspections to which all seed lots, except pre-nuclear are subjected and which must be passed in order to be certified are as follows:

- a. Two (2) field inspections
- b. A storage inspection
- c. A post harvest test.

Pre-nuclear seed lots are not subjected to the above inspections, but must pass at least two growing-season inspections to be certified.

4. Disqualification

Removal of eligibility for certification status from seed potatoes entered for certification due to not meeting all of the specific requirements of the California Rules of Certification.

5. Downgrading

The process of changing the generation designation of a seed lot. This is due to failing to meet a specific tolerance of the generation for which the seed was entered for certification. The seed lot is given the next appropriate later generation designation for which the seed lot does not exceed certification tolerances.

6. Post Harvest Testing

Tubers, either submitted to CCIA or collected by CCIA, are tested by a CCIA-approved growout, or by direct tuber testing in an approved laboratory.

7. Roguing

The seed potato production practice of removing or destroying undesirable potato vines and tubers in a field.

8. Tolerance

Tolerance is a permissible allowance for a disease or an allowable mixture or defect as specified in certification standards of a particular generation.

9. Volunteers

Potato plants growing in a seed potato field that originate not from the seed planted, but from tubers remaining in the field during a previous year's harvest or from other sources of contamination.

10. Zero Tolerance Factor

Zero tolerance means that none is allowed in a seed lot. If one or more of a zero tolerance factor is found at any time in a seed lot, that lot will be disqualified for certification. **It does not mean, nor may it be construed to mean, that a lot that passed inspection is free from the zero tolerance factor. It means only that none was found during the normal course of the inspection process. Zero tolerance factors in California include,** but are not limited to:

- a. Bacterial Ring Rot
- b. Root-Knot Nematode

D. Storage**1. Seed Lot Identification**

The tracking and documentation of eligible seed lots throughout production, harvesting, grading, storage and shipping. Seed lot locations are to be maintained during the storage season.

2. Subdivision

A portion of a storage or warehouse which is not permanently partitioned.

3. Tagging

The attaching of an official certification tag to a bag or bulk container of seed potatoes.

E. Diseases and Pests**1. Bacterial Ring Rot**

Disease caused by the bacterium *Clavibacter michiganense ssp. sepedonicum*.

2. Blackleg

Disease caused by the bacterium *Pectobacterium carotovorum pv atrosepticum*.

3. Corky Ring Spot

Disease caused by tobacco rattle virus.

4. Late Blight

Late blight is a disease caused by the fungus *Phytophthora infestans*.

5. Powdery Scab

Disease caused by the fungus *Spongospora subterranea*.

6. Root-Knot Nematode

The plant parasitic nematodes *Meloidogyne spp.*

7. Viruses and Viroids

Viruses caused by potato leaf roll virus (PLRV), potato virus X (PVX), potato virus Y (PVY), alfalfa mosaic virus (AMV) and potato spindle tuber viroid (PSTVd).

II. Seed Classification

A. California follows a Generation program. The classes of seed in this program are as follows:

1. Pre-Nuclear (PN)

Pre-field stocks for laboratory and greenhouse productions or direct field plantings. Types of PN material include:

- a. stem cuttings
- b. tissue cultured plantlets
- c. microtubers
- d. greenhouse-produced tubers (minitubers)
- e. laboratory-tested line selections.

2. Pre-Nuclear (PN) Pre-field stocks that meet PN tolerances

3. Nuclear (N) 1st field production and meets N tolerances

4. Generation 1 (G1) 2nd field production and meets G1 tolerances

5. Generation 2 (G2) 3rd field production and meets G2 tolerances

6. Generation 3 (G3) 4th field production and meets G3 tolerances

7. Generation 4 (G4) 5th field production and meets G4 tolerances

8. Generation 5 (G5) 6th field production and meets G5 tolerances

Each generation of seed is derived from planting the previous generation. At planting, the seed stock that was planted automatically progresses one generation. For example, PN becomes N, G3 becomes G4. Seed stocks must meet tolerances for the generation in which they are classified.

B. Experimental (EXP) Class

Non-released breeding selections and cultivars.

C. Line Selections

The suffix "LS" following the generation designation denotes a seed lot that was derived by clonal line selection.

III. Application Due Date

An application to grow potatoes for certification must be submitted online no later than six (6) weeks after planting. Late applications will be considered on an individual basis, and a late fee will be assessed.

IV. Procedure for Tagging and Sealing Bulk Seed Potatoes

A certification tag with the following information for each seed lot shall accompany the transporting vehicle.

1. Year of production
2. State
3. Grower Number
4. Generation
5. Variety
6. Lot Number

V. Sacking Seed Potatoes

- A. If seed potatoes are to be sacked, they must be packed in new sacks. Misprinted, misbranded, blotted, reject sacks and/or sacks turned inside out must not be used.
- B. New sacks that have been emptied in order to resort the potatoes shall not be reused if the sacks show stains or if the sacks show appreciable damage.

VI. Sanitation

Farming and sanitation practices are the responsibility of the grower. Official inspections do not relieve the grower of this responsibility.

VII. Disclaimer of Warranty

Certification does not constitute a warranty of either the California Crop Improvement Association or the grower of certified seed potatoes regarding the quality or freedom from disease of the seed potatoes beyond the express representation that the potatoes were produced, inspected, and shipped under the standards of the CCIA, and did qualify, prior to shipping, as to all certification requirements of the rules and regulations of the CCIA. The reliability of the inspections performed on these potatoes is subject to the normal limits of accuracy. By acceptance of these seed potatoes, buyer expressly agrees that the exclusive remedy against CCIA, its membership, and those parties utilizing CCIA services for breach of any warranty shall be limited in all events to a return of the purchase price of the seed.

**RULES OF CERTIFICATION
for
SEED POTATOES IN CALIFORNIA**

PART II - SEED POTATO CERTIFICATION STANDARDS

In order to comply with the CDFA Memorandum of Understanding regarding postharvest tests of potatoes, CCIA needed to update the potato crop standards to align with the State National Harmonization Program and the Potato Virus Management Plan.

I. General Certification Standards

The CCIA "[General Standards](#)," together with these specific potato certification standards, constitute the standards for certification of seed potatoes in California.

II. Application

Applications should be submitted electronically on CCIA's website (Application to grow and certify seed) as soon as possible and no later than six (6) weeks after planting. New applicants should contact the CCIA office for instructions on obtaining access to the online application system.

III. Seed Farm Eligibility Requirements

To be eligible for certified seed potato production, all potato-producing acreage on a Seed Farm must have been planted with Certified seed stock.

IV. Laboratory and Greenhouse Facility Requirements

- A.** Laboratory and greenhouse facilities used for production of plantlets or minitubers shall be maintained free of potato pests or vectors of potato pathogens. Failure to keep such pests under control may be cause for rejection of all lots maintained in the facility. All potting or growth media shall be sterile. Water sources used in a laboratory or greenhouse operation shall be treated or otherwise rendered free of potato pathogens by the applicant.
- B.** Suitable precautions shall be taken in micropropagation practices and in the potting, planting, irrigating, movement and use of equipment, and other laboratory and greenhouse practices to guard against the spread of disease or pests into and within facilities used within this certification program.
- C.** Records to document the progress of certified plant material through all increases are required.

V. Seed Stock Eligibility Requirements

- A.** Limited-generation seed stocks are eligible for certification for six (6) field production years. Generation 6 seed stocks, the 7th field production year, are not eligible for certification.
- B.** All seed stocks purchased by a farming operation from another farming operation and subsequently entered for certification, must be tagged unless the purchaser was a co-applicant for certification of that seed.
- C.** Certification tags from other states or Canada must be accompanied by a North American Certified Seed Potato Health Certificate (NAHC) issued by the state or province of origin. The eligibility of seed purchased for recertification must be verified by one of the following; Tags, Bulk Sale Certificates, or Interstate Transfer Certificate.

- D. Seed lots produced out of state shall be subjected to a post-harvest test for Potato Virus Y (PVY). The maximum tolerance level as determined for PVY by the post-harvest test is 2% for seed lots for recertification. If post-harvest testing results indicate that PVY exceeded 2% in the parent stocks, recertification may be rejected.
- E. A record of the shipping point inspection for seed of origin outside of California should be submitted with the application. In order for seed stocks to be eligible for recertification, tuber necrosis score must be less than or equal to 0.5%, based on visual inspection or lab test of symptomatic tubers for PVY, Potato Mop Top Virus (PMTV), or Tobacco Rattle Virus (TRV).
- F. Bacterial ring rot found in a seed lot of a seed farm will be cause to reject the lot from certification. All fields on that seed farm planted with the same seed lot as the rejected field will also be rejected, and ineligible for certification. All other seed lots associated with or planted after the rejected lot will not be eligible for recertification, but will be eligible for certification for commercial planting if all other certification requirements are met. The Potato Field Inspection Report and/or tag shall be clearly marked with the words "Not Eligible for Recertification" for those lots so identified.
- G. Nuclear, G1 or G2 seed lots disqualified for certification in the post harvest test because of seed-borne chemical injury, may only be recertified by the original applicant(s) during the next growing season.
- H. Seed lots containing tubers proven to be powdery scab infected shall not be eligible for certification.

VI. Land Requirements

- A. A field will not be eligible to produce certified seed potatoes if noncertified potatoes or potatoes proven to be Bacterial Ring Rot infected were grown in this field within one previous growing season.
- B. A field must be farmed for 1 (one) year with a crop other than potatoes immediately following the growing season in which potatoes were disqualified for Bacterial Ring Rot.

VII. Field Isolation Requirements

- A. Potatoes entered for certification must be separated by at least a skip row from potatoes not entered for certification.
- B. There must be clear demarcation between different varieties and classes of seed potatoes.
- C. Different lots must be separated from each other by steel posts or heavy wooden stakes that are tall enough to be seen above the crop and placed at 500 ft. intervals.

VIII. Field Inspection Requirements

- A. For all field plantings, at least two inspections will be made during the growing season, prior to harvest. Seed potatoes entered for certification shall not exceed the tolerances in Tables I and II.

Table I. Field Inspection - 1st Inspection Tolerances

Factor	Pre-nuclear (Greenhouse)	Nuclear	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5
Potato Leafroll Virus	0	0	0.05	0.20	0.50	0.50	0.50
Mosaic	0	0	0.10	0.30	2.00	2.00	3.00
Other Virus or Virus -Like Disease	0	0	0.10	0.30	2.00	2.00	3.00
Total Visible Virus	0	0	0.10	0.50	2.00	2.00	4.00
Spindle Tuber Viroid	0	0	0	0	0	0	0
Blackleg*	0	0	0.10	0.30	3.00	3.00	3.00
Varietal Mixture/Off-type	0	0	0	0.20	0.50	0.50	2.00
Bacterial Ring Rot	0	0	0	0	0	0	0
Root Knot Nematode	0	0	0	0	0	0	0

Table II. Field Inspection - 2nd Inspection Tolerances

Factor	Pre-nuclear	Nuclear	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5
Potato Leafroll Virus	0	0	0.05	0.10	0.25	0.25	0.25
Mosaic	0	0	0.10	0.20	1.00	1.00	2.00
Other Virus or Virus-Like Diseases	0	0	0.10	0.20	1.00	1.00	2.00
Total Visible Virus	0	0	0.10	0.20	1.00	1.00	3.00
Spindle Tuber Viroid	0	0	0	0	0	0	0
Blackleg*	0	0	0.10	0.20	1.00	1.00	1.00
Varietal Mixture/Off-type	0	0	0	0.10	0.25	0.25	0.5
Bacterial Ring Rot	0	0	0	0	0	0	0
Root Knot Nematode	0	0	0	0	0	0	0
PVX (Optional for Gen. 2 3 4 5)	0	0	0.2	1.0**	2.0**	3.0**	4.0**

*This tolerance is based on the presence of a typical, inky black stem system. Tolerance does not take into consideration the presence of blackleg bacteria that may be present on the plant but not causing disease symptoms or other symptoms caused by *Erwinia carotovora* such as stem rot, below ground stem decay, decay, early dying disease. Tolerance is no indication that this is a true value for the amount of blackleg in a seed lot.

**Lots over 1% (percent) "Potato Virus X" (PVX) will be downgraded or the grower may request the PVX designation dropped and classified TC stock.

- B.** All disease or problem determinations shall consist of a visual inspection of the plants in question, except in the case of latent viral infections, where a serological test such as ELISA may be used to supplement the visual inspection.
- C.** Inspection for bacterial ring rot is visual and shall be confirmed by laboratory diagnosis to determine the presence and shall be based on such tests and diagnostic procedures determined appropriate by the California Crop Improvement Association, including those currently approved by the Potato Association of America.

- D. Fields shall be considered ready for inspection at all times. Additional inspections may be made at the discretion of the inspector, but will not be made in order to allow growers to rogue fields which will not pass inspection.
- E. Chemical Injury:
1. The inspector is given authority to withhold certification pending outcome of a post-harvest test plot growout or refuse certification on a field or portion of a field sprayed or contaminated with a chemical that causes seed-borne injury to seed potatoes.
 2. Those portions of a field that do not show enough chemical injury to interfere with field inspections but still may be contaminated to the degree that seed-borne chemical injury may occur in the next crop, shall be harvested and stored separately from other potatoes in that seed lot.
 3. Under the direction of an inspector, a separate winter test sample shall be collected and submitted from those potatoes with the possible chemical injury.
 4. Certification will be withheld until post-harvest test readings are completed.
- F. The following are seed lot disqualifying conditions:
1. 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 the identity of the variety.
 2. Bacterial Ring Rot and Root-Knot Nematode are zero tolerance factors. Any seed lot, regardless of generation, is automatically disqualified from certification when any of these factors are found at any time.
 3. Evidence of failure to remove daughter tubers from rogued hills.
 4. When Bacterial Ring Rot is found in a seed lot, all potatoes grown by that farming operation from that seed source shall be disqualified.
 5. The presence of any new or exotic disease to the state of California.
 6. Failure to list on an application, all seed sources that were used to plant a particular seed lot.

IX. Post Harvest Testing Requirements

- A. Each seed lot of Nuclear and Generation 1, and any lot of Generation 2, 3, 4, or 5 which may be shipped to another state or Canadian province for planting, shall be tested in a post-harvest test. Lots not tested may not be eligible for recertification in another state, Canadian province, or country. As a means of monitoring program effectiveness, the CCIA may test all lots entered for production as California certified seed potatoes. The applicant is responsible for all costs associated with post-harvest testing.
- B. Seed lots shipped and planted for commercial production in areas outside of seed production areas before a post-harvest test can be completed are exempt from the post-harvest test.
- C. Seed lots produced and planted for recertification or commercial production within California are exempt from post-harvest test requirements.

- D. Each seed lot will be tested on a sample basis. The following are minimum sizes of samples based on the lot acreage, which shall be tested in a post-harvest test. Each seed tuber should be less than or equal to 2 oz. in size. Tubers should be collected at random and represent the entire lot.

Field Acres	Number of Tubers to Test
Lots representing less than 1.0 acre	200 tubers
Lots representing fields 1.0 acre or more	400 tubers

- E. Disease Tolerance. Seed potatoes entered for post-harvest testing shall not exceed the tolerances in Table III. The presence of diseases shall be determined visually, except in the case of varieties identified as not readily expressing virus symptoms, where a serological test such as ELISA may be used to supplement the visual inspection. Compliance with the specified tolerances is based upon the sample inspected. The zero tolerance has been chosen for reasons of convenience and practicality and is not to be construed to mean that the lot inspected is free of these pests or factors. It does mean that no bacterial ring rot or root-knot nematode was found during the inspection process.

Table III Post-Harvest Test Disease Tolerance

Factor	Nuclear	Gen 1	Gen 2	Gen 3	Gen 4	Gen 5
Leafroll	0	0.50	0.50	0.50	1.00	****
Mosaic	0	0.50	0.50	1.00	2.00	2.00****
Spindle tuber viroid	0	0	0	0	0	0
Other visible virus	0	0.50	0.50	1.00	2.00	****
Total visible virus	0	0.50	0.50	1.00	2.00	2.00****
Ring Rot and Root-Knot Nematodes	0	0	0	0	0	0
Chemical injury: Severe	***	0.50	0.50	0.50	1.00	****
Chemical injury: Mild	***	0.50	1.00	3.00	3.00	****
Varietal Mixtures	0	0	0.25	0.50	1.00	****

*** Does not apply.

**** Acceptance of the seed lot will be based on buyer/seller agreement.

X. Disease/Virus Testing

- A. The California Crop Improvement Association may grow and test samples of seed to determine the amount of virus or other disease in such seed. A reasonable amount of seed for testing shall be furnished when requested by the CCIA. CCIA may also take plants and/or tubers from any planting or storage for inspection and testing purposes. Disease/virus-testing shall be performed using laboratory serodiagnostic and/or plant indicators, molecular hybridization, or other methods as may be determined to be suitable by the CCIA including those currently approved by the Potato Association of America. A list of the approved tests shall be maintained by and made available from the California Crop Improvement Association.
- B. Pre-Nuclear Testing Requirements:
1. The applicant shall annually test all (100 percent) entry level explants, mother plants and base cultures prior to increasing through micropropagation techniques. All stock shall test negative for potato viruses A (PVA), M (PVM), S (PVS), X (PVX), Y (PVY) and leafroll; spindle tuber viroid (PSTVd); PMTV; TRV; *Erwinia carotovora* subsp. *carotovora* and *Erwinia*

carotovora subsp. *atroseptica* (Erw); and *Clavibacter michiganensis* subsp. *sepedonicus* (Cms).

2. The applicant shall sample test micropropagated seed potatoes during the final stage of multiplication prior to distribution. Stock shall test negative for PVA, PVM, PVS, PVX, PVY, PMTV, TRV, and PLRV, and Cms and Erw. Leaf tissue shall be sampled from two (2) percent of the plantlets and additionally, when appropriate, microtubers or tubercles shall be collected from one (1) percent of the plantlets.
3. The applicant shall sample test mass propagated seed potatoes during the final stage of multiplication prior to distribution. Samples shall be collected prior to kill down or shipment of plantlets. Stock shall test negative for PVS, PVX, PVY, PMTV, TRV, and PLRV, and Cms and Erw. Leaf tissue shall be tested from two (2) percent of the plants and tuber sampled shall be tested from one (1) percent of the plants.
4. Tests shall be conducted by an independent diagnostic laboratory approved by the CCIA. A list of approved laboratories is available upon request from the California Crop Improvement Association.

XI. Harvesting, Grading, and Storage Facility Requirements

- A. Precautions shall be taken during harvesting, grading and storage to prevent contamination by bacterial ring rot and other potato pathogens.
- B. Storage inspections will be conducted at any time on all storage facilities containing seed potatoes eligible for certification.
- C. Seed potatoes shall be stored in sanitized storage areas after harvest and shall not be stored in the same storage facility with potatoes known to be infected with bacterial ring rot and root knot nematode.
- D. Each lot of seed potatoes shall be harvested, graded and stored separately in such a manner as to preclude intermixing.
- E. Each lot of stored seed potatoes shall be clearly identified in a manner approved by the CCIA.
- F. All containers shall be new, for Nuclear and Generation 1. Containers for Generations 2, 3, 4 and 5 must be cleaned and sanitized if they have been previously used to contain potatoes.
- G. Storage where sprout inhibitors were used in the previous season is not to be used to store certified seed.

XII. Tagging

- A. When tagging a seed potato lot, the shipping destination must be declared to CCIA before certified tags are printed.
- B. California participates in the Seed Potato Quality Management Program (aka "MOU"), which requires adhering to the requirements in the "United States Potato Industry Management Plan for Potato Viruses that Cause Tuber Necrosis" (Virus Management Plan). Under these two agreements some conditions unique to interstate seed shipments include: All seed shipped out of state must be inspected for Necrotic arcs caused by one of the necrosing viruses (PVY, PMTV, TRV). Specific tolerances in the Virus Management Plan apply if necrotic arcs are found during shipping point inspection, and certification may be rescinded and tags removed if the lot exceeds tolerances.

Limited Generation Certified Seed Potatoes Comparison¹
Field Planting Equivalency Table

Agency	1²	2	3	4	5	6	7	8
Alaska	G1	G2	G3	G4	G5	G6	G7	G8
California	G1	G2	G3	G4	G5	-	-	-
Colorado	G1	G2	G3	G4	G5	G6	-	-
Idaho ⁵	FY1	FY2	FY3	FY4	FY5	FY6	FY7	-
Maine ⁵	FY1	FY2	FY3	FY4	FY5	-	-	-
Michigan ⁵	FY1	FY2	FY3	FY4	FY5	FY6	-	-
Minnesota	G1	G2	G3	G4	G5	G6	C	-
Montana	N	G1	G2	G3	G4	G5	-	-
Nebraska/Wyoming ⁵	FY1	FY2	FY3	FY4	FY5	FY6	-	-
Nevada	N	G1	G2	G3	G4	G5	-	-
New York ⁴	(U)G1	(U)G2	(U)G3	G4	G5	G6	-	-
North Dakota ⁵	FY1	FY2	FY3	FY4	FY5	FY6	C	-
Oregon ⁵	FY1	FY2	FY3	FY4	FY5	FY6	-	-
Utah	N(G1)	G2	G3	G4	G5	G6	-	-
Washington	N	G1	G2	G3	G4	G5	-	-
Wisconsin ⁶	FY1	FY2	FY3	FY4	Fy5	FY6	C	-
Canada	PE	E1	E2	E3	E4	F	C	-

1. The purpose of this table is to express equivalency of terms used by various certification agencies for seed potatoes harvested from a series of successive field plantings. For specific criteria relating to disease tolerances and other requirements, the reader is referred to the certification regulations of the agency in question.
2. The first field planting utilizes laboratory-tested stocks which may be tissue-cultured plantlets, greenhouse-produced minitubers, stem cuttings, or line selections. Contact agencies for detail as to types of stocks planted in their programs.
3. 3. Term used by agency for seed potatoes for a particular year in the field: C=Certified, E=Elite, F=foundation, G=Generation, N=Nuclear, PE=Pre-elite.
4. 4. If lots originate at Cornell-Uihlein Farm, the first three generations (G1-G3) are also designated by a "U" to denote source.
5. FY= Field Year
6. FY= Foundation Year

Prepared by the Certification Section of the Potato Association of America.
Revision Date: 02/2021

Directory

Name	Address	City	State	Zip	Phone
Allied Potato Inc.	550 Ming Ave., STE. 350	Bakersfield	CA	93309	661-837-1270
Grimmway Farms	11001River Run Blvd	Bakersfield	CA	93311	661-717-5444
Zuckerman Family Farm, Inc.	P.O. Box 487	Stockton	CA	95201	209-469-7979

Variety	Org	Cert#	Acres Applied	Class produced	Insp#	Other Varieties %	Mosaic %	Leafrool %	BlackLeg %	Calico %
Proprietary	ZUCKERMAN FAMILY FARM, INC. 60202	23CA-5465-03ALE-033	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 60203	23CA-5465-03ALE-032	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 60204	23CA-5465-03ALE-033	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 60206	23CA-5465-02ALE-020	9	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62971	23CA-5465-03ALE-314	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63190	23CA-5465-03ALE-322	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63191	23CA-5465-02ALE-205	4	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63396	23CA-5465-03ALE-339	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63452	23CA-5465-02ALE-210	2	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63453	23CA-5465-01ALE-106	1	G1	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63458	23CA-5465-01ALE-100	1	G1	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63461	23CA-5465-02ALE-207	2	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 61269	23CA-6873-03AMA001	36.34	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 61270	23CA-6873-03AMA002	8.72	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 62662	23CA-6873-04AMA001	16	G4	1	0	0	0.01	0	0.09
					2	0	0	0.01	0	0.09
	ZUCKERMAN FAMILY FARM, INC. 63186	23CA-5465-03BNT-318	2	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63219	23CA-5465-03BNT-329	2	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62884	23CA-5465-03CMB-304	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63194	23CA-5465-03CMB-324	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63220	23CA-5465-03CMB-330	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63478	23CA-5465-03CMB-341	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62950	23CA-5465-04CON-401	5	G4	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62965	23CA-5465-04CON-403	1	G4	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62966	23CA-5465-04CON-404	6	G4	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63390	23CA-5465-04CON-406	4	G4	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63392	23CA-5465-04CON-407	5	G4	1	0	0	0	0	0
					2	0	0.06	0.08	0	0
	ZUCKERMAN FAMILY FARM, INC. 63393	23CA-5465-04CON-408	3	G4	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62883	23CA-5465-03CRS-303	8	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62967	23CA-5465-03CRS-311	5	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63189	23CA-5465-03CRS-321	6	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63218	23CA-5465-03CRS-328	6	G3	1	0	0	0	0	0

Variety	Org	Cert#	Acres Applied	Class produced	Insp#	Other Varieties %	Mosaic %	Leafrool %	BlackLeg %	Calico %
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63223		23CA-5465-03CRS-333	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63388		23CA-5465-03CRS-334	5	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63389		23CA-5465-03CRS-335	5	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63394		23CA-5465-03CRS-337	4	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63477		23CA-5465-03CRS-340	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 62885		23CA-5465-04FEN-405	2	G4	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 62964		23CA-5465-04FEN-402	1	G4	1	0	0	0	0	0
					2	0	0	0	0	0
Allied Potato Inc. 59038		004	47.4	G4	1	0	0	0	0	0
					2	0	0	0	0	0
Allied Potato Inc. 59039		005	73	G4	1	0	0	0	0	0
					2	0	0	0	0	0
Allied Potato Inc. 59035		001	2.4	G4	1	0	0	0	0	0
					2	0	0	0	0	0
Allied Potato Inc. 59037		003	13.5	G4	1	0	0	0	0	0
					2	0	0	0	0	0
Allied Potato Inc. 59036		002	8.3	G4	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63182		23CA-5465-03NOB-316	2	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63183		23CA-5465-03NOB-317	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63221		23CA-5465-03POO-331	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Grimmway Farms 61276		23CA-6873-03PIR001	11.85	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Grimmway Farms 61279		23CA-6873-03PIR002	15	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Grimmway Farms 62663		23CA-6873-03PIR003	6	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Grimmway Farms 61275		23CA-6873-03PMA001	24.25	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Grimmway Farms 62664		23CA-6873-03PMA002	10	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63196		23CA-5465-03SAL-326	5	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 63217		23CA-5465-03SAL-327	2	G3	1	0	0	0	0	0
					2	0	0	0.06	0	0
ZUCKERMAN FAMILY FARM, INC. 63222		23CA-5465-03SAL-332	4	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 60207		23CA-5465-03SIF-031	6	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 60208		23CA-5465-04SIF-040	25	G4	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 60209		23CA-5465-03SIF-030	15	G3	1	0	0	0	0	0.01
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 62845		23CA-5465-03SIF-301	7	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 62846		23CA-5465-04SIF-400	12	G4	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 62907		23CA-5465-03SIF-308	5	G3	1	0	0	0	0	0
					2	0	0	0	0	0
ZUCKERMAN FAMILY FARM, INC. 62909		23CA-5465-03SIF-309	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0

Variety	Org	Cert#	Acres Applied	Class produced	Insp#	Other Varieties %	Mosaic %	Leafrool %	BlackLeg %	Calico %	
ZUCKERMAN FAMILY FARM, INC.	62963	23CA-5465-03SIF-310	7	G3	1	0	0	0	0	0	
					2	0	0	0	0	0	
	62968	23CA-5465-03SIF-312	2	G3	1	0	0	0	0	0	
					2	0	0	0	0	0	
	63187	23CA-5465-03SIF-319	7	G3	1	0	0	0	0	0	
					2	0	0	0	0	0	
	63188	23CA-5465-03SIF-320	2	G3	1	0	0	0	0	0	
					2	0	0	0	0	0	
	63391	23CA-5465-03SIF-336	6	G3	1	0	0	0	0	0	
					2	0	0	0	0	0	
	63395	23CA-5465-03SIF-338	4	G3	1	0	0	0	0	0	
					2	0	0	0	0	0	
	Total			505.76		Count = 67					

Crescent	Grimmway Farms 61271	23CA-6873-04AUC001	31.6	G4	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 61272	23CA-6873-04AUC002	14.57	G4	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 62725	23CA-6873-04AUC003	20	G4	1	0	0	0	0	0
					2	0	0	0	0	0
Total			66.17		Count = 3					

Bodega Red	ZUCKERMAN FAMILY FARM, INC. 63455	23CA-5465-01BOD-104	1	G1	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63459	23CA-5465-02BOD-209	1	G2	1	0	0	0	0	0
					2	0	0	0	0	0
Total					2					Count = 2

Queen	ZUCKERMAN FAMILY FARM, INC. 63456	23CA-5465-01BRQ-103	1	G1	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63460	23CA-5465-02BRQ-208	1	G2	1	0	0	0	0	0
					2	0	0	0	0	0
Total					2					Count = 2

Ciklamen	Grimmway Farms 61273	23CA-6873-03CIK001	33.23	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 61274	23CA-6873-03CIK002	51.15	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 62635	23CA-6873-03CIK003	144	G5	1	0	0	0	0.03	0
					2	0	0	0	0.03	0
	Grimmway Farms 62660	23CA-6873-03CIK004	148	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	Grimmway Farms 62661	23CA-6873-03CIK005	148	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Total			524.38		Count = 5					

Jule	ZUCKERMAN FAMILY FARM, INC. 63463	23CA-5465-01JUL-102	1	G1	1	0	0	0	0	0
					2	0	0	0	0	0
	Total					1				Count = 1

Variety	Org	Cert#	Acres Applied	Class produced	Insp#	Other Varieties %	Mosaic %	Leafrool %	BlackLeg %	Calico %
Natalia	ZUCKERMAN FAMILY FARM, INC. 63462	23CA-5465-01NAT-105	1	G1	1	0	0	0	0	0
					2	0	0	0	0	0
	Total					1	Count = 1			
Red La Soda	ZUCKERMAN FAMILY FARM, INC. 62843	23CA-5465-03RLS-300	6	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62844	23CA-5465-03RLS-302	6	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62906	23CA-5465-03RLS-307	5	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Total					17	Count = 3				
Red La Soda NY 10	ZUCKERMAN FAMILY FARM, INC. 62908	23CA-5465-02RL1-201	2	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62951	23CA-5465-02RL1-200	2	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62969	23CA-5465-02RL1-202	1	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 62970	23CA-5465-02RL1-203	1	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63184	23CA-5465-02RL1-204	2	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63192	23CA-5465-02RL1-206	2	G2	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63193	23CA-5465-03RL1-323	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63454	23CA-5465-01RL1-107	1	G1	1	0	0	0	0	0
2					0	0	0	0	0	
ZUCKERMAN FAMILY FARM, INC. 63457	23CA-5465-01RL1-101	1	G1	1	0	0	0	0	0	
				2	0	0	0	0	0	
Total					13	Count = 9				
Russian Blue	ZUCKERMAN FAMILY FARM, INC. 62972	23CA-5465-03RBL-313	2	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63181	23CA-5465-03RBL-315	1	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	ZUCKERMAN FAMILY FARM, INC. 63195	23CA-5465-03RBL-325	3	G3	1	0	0	0	0	0
					2	0	0	0	0	0
Total					6	Count = 3				
UW23	J.R. Simplot Company 58543	23CA-9220-UCDREC0001	0.05	G1	1	0	0	0	0	0
					2	0	0	0	0	0
	Total					0.05	Count = 1			
Violet Thumb	Grimmway Farms 61288	23CA-6873-03VTH001	36.7	G3	1	0	0	0	0	0
					2	0	0	0	0	0
	Total					36.7	Total Count = 1			

**Total
Acreage**

1,175.06 Total Count = 98