

QUARANTINE FOR LATE BLIGHT

Colorado Department of Agriculture

STATEMENT OF BASIS AND PURPOSE - 1996

This quarantine is imposed pursuant to the Pest Control Act, § 35-4-110, C.R.S. (1995) and HB 96-1018.

The Commissioner of Agriculture finds as follows:¹

1. Throughout most of the year, Colorado ranks second in the nation in number of shipments of fresh-pack potatoes. The San Luis Valley of the state has approximately 77,000 acres devoted to the production of potatoes, producing 23,808,000 cwt (1,190,400 tons) of potatoes with a market value of \$132,134,000.

2. The potato industry is the number one agricultural industry in the San Luis Valley.

3. Late blight, *Phytophthora infestans*, is a fungus that is among the most devastating of all plant diseases. All portions of the plant are susceptible. Late blight is commonly recognized as the Irish potato famine fungus.

4. The San Luis Valley is free of late blight.

5. Late blight is epidemic in North America and no other potato production area outside of Colorado is free of late blight.

6. Late blight spores are dramatically explosive and the subsequent disease can destroy whole fields of plants in a remarkably short time. Under favorable conditions, a potato field that had mild and scattered lesions in one week can be nearly destroyed the next week.

7. An exact measure of the actual economic damage from late blight in areas of similar conditions of climate and natural habitat is not yet available, but the cost of protecting a potato field or treating an infected potato field with fungicide throughout a growing season is \$200 to \$250 per acre.

¹ Sources for this information are: "Colorado Potato Situation and Outlook Report" and "Potato Late Blight Management Plan for Colorado," Dr. Richard T. Zink, Extension Potato Specialist, Colorado State University; "Re-emergence of the Irish Potato Famine Fungus," W. E. Fry and S. B. Goodwin, Plant Pathology Department, Cornell University; "Colorado Agricultural Statistics 1995 Annual Report," Colorado Agricultural Statistics Service.

8. Late blight kills the foliage of the potato plant and the spores find their way into the soil and cause rot in the plant tuber. The spores may be present in fresh potatoes or, after harvesting, in potatoes in storage.

9. Importation of seed potatoes infected with late blight would likely result in the introduction of late blight to the potato crops in the San Luis Valley.

10. Introduction of late blight to the potato crops in the San Luis Valley would cause irreparable economic injury to the potato producers in the San Luis Valley.

A quarantine is thus declared against the importation of seed potatoes into the San Luis Valley, unless such seed potatoes are certified and inspected as late blight free.

AMENDMENT TO QUARANTINE FOR LATE BLIGHT - 1997

STATEMENT OF BASIS AND PURPOSE

This amendment to the quarantine is made pursuant to the Pest Control Act, § 35-4-110, C.R.S. (1995 and 1996 Supp.).

Section 4.00 concerning producer reports is amended to make the reports received by the Commissioner more complete and useful. Requiring reporting of the location where imported seed potatoes are planted will facilitate detection of late blight should it occur in fields planted with imported seed potatoes.

AMENDMENTS TO THE QUARANTINE FOR LATE BLIGHT - 1999

STATEMENT OF BASIS AND PURPOSE

The amendments to the quarantine are adopted pursuant to the Pest Control Act, § 35-4-110, C.R.S. (1998).

The purpose of these amendments is to enforce the provisions of the quarantine for late blight by further defining cull management to decrease any opportunity for late blight spore transmission.

1.00	DEFINITIONS
2.00	IMPORTED SEED POTATOES
3.00	CULL MANAGEMENT
4.00	PRODUCER REPORTS

1.00 DEFINITIONS

A. "Certificate" means any federal/state, state or other inspection certificate accepted by the government of origin.

B. "Certified" means certified seed as defined in § 35-27-103(3) certified by a certifying agency as defined in § 35-27-103(4), C.R.S., or certified seed certified by a government of origin.

C. "Commissioner" means the Commissioner of the Colorado Department of Agriculture, or the Commissioner's designee.

D. "Culls" means any forms of waste and off-grade potatoes, including volunteer plants.

E. "Department" means the Colorado Department of Agriculture.

F. "Import" means to ship into the San Luis Valley from any state or country.

G. "Inspection" means an inspection performed at the place of origin by an inspector.

H. "Inspector" means a qualified fruit and vegetable inspector who is licensed by the United States Department of Agriculture, Agricultural Marketing Service or an inspector who meets all qualifications, licensure or other requirements of the country of origin.

I. "Late blight" means the fungus *Phytophthora infestans*.

J. "Nuclear seed stock" means disease-tested, certified seed potatoes produced in a greenhouse.

K. "Person" means any individual, corporation, government or governmental subdivision or agency, business trust, estate, trust, limited liability company, partnership, association, or other legal entity.

L. "Reinspection" means an inspection conducted by the Commissioner after the potatoes have been shipped from the area of origin to Colorado.

M. "Repack" means potatoes imported into the San Luis Valley for packaging.

N. "San Luis Valley" means the Colorado counties of Rio Grande, Saguache, Alamosa, Conejos, Costilla and Chaffee.

O. "Seed potatoes" means potato tubers or portions thereof utilized as seed.

P. "Tested" means performed a scientifically accepted protocol to detect the presence of a specific plant pathogen.

2.00 IMPORTED SEED POTATOES

A. A quarantine is imposed against seed potatoes imported into the San Luis Valley. Pursuant to said quarantine, seed potatoes may be imported into the San Luis Valley under the terms and conditions set forth in paragraphs B through F immediately below.

B. Imported seed potatoes shall be certified and accompanied by a certificate which shows proof of field inspection and documents that a representative sample of tubers from the load(s) was tested for late blight.

C. If the inspection certificate indicates that late blight was present during growing or loading, or no statement is made on the certificate concerning the presence or absence of late blight, the load(s) to which said certificate pertains shall not be unloaded, and, pursuant to § 35-4-109, shall be removed from the state within forty-eight (48) hours or shall be destroyed by the Commissioner.

D. Any load(s) which are not accompanied by an inspection certificate shall not be unloaded, and, if a certificate cannot be produced within forty-eight (48) hours, pursuant to § 35-4-109, shall be removed from the state within forty-eight (48) hours or shall be destroyed by the Commissioner.

E. If the inspection certificate indicates that no late blight was present during the growing, loading, or testing, the load(s) to which said certificate pertains shall be reinspected during the unloading process. Random sampling of the load shall be taken and any tubers showing symptoms of late blight shall be tested. Any load(s) showing symptoms of late blight shall be placed in a bin and held at the place where reinspection occurred, or, they shall be placed in a truck owned by the receiver of said load(s) and held at the place where reinspection occurred, pending results of testing. If late blight is confirmed by testing, the load(s) must be removed from the state or destroyed within seventy-two (72) hours.

F. Nuclear seed stock is exempt from the reinspection and sampling set forth in paragraph E immediately above.

3.00 CULL MANAGEMENT

A. If culls are made permanently nonviable by chemical or mechanical means prior to leaving the storage, processing or packing facility, no further management is required.

B. If culls are not processed as set forth in Part 3.00 A immediately above, one of the following management measures shall be used:

1. From June 1 through September 10 of each year,

All cull potatoes shall be destroyed within seventy-two (72) hours utilizing one of the methods set forth below:

a. Composting, under the following conditions:

(1) Any person who intends to use composting as a means of cull management shall notify the Department at (719) 852-3983 of such intent, prior to beginning composting;

(2) Composting, as used herein, is the hot aerobic (oxygen-requiring) decomposition of organic materials including culls by microorganisms under controlled conditions. Each compost windrow or pile shall be marked with an identification number. Temperature readings of each windrow or pile shall be taken and recorded daily at a maximum of 50-foot intervals along each windrow. Compost windrows or piles shall reach temperatures of 130 degrees Fahrenheit or higher for a minimum of fifteen (15) separate daily readings to ensure destruction of late blight or other plant pathogens. Written records of the temperature readings shall be maintained for a period of one year and made available to the Department upon request to the compost operator; and

(3) Inspections of the composting operation and records will be performed by the Department at regular intervals.

b. Ensiling;

c. Processing, such as for starch;

d. Burying, if lawful under applicable statutes, rules, or ordinances; or

e. Utilizing for livestock feed, under the following conditions:

(1) Within seventy-two (72) hours of receiving the culls, the feeder shall feed the culls or cut, chop, or grind them to make them nonviable;

(2) Culls not fed or processed as described in Part 3.00 B. 1. e. (1) immediately above or culls being stored prior to feeding or processing shall be completely covered with a tarp;

(3) The unprocessed culls shall be consumed within forty-eight (48) hours of feeding;

(4) Any person who intends to utilize culls for animal feed during this time period shall notify the Department at (719) 852-3983 of such intent, prior to beginning to feed culls; and

(5) Regular inspections of the feeding operation will be performed by the Department.

2. From September 11 to March 31 of each year,

All culls shall be destroyed utilizing one of the methods set forth below:

a. Composting, under the following conditions:

(1) Any person who intends to use composting as a means of cull management shall notify the Department at (719) 852-3983 of such intent, prior to beginning composting;

(2) Composting, as used herein, is the hot aerobic (oxygen-requiring) decomposition of organic materials including culls by microorganisms under controlled conditions. Each compost windrow or pile shall be marked with an identification number. Temperature readings of each windrow or pile shall be taken and recorded daily at a maximum of 50-foot intervals along each windrow. Compost windrows or piles shall reach temperatures of 130 degrees Fahrenheit or higher for a minimum of fifteen (15) separate daily readings to ensure destruction of late blight or other plant pathogens. Written records of the temperature readings shall be maintained for a period of one year and made available to the Department upon request to the compost operator; and

(3) Inspections of the composting operation and records will be performed by the Department at regular intervals.

b. Ensiling;

c. Processing, such as for starch;

d. Burying, if lawful under applicable statutes, rules, or ordinances;

- e. Utilizing for livestock feed;
- f. Spreading uniformly on the soil surface to a depth no greater than three (3) inches so that the culls are made nonviable by freezing or desiccation; or
- g. Treating pursuant to label directions with a pesticide effective for the destruction of volunteer potato plants.

3. From April 1 to May 31 of each year,

All culls shall be destroyed utilizing one of the methods set forth below:

- a. Composting, under the following conditions:
 - (1) Any person who intends to use composting as a means of cull management shall notify the Department at (719) 852-3983 of such intent, prior to beginning composting;
 - (2) Composting, as used herein, is the hot aerobic (oxygen-requiring) decomposition of organic materials including culls by microorganisms under controlled conditions. Each compost windrow or pile shall be marked with an identification number. Temperature readings of each windrow or pile shall be taken and recorded daily at a maximum of 50-foot intervals along each windrow. Compost windrows or piles shall reach temperatures of 130 degrees Fahrenheit or higher for a minimum of fifteen (15) separate daily readings to ensure destruction of late blight or other plant pathogens. Written records of the temperature readings shall be maintained for a period of one year and made available to the Department upon request to the compost operator; and
 - (3) Inspections of the composting operation and records will be performed by the Department at regular intervals.
- b. Ensiling;
- c. Processing, such as for starch;
- d. Burying, if lawful under applicable statutes, rules, or ordinances;
- e. Utilizing for livestock feed; or
- f. Treating pursuant to label directions with a pesticide effective for the destruction of volunteer potato plants.

C. All cull potatoes shall be transported in a vehicle that is constructed or loaded or the load thereof securely covered with a tarp or other cover to prevent any of the load from blowing, dropping or otherwise escaping therefrom.

4.00 PRODUCER REPORTS

Any person who plants imported seed potatoes in the San Luis Valley shall report to the Commissioner annually, not later than June 1, the location (section, township and range) where such seed potatoes were planted and not later than October 1, as to whether late blight did or did not appear after planting.