

## APPLE MAGGOT

With the repeal of the State's exterior and interior quarantines for apple maggot, apples may move unrestricted in California except to the following counties which have adopted ordinances to regulate to movement of apples into their jurisdictions:

Contra Costa, El Dorado, Fresno, Kern, Kings, Madera, Merced, Monterey, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Stanislaus, Tulare and Ventura.

**Apples, or apple trees**, are prohibited entry into these counties except under the following provisions:

1. Commercially packed apples produced using conventional pest control practices are not restricted. "Conventional pest control practices" shall mean treatment with pesticides at label dosages and on a schedule effective against apple maggot.
2. Commercially packed organic apples (apples produced by growers in compliance with and registered under the California Organic Foods Act of 1990) may enter the county if the producing orchard was trapped and found negative for apple maggot.
3. Commercially produced apples may enter the county in bulk for packing, juicing, and processing under a compliance agreement between the importing company and the county agricultural commissioner.
4. Apples trees which are free of fruit and bareroot or free of fruit and certified by origin agricultural officials as being treated with a soil drench effective against apple maggot may enter the county, subject to inspection.

Local compliance agreements for the movement of commercially produced bulk apples shall have the following requirements:

1. Only apples originating from orchards using conventional pest control methods, or from qualified organic orchards may enter the county for packing, juicing, or processing.
2. Prior to receiving any apples grown from any orchard located outside of the county, the importer must notify the agricultural commissioner's office of the intent to receive the apples, the name of the shipper/grower, the identification of the orchard of origin, and the anticipated dates of receipt.
3. All bulk shipments entering the county must be transported in a secured vehicles to prevent spillage. This may include use of structurally sound bins and tarped vehicles, or enclosed vans.
4. All bins must be identified to maintain the origin identity of the fruit.
5. Fruit shall be processed upon arrival, remain in their original enclosed containers, or be placed into controlled atmosphere or conventional cold storage chambers.
6. All waste must be disposed of in a manner approved by the agricultural commissioner. All bins shall be

cleaned in a manner approved by the agricultural commissioner.

7. The following records must be kept for each load of bulk apples imported into the county: date received, shipper/grower's name, county or state of origin, number of bins, origin orchard identification.
8. Inspectors from the commissioner's office may intermittently monitor the facility, cut fruit, and have access to records associated with the compliance agreement.
9. The importer shall reimburse to the county agricultural commissioner all costs for monitoring this compliance agreement.

### **Guidelines for apple maggot certification of commercially produced apples.**

A history of freedom from apple maggot infestation has been established within some counties in California's Central Valley based on participation in the detection trapping program sponsored by the California Department of Food and Agriculture. With the cessation of the Department sponsored detection program, the following guidelines have been developed to provide all counties with the means to offer origin certification based on freedom from apple maggot infestation for those states and countries requiring such certification based on the use of annual surveys.

Orchard surveys to assure apple maggot free status will be performed under a compliance agreement with the local county agricultural commissioner (CAC) and the participating exporters, and may be funded by the participating growers. Sample compliance agreements can be found in Appendices B and C. Any apple producer intending to export apples to a county with an apple maggot ordinance, or another state or country requiring an annual survey, must participate in this program to qualify for origin, or freedom from, apple maggot certification. The level of trapping for certification of apples is reduced further if the origin county maintains an apple maggot ordinance to restrict the movement of apples into the county; and when the apples are destined for market in a county maintaining an ordinance against apple maggot.

**NOTE:** Apples regulated for other pests by the destination state or country must continue to meet those requirements as well.

- A. Counties maintaining an ordinance against apple maggot will use the following certification trapping program:
  1. Funding for the program may be at the expense of the participating growers, if the certifying county wishes to charge for the service.
  2. All traps shall be placed and monitored by the CAC. The Pherocon AM trap shall be used; these traps will be placed according to the procedures described in CDFA's Detection Trapping Guide and according to the following:

- a. traps shall be in place by the first of June and shall remain in place through September of each year;
  - b. traps shall be placed at a density of 1 trap/10 acres, with no fewer than 4 traps/block; and a maximum of 40 traps/640 contiguous acres. Traps shall be placed around the perimeter of the orchard but on trees in the second row to minimize contamination with dust;
  - c. traps shall be serviced bi-weekly and shall be replaced at least every 4 weeks, more often if traps become dirty.
3. Quality control inspections of all traps shall be conducted routinely by the CAC.
  4. All apple maggot suspects, adults and immature stages, will be submitted to the Plant Pest Diagnostics Branch for confirmation.
  5. If apple maggot is detected within an orchard, the orchard shall be treated at the expense of the orchard owner using conventional pest control practices, in a manner approved by and under the supervision of the CAC; and the orchard owner shall reimburse the CAC for the cost of supervising the treatment. Apples from that orchard shall not be certified for apple maggot for the remainder of that year's growing season unless the prescribed treatments are conducted and cold treatment or controlled atmosphere treatment is used for certification.

If apple maggot is detected in an orchard and the aforementioned treatment is not conducted as required the pest shall be abated as provided for in Section 5401 et seq., of the California Food and Agricultural Code.

6. It will be the responsibility of the packer to assure identity of certifiable lots throughout the packing and storage process.
- B.** For counties that do not establish an ordinance against apple maggot the following certification trapping protocol must be used:
1. Funding for the program may be at the expense of the participating growers, if the certifying county wishes to charge for the service.
  2. All traps shall be placed and monitored by the CAC. The Pherocon AM trap shall be used; these traps will be placed according to the procedures described in CDFA's Detection Trapping Guide and according to the following:
    - a. traps shall be in place by the first of June and shall remain in place through September of each year;
    - b. traps shall be placed at a density of 1 trap/10 perimeter trees (minimum 2/acre), or every 300 feet for high density plantings; with no fewer than 4 traps/block. Traps shall be placed around the perimeter of the orchard but on trees in the second row to minimize contamination with dust.

- c. traps shall be serviced bi-weekly and shall be replaced at least every 4 weeks, more often if traps become dirty.
3. Quality control inspections of all traps shall be conducted routinely by the CAC.
  4. All apple maggot suspects, adults and immature stages, will be submitted to the Plant Pest Diagnostics Branch for confirmation.
  5. If apple maggot is trapped within 1/2 mile of a participating orchard, but not within the orchard, the apples from that orchard may be certified if apple maggot is undetected following additional inspection as detailed in Appendix A.
  6. If apple maggot is detected within an orchard, the orchard shall be treated at the expense of the orchard owner using conventional pest control practices in a manner approved by, and under the supervision of, the CAC; and the orchard owner shall reimburse the CAC for the cost of supervising the treatment. Apples from that orchard shall not be certified for apple maggot for the remainder of that year's growing season unless the prescribed treatments are conducted and cold treatment or controlled atmosphere treatment is used for certification.
  7. It will be the responsibility of the packer to assure identity of certifiable lots throughout the packing and storage process.
- C.** For those apple maggot ordinance counties producing apples for intrastate movement only and final destination to another apple maggot ordinance county the following certification trapping program may be used:
1. Funding for the program may be at the expense of the participating growers, if the certifying county wishes to charge for the service.
  2. All traps shall be placed and monitored by the CAC. The Pherocon AM trap shall be used; these traps will be placed according to the procedures described in the CDFA's Detection Trapping Guide and according to the following:
    - a. traps shall be in place by the first of June and shall remain in place through September of each year;
    - b. traps shall be placed at a density of 1 trap/block for blocks less than 1 acre; 2 traps/block for blocks from 1 to 5 acres; 4 traps/block for blocks from 5 to 40 acres; 4 traps + 1 trap for each additional 10 acres, or portions thereof for blocks greater than 40 acres with a maximum of 40 traps/640 contiguous acres;
    - c. traps shall be serviced bi-weekly and shall be replaced at least every 4 weeks, or more often if the traps become dirty.
  3. Quality control inspections of all traps shall be conducted routinely by the CAC.

4. All apple maggot suspects, adults and immature stages, will be submitted to the Plant Pest Diagnostics Branch for confirmation.
5. If apple maggot is detected within an orchard, the orchard shall be treated at the expense of the orchard owner using conventional pest control practices, in a manner approved by and under the supervision of the CAC; and the orchard owner shall reimburse the CAC for the cost of supervising the treatment. Apples from that orchard shall not be certified for apple maggot for the remainder of that year's growing season unless the prescribed treatments are conducted and cold treatment or controlled atmosphere treatment is used for certification.

If apple maggot is detected in an orchard and the aforementioned treatment is not conducted as required the pest shall be abated as provided for in Section 5401 et seq., of the California Food and Agricultural Code.

6. It will be the responsibility of the packer to assure identity of certifiable lots throughout the packing and storage process.
7. Quarantine compliance certificates will be required for all shipments moved under this program with the following additional declaration (AD):

"The apples were organically produced, trapped and found negative for apple maggot. For intrastate use only; not for export."

or

"The apples were produced using conventional pest control practices. For intrastate use only; not for export."

#### APPENDIX A

Procedures for sampling harvested apples for commercial packing for apple maggot infestation.

1. Samples must be taken from all grower lots of an orchard within 1/2 mile of an apple maggot fly find.
2. The sampling rate will be 100 apples per 100 containers in each grower lot.
3. The sample shall be drawn from at least 2 containers for each 100 containers in the grower lot.
4. The sample shall be examined for external evidence of apple maggot infestation.
5. At least 20 apples shall be cut and inspected internally for evidence of apple maggot infestation.
6. If apple maggot injury is detected, at least 100 apples from the grower lot shall be cut and inspect for apple maggot larvae.
7. The grower may not ship under this agreement if:
  - a. the lot sampled contains apple maggot or any other serious plant pest; or,
  - b. more than 0.5% of the fruit shows larval damage; or,
  - c. more than 4.0% of the fruit displays evidence of infestation.

#### APPENDIX B

A. Sample compliance agreement for use in those counties maintaining an apple maggot ordinance:

Name and Mailing Address of Establishment:

Location of growing area(s):

Regulated Articles Handled: Apple orchards and apples destined for shipment to other states or countries requiring annual surveys.

1. Funding for the program may be at the expense of the participating growers, if the certifying county wishes to charge for the service.
2. All traps shall be placed and monitored by the CAC. The Pherocon AM trap shall be used; these traps will be placed according to the procedures described in CDFA's Detection Trapping Guide according to the following:
  - a. traps shall be in place by the first of June and shall remain in place through September of each year.
  - b. traps shall be placed at a density of 1 trap/10 acres, with no fewer than 4 traps/block; and a maximum of 40 traps/640 contiguous acres. Traps shall be placed around the perimeter of the orchard but on trees in the second row to minimize contamination with dust.
  - c. traps shall be serviced bi-weekly and shall be replaced at least every 4 weeks, more often if traps become dirty.
3. Quality control inspections of all traps shall be conducted routinely by the CAC.
4. All apple maggot suspects, adults and immature stages, will be submitted to the Plant Pest Diagnostics Branch for confirmation.
5. If apple maggot is detected within an orchard, the orchard shall be treated at the expense of the orchard owner using conventional pest control practices in a manner approved by, and under the supervision of, the CAC; and the orchard owner shall reimburse the CAC for the cost of supervising the treatment. Apples from that orchard shall not be certified for apple maggot for the remainder of that year's growing season unless the prescribed treatments are conducted and cold treatment or controlled atmosphere treatment is used for certification.

If apple maggot is detected in an orchard and the aforementioned treatment is not conducted as required the pest shall be abated as provided for in Section 5401 et seq., of the California Food and Agricultural Code.
6. It will be the responsibility of the packer to assure identity of certifiable lots throughout the packing and storage process.
7. Other requirements, where applicable, may be prescribed by the CAC and may include, but are not limited to: placement and monitoring of additional

traps, treatments and the use of prescribed sanitary measures.

**B.** The affixing of both signatures will validate this Agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

Company Representative's Name:

Company Representative's Signature:

Title: Date Signed:

Agreement Number: Date of Agreement:

County Agricultural Commissioner's Signature:

**APPENDIX C**

**A.** Sample compliance agreement for use in those counties which do not maintain an apple maggot ordinance:

Name and Mailing Address of Establishment:

Location of growing area(s):

Regulated Articles Handled: Apple orchards and apples destined for shipment to other states or countries requiring annual surveys.

1. Funding for the program may be at the expense of the participating growers, if the certifying county wishes to charge for the service.

2. All traps shall be placed and monitored by the CAC. The Pherocon AM trap shall be used; these traps will be placed according to the procedures described in CDFA's Detection Trapping Guide according to the following:

a. traps shall be in place by the first of June and shall remain in place through September of each year;

b. traps shall be placed at a density of 1 trap/10 perimeter trees (minimum 2/acre), or every 300 feet for high density plantings; with no fewer than 4 traps/block. Traps shall be placed around the perimeter of the orchard but on trees in the second row to minimize contamination with dust;

c. traps shall be serviced bi-weekly and shall be replaced at least every 4 weeks, more often if the traps become dirty.

3. Quality control inspections of all traps shall be conducted routinely by the CAC.

4. All apple maggot suspects, adults and immature stages, will be submitted to the Plant Pest Diagnostics Branch for confirmation.

5. If apple maggot is trapped within 1/2 mile of an orchard, but not within the orchard, the apples from that orchard may be certified if apple maggot is undetected following additional inspection as detailed in Appendix A.

6. If apple maggot is detected within an orchard, the orchard shall be treated at the expense of the orchard owner using conventional pest control

practices in a manner approved by, and under the supervision of, the CAC; and the orchard owner shall reimburse the CAC for the cost of supervising the treatment. Apples from that orchard shall not be certified for apple maggot for the remainder of that year's growing season unless the prescribed treatments are conducted and cold treatment or controlled atmosphere treatment is used for certification.

7. It will be the responsibility of the packer to assure identity of certifiable lots throughout the packing and storage process.

8. Other requirements, where applicable, may be prescribed by the CAC and may include, but are not limited to: placement and monitoring of additional traps, treatments and use of prescribed sanitary measures.

**B.** The affixing of both signatures will validate this Agreement which shall remain in effect until canceled, but may be revised as necessary or revoked for noncompliance.

Company Representative's Name:

Company Representative's Signature:

Title: Date Signed:

Agreement Number: Date of Agreement:

County Agricultural Commissioner's Signature:

**SAMPLE COMPLIANCE AGREEMENT**

**APPENDIX D**

**A.** For those apple maggot ordinance counties producing apples for intrastate movement only and final destination to another apple maggot ordinance county the following certification trapping program may be used:

Name and Mailing Address of Establishment:

Location of Growing Area(s):

Regulated Articles Handled: Apple orchards and apples destined for shipment to other apple maggot ordinance counties.

1. Funding for the program may be at the expense of the participating growers, if the certifying county wishes to charge for the service.

2. All traps shall be placed and monitored by the CAC. The Pherocon AM trap shall be used; these traps will be placed according to the procedures described in the CDFA's Detection Trapping Guide and according to the following:

a. traps shall be in place by the first of June and shall remain in place through September of each year;

b. traps shall be placed at a density of 1 trap/block for blocks less than 1 acre; 2 traps/block for blocks

from 1 to 5 acres; 4 traps/block for blocks from 5 to 40 acres; 4 traps + 1 trap for each additional 10 acres, or portions thereof for blocks greater than 40

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County Agricultural Commissioner's Signature:

acres with a maximum of 40 traps/640 contiguous acres.

c. traps shall be serviced bi-weekly and shall be replaced at least every 4 weeks, or more often if the traps become dirty.

3. Quality control inspections of all traps shall be conducted routinely by the CAC.
4. All apple maggot suspects, adults and immature stages, will be submitted to the Plant Pest Diagnostics Branch for confirmation.
5. If apple maggot is detected within an orchard, the orchard shall be treated at the expense of the orchard owner using conventional pest control practices, in a manner approved by and under the supervision of the CAC; and the orchard owner shall reimburse the CAC for the cost of supervising the treatment. Apples from that orchard shall not be certified for apple maggot for the remainder of that year's growing season unless the prescribed treatments are conducted and cold treatment or controlled atmosphere treatment is used for certification.
6. If apple maggot is detected in an orchard and the aforementioned treatment is not conducted as required the pest shall be abated as provided for in Section 5401 et seq., of the California Food and Agricultural Code.
7. It will be the responsibility of the packer to assure identity of certifiable lots throughout the packing and storage process.
8. Quarantine compliance certificates will be required for all shipments moved under this program with the following additional declaration (AD):

"The apples were organically produced, trapped and found negative for apple maggot. For intrastate use only; not for export."

or

"The apples were produced using conventional pest control practices. For intrastate use only; not for export."

**B.** The affixing of both signatures will validate this agreement which shall remain in effect until canceled but may be rescinded as necessary or revoked for non-compliance.

Company Representative's Name:

Company Representative's Signature:

Title:                      Date Signed:

[Note: See page 509.6 for the status of counties with apple maggot ordinances and compliance agreements]

**Status of Counties with Apple Maggot Ordinances and Compliance Agreements**

		Contra Costa	El Dorado	Fresno	Kern	Kings	Madera	Merced	Monterey	San Benito	San Joaquin	San Luis Obispo	Santa Barbara	Stanislaus	Tulare	Ventura	
County ordinance established, non-commercial apples prohibited		X	X	X	X	X	X	X	X	X	X	X	X <sup>6</sup>	X	X	X	
<b>Apple Trees</b> Free of fruit and bareroot or soil drench required		X	X	X	X	X	X	X	X	X	X	X	X <sup>6</sup>	X	X	X	
<b>A P P L E  F R U I T</b>	<b>Commercially Packed</b>	Conventionally Grown	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
		Organic if trapped (-)	X	X	X	X	X	X	X	X	X	X	X <sup>6</sup>	X	X	X	
		Approved grower list required <sup>1</sup>			X		X	X		X		X				X	
	<b>Commercial bulk shipments</b>	Conventionally Grown	X	X	X	X		X	X	X		X					X
		Organic if trapped (-)	X	X	X	X	X	X	X	X		X					X
		Approved grower list required <sup>1</sup>		X	X		X	X	X	X		X					X
Closed or tarped van required for non-ordinance source <sup>2</sup>			X	X		X	X	X	X <sup>5</sup>		X					X	
Lot identification required <sup>3</sup>		X	X	X	X	X	X	X		X					X		
Q.C. Certificate <sup>4</sup> required for certified producers		X	X	X	X	X	X	X		X	X			X	X		

- 1 The lists would contain qualified conventional and qualified organic growers from other counties or states who wish to ship either packed or bulk apples. Lists shall include grower's name, grower's address, identification of orchard(s) from which apples will be shipped, and labels (brands).
- 2 Non-ordinance counties include out-of-state areas which do not have apple maggot ordinances or pestcontrol districts.
- 3 Lot identification = bin tags with grower's lot numbers and identification; only structurally sound bins, gondolas, or other bulk containers are to be used.
- 4 Quarantine Compliance Certificates would state that the apples come from a county where: the apples were produced using conventional pest control practices; or the apples were organically produced, trapped and found negative for apple maggot.
- 5 Tarping required for bulk apples originating from other states only.
- 6 Requirements apply to regulated areas within the county only (e.g., Cebada Canyon and the Cuyama Valley).