

# Apricot

## Crown Gall

Pathogen: *Agrobacterium tumefaciens*

(Reviewed 11/07, updated 2/09)



In this Guideline:

- [Symptoms](#)
  - [Management](#)
  - [Comments on the disease](#)
  - [Publication](#)
- 

### SYMPTOMS

Crown gall disease results in rough, abnormal galls on roots or trunk. Galls are soft and spongy, not hard. The centers of older galls decay. Young trees become stunted, older trees often develop secondary wood rots.

### COMMENTS ON THE DISEASE

Crown gall bacteria survive in [gall tissue](#) and in the soil. They enter the tree only through wounds. Crown gall is most damaging to young trees, either in the nursery or in new orchard plantings.

### MANAGEMENT

The incidence of crown gall can be reduced by planting noninfected, "clean" trees. It is also important to carefully handle trees to avoid injury as much as possible, both at planting and during the life of the tree in the orchard. Preplant, preventive dips or sprays with a biological control agent are available and may be helpful in some orchards. Generally, by the time crown gall is evident in an apricot orchard, it is usually best to tolerate the problem for the few remaining years of orchard life, which is about 12 to 15 years, or just remove the orchard and start anew.

When replanting a previously affected site, remove as many of the old tree roots as possible, grow a grass rotation crop to help degrade leftover host material and reduce pathogen levels, and offset the new trees from the previous tree spacing to minimize contact of healthy new roots with any infested roots that may remain.

Common name (trade name)	Amount/Acre	R.E.I.+ (hours)	P.H.I.+ (days)
-----------------------------	-------------	--------------------	-------------------

*When choosing a pesticide, consider the [general properties of the fungicide](#) as well as information relating to environmental impact.*

#### A. AGROBACTERIUM TUMEFACIENS-84#

(Galltrol) Label rates 12 0

MODE OF ACTION GROUP NAME (NUMBER<sup>1</sup>): A biological fungicide.

COMMENTS: Preplant treatment only. This is a living organism; store according to directions on label and do not mix with disinfectants.

#### B. GALLEX

Label rates 0 0

COMMENTS: For removal of existing galls, apply winter through spring.

- + Restricted entry interval (R.E.I.) is the number of hours (unless otherwise noted) from treatment until the treated area can be safely entered without protective clothing. Preharvest interval (P.H.I.) is the number of days from treatment to harvest. In some cases the REI exceeds the PHI. The longer of two intervals is the minimum time that must elapse before harvest.
- <sup>1</sup> Group numbers are assigned by the Fungicide Resistance Action Committee (FRAC) according to different modes of actions (for more information, see <http://www.frac.info/>). Fungicides with a different group number are suitable to alternate in a resistance management program. For fungicides with mode of action Group numbers 1, 4, 9, 11, or 17, make no more than one application before rotating to a fungicide with a different mode of action Group number; for fungicides with other Group numbers, make no more than two consecutive applications before rotating to fungicide with a different mode of action Group number.
- # Acceptable for use on organically grown produce.

## PUBLICATION



*UC IPM Pest Management Guidelines: Apricot*  
 UC ANR Publication 3433  
 Diseases  
 J. E. Adaskaveg, Plant Pathology, UC Riverside  
 W. D. Gubler, Plant Pathology, UC Davis  
 W. W. Coates, UC Cooperative Extension, San Benito County  
 J. J. Stapleton, UC IPM Program, Kearney Agricultural Center, Parlier  
 J. L. Caprile, UC Cooperative Extension, Contra Costa County  
 B. A. Holtz, UC Cooperative Extension, Madera County  
 Acknowledgment for contributions to Diseases:  
 B. L. Teviotdale, Kearney Agricultural Center, Parlier

<http://www.ipm.ucdavis.edu/PMG/r5100411.html>