

# Peach Leaf Curl

Ellie Andrews

UCCE Specialty Crops Advisor

Sonoma, Marin, Napa Counties

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## Background Info

- Peach leaf curl is caused by *Taphrina deformans*, a fungal pathogen
- Hosts: peach and nectarine
  - *Taphrina spp.* can also infect plum trees (aka “plum pocket”) but shows somewhat different symptoms on plums than peaches/nectarines
- Life cycle
  - Overwinters in bark and bud scales
  - Spores are dispersed by rain and infect leaves and shoots
  - Tree to tree spread occurs via airborne spores
  - Mycelia grow intercellularly, spore structures form in leaf cuticle which look like grayish white powder on leaf surface, then release spores
  - Infection is promoted by mild weather and wetness from rain, dew, or irrigation
  - In the fall, more spore structures are produced which cover the tree’s surface
- Symptoms
  - Leaf symptoms start ~2 weeks after leaves emerge from buds
  - Light green, yellow, pink, or reddish lesions found on leaves
  - Leaves become deformed, twisted, puckered, blistered
  - Can lead to stunted shoots, leaf rosettes, defoliation
  - Can cause flowers to abort, reddish bumps on fruit which may fall prematurely
  - Reduced fruit set and yield
  - If severe, can cause significant leaf drop, debilitate trees, stunt tree growth
  - Plums only: small white spots on young fruits grow to cover the fruit, seed cavity withers forming a pocket in dry fruit, turn velvety gray due to spore production and then eventually brown

## Management Options

- Choose resistant varieties such as Frost, Indian Free, Muir, Q-1-8
- Removing diseased leaves doesn't do much since it overwinters in bark & buds
- Thinning fruit helps reduce the demand on the tree
- Avoid overhead irrigation
- Dormant prune to remove inoculum (prior to fungicide application)
- Dormant fungicide sprays: fixed copper products
  - Apply fungicide after leaves have fallen in autumn
  - Horticultural oil can help improve fungicide efficacy
  - Typically, a single early treatment is effective
  - If rainfall is high, consider applying a second spray at flower bud development before green leaf tips are visible

## Sources

<https://ipm.ucanr.edu/PMG/PESTNOTES/pn7426.html>

[https://acmg.ucanr.edu/Over the Fence/peach Leaf Curl No Cause for Concern If You Know How to Treat It/](https://acmg.ucanr.edu/Over%20the%20Fence/peach%20Leaf%20Curl%20No%20Cause%20for%20Concern%20If%20You%20Know%20How%20to%20Treat%20It/)

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[https://www.canr.msu.edu/ipm/diseases/plum\\_pockets](https://www.canr.msu.edu/ipm/diseases/plum_pockets)