

# Disease Profile- Peach Scab on Stone Fruit



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Peach scab caused by *Cladosporium carpophilum* is a common stone fruit pathogen, and is primarily a problem in warm, humid areas of production. For New York growers, this means that peach scab is not likely to severely affect peach plantings. Unfortunately, the problem has become more severe since winters have been warmer than usual in the last decade. Overall, peach scab is often the most damaging on peach and tart cherry, but is sometimes found on plums and apricots. Late bearing varieties are often more severely infected than earlier varieties.

## *Symptoms and Signs*



Above: Peach Scab is often found near the stem end of the fruit.

Below: Severe infections crack the fruit open and allow the entry of secondary rots.

Twigs and leaves can be infected by *C. carpophilum*, but the lesions are rarely noticeable. The lesions are on the undersides of infected tissues and are often the same color as the tissue. Olive green lesions are often very discernable on half formed fruit, and are typically found closer to the stem. These lesions blacken with age, and may coalesce as they enlarge. Severe infections crack the fruit.

Fruit infection varies by the *Prunus* species affected. Nectarine fruit lesions are often considerably larger than any other examples, and sour cherry fruit lesions are often red instead of olive green.

## *Impact and Considerations*

Twig and leaf infections don't do enough damage to be noticed, and don't change color. In warmer climate orchards, these symptoms are often so numerous that sanitation is unfeasible. Fruit lesions can become a much more significant problem once they coalesce and crack the fruit. This opens the fruit to brown rot, which can subsequently infect all surrounding fruit. Fruit infections also have a lengthy incubation (40-70 days), meaning that lesion development can occur before the infection becomes apparent.



## ***Epidemiological aspects***

- *C. carpophilum* overwinters as mycelia in twig lesions and as chlamydospores on bark.
- Overwintering lesions are sporulating two weeks before calyx ('shuck') split. The number of conidia drastically increases in the four weeks following calyx split.
- Most conidia are produced during humid weather, and this period is the most conducive for infection.



Above: Peach scab is often found near the stem end of the fruit.

## ***What can you do about peach scab?***

### ***If you have peach scab...***

- **Cultural management**

- *Pruning trees to allow for maximum sunlight exposure decreases the drying time after rain, decreasing the length of each infection cycle. Pruning in this manner also allows for maximum spray penetration into the canopy, ensuring an even and complete application.*

- *Pruning every infected twig is unfeasible because the lesions are too numerous.*

- **Chemical / organic management**

- *Control is usually achieved through fungicide programs. These programs include captan, chlorothalonil, demethylation inhibitors, and quinone outside inhibitors applications at calyx split and every two weeks after for about 6-8 weeks. Bravo (chlorothalonil) will provide approximately 14 days of protection. However, this time period can be extended in dry weather and shortened in wet weather. Research has indicated that applications at shuck split are critical because of this is the time of maximum sporulation. An organic option of wettable sulfur can be applied on a similar schedule.*

- *Research has indicated that in cooler growing areas, control of *C. carpophilum* requires fewer applications.*

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