



Peach Leaf Curl: *Taphrina deformans*

Introduction

Peach leaf curl is a springtime disease of peach, nectarine, almond, and related ornamental species caused by the fungus *Taphrina deformans*. This disease is common in unsprayed orchards. Peach leaf curl is not serious except in rainy years when it can cause defoliation of unsprayed trees early in the growing season. This weakens the trees making them more susceptible to winter injury.

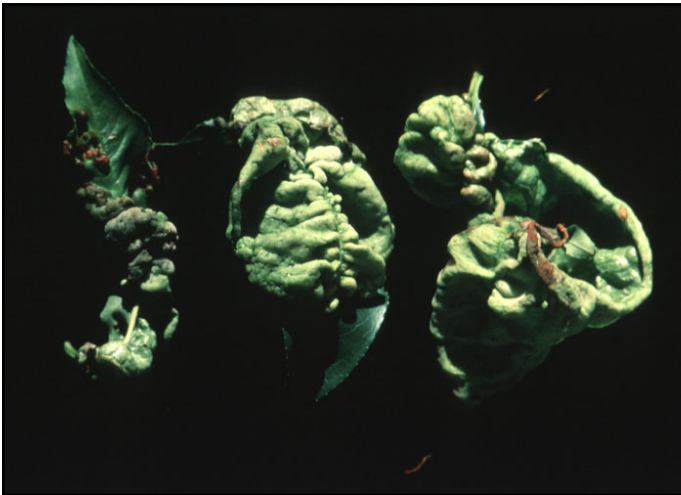


Figure 1: Deformed leaves of peach

Symptoms and Signs

Taphrina deformans can infect leaves, fruit, and young twigs. Infected leaves become distorted, puckered, and thickened (Figure 1 & 2), initially with a distinct reddish or purple coloration. As infection progresses, affected leaves turn gray with a powdery appearance as a result of the production of fungal spores on the leaf surface. Shortly thereafter these leaves turn yellow or brown and drop. Fruit which becomes infected tends to drop shortly after infection occurs. Infected

twigs are swollen and stunted, usually with deformed leaves at their tips.

Disease Cycle

Spores produced on the leaf surface by the fungus are washed or wind blown onto peach twigs and buds. They remain lodged in bud scales or crevices in the bark throughout the summer and following winter. These spores germinate during periods of frequent rain as the buds open in the spring. If rain does not occur at this time, the spores remain inactive and little or no infection occurs.



Figure 2: Deformed leaves of peach

Only juvenile plant tissues are susceptible to infection, so if no spore germination occurs at bud break, then little damage results for that year. Spores are capable of producing secondary spores known as bud conidia during periods of wet, cool weather. Both spore types can remain inactive for several years on the peach tree until conditions are right for infection to occur. This explains why peach leaf curl

can periodically cause severe defoliation even though it was not noticed the previous growing season.

Management Strategies

Peach leaf curl can be managed by a single, dormant application of a registered fungicide. In the home orchard, some registered products may be labeled for managing the disease or simply for suppression. For a list of specific products that may be registered to manage peach leaf curl in the home garden in New York please see our [fruit fungicide table](#).

Please note that some restrictions or warnings may apply to various products that may be registered for either commercial or home garden use. Apply fungicide in Autumn after the leaves have fallen. Fungicide applications will not be effective if applied after bud break.

Be certain any formulation(s) of pesticide(s) you purchase are registered for the intended use. Follow the label instructions for all pesticides used, and avoid the use of insecticides during bloom so that bees are not harmed. For commercial applications, please refer to the appropriate commercial pest management guidelines, or contact your local Cooperative Extension Office for more information on currently registered products.

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READ THE LABEL BEFORE APPLYING ANY PESTICIDE! Changes in pesticide regulations occur constantly. All pesticides distributed, sold, and/or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide use in New York State should be directed to the appropriate Cornell Cooperative Extension Specialist or your regional DEC office.

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