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Apple: Crown and collar rot

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Crown rot of the rootstock and collar rot of the scion wood of apple trees is caused by a soilborne fungus. It can survive in infected tissues and plant debris, as well as in the soil. Symptoms typically appear in early fall, when one or more branches show signs of decline, including discolored (reddish-bronze to purple) foliage, smaller leaves and terminal growth, and a red discoloration of the bark. Infection occurs in the roots and moves within the roots to the crown. The bark is killed, and the cambium beneath the bark turns reddish-brown, instead of the normal white color. Crown or collar rots may completely girdle trees, resulting in death.

Management Options

Non-Chemical Management

- ~ Plant disease-resistant cultivars such as 'Antonovka', 'Delicious', and 'Wealthy'. 'Golden Delicious', 'McIntosh', and 'Rome Beauty' are moderately resistant.
- ~ The rootstocks M9 (highly resistant) and M2, M7, M26, and MM111 (moderately resistant) resist crown and collar rot.
- ~ Do not overwater or allow water to pool at base of trees.
- ~ Avoid wounding crowns and collars.
- ~ Cut out diseased tissues from crowns in dry weather and leave wounds exposed to the air.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

None recommended

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Images



*~ Caption: Apple crown and collar rot
~ Photo by: J.W. Pscheidt*