Apple Scab

Apple Scab
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Apple Scab is caused by a fungus that infects both leaves and fruit. Scabby fruit are often unfit for eating, and continued infection of leaves weakens the tree.

Identification. Scab infections on leaves start as olive green to brown spots with an irregular or feathered edge. As leaf infections grow, they may merge together and assume a dark brown velvety appearance. Severely infected leaves may turn yellow and drop prematurely. Scab infections on young fruit start out as olive green to brown spots. As the lesions enlarge, they harden, and eventually become black, corky, inedible areas on the fruit. Severely infected fruit may be deformed and often crack open.

Important Biology. Apple scab survives Minnesota's winters on infected leaves that have fallen to the ground. In spring, spores are ejected from last year's fallen leaves and create new infections on the young leaves and tiny fruitlets. Leaf spots quickly mature and produce new fungal spores. These spores spread to other leaves to create new infections throughout the growing season. Abundant rainfall in May and early June is conducive to scab infection, and rainy summers allow the fungus to infect trees even more severely. Many ornamental crab apple trees are susceptible to apple scab, so the disease can be spread to your fruit trees from nearby flowering crabs.

Plant resistant varieties. The best way to deal with apple scab is to avoid it altogether by planting disease resistant varieties. Many varieties of apple trees are resistant or completely immune to apple scab. Susceptible and very susceptible trees will require fungicide sprays every year to control the apple scab fungus. Resistant trees will only require fungicide sprays in very wet years, where the apple scab fungus is nearby in other infected trees or in infected leaf litter. Good sanitation and cultural control practices will minimize the need for even these sprays. Immune trees do not require any fungicide sprays at any time, and will remain disease free all season long.

Very susceptible	Susceptible	Resistant	Immune
Cortland	Beacon	Honeycrisp™	Dayton
Honeygold	Fireside		Freedom
McIntosh	Haralson		Liberty
State Fair	Keepsake		McShay
Zestar!™	Paula Red		Pixie Crunch
	Sweet Sixteen		Pritine
	Wealthy		Redfree
	Chestnut Crab		William's Pride

Management

Sanitation. Rake all the fallen leaves from around your trees each autumn and remove them from the area. Infected leaves can be burned, buried or composted. Perfect sanitation in an apple planting could, in theory at least, control the disease. If there are other apple or crab apple trees in the vicinity of your planting, however, spores could become airborne and drift onto your property, starting the infection cycle again.

Pruning. The apple scab fungus needs moisture on the leaves to start a new infection. A well pruned tree with an open canopy will allow air to move through the tree and dry the leaves quickly. This will create an environment less favorable to the fungi and can help reduce the severity of apple scab in a tree.

For more information on Pruning, please see http://www.GleanMilwaukee.org/classes-resources/pruning/