

Crabapple

Malus spp. (Rosaceae)

Description of crop:

Crabapples are generally considered native species as opposed to the hybridized commercial apple varieties. In general crabapples produce rather small fruits of less than 2" in diameter. Crabapples are grown as a food crop or as pollinators in tree fruit crops. They are also a nursery crop that is grown for ornamental purposes. Varieties that produce large fruit are used as a food crop and are processed for cinnamon apple rings. The production of crabapples as a food crop has virtually disappeared in the last few years. One reason for the reduction in crabapple production as a condiment was the dramatic reduction in the value of small Red Delicious apples. As the price of Red Delicious fell, growers scrambled for any possible market and the niche market of the condiment apple was one such market. Crabapples, whether spiced or pickled, are no longer a popular item for the American dinner table. Crabapple for food production is now limited to very small individual production sold in farmers markets. Crabapple tree production now is primarily for pollination purposes in apple orchards and as an ornamental. Pest problems are similar to pest problems in apples and because crabapple pollinators are in apple orchards, the control strategies for the two crops are generally identical. Production practices are similar also; however, pollinator crabapples do not produce fruit for consumption and thus do not require activities such as thinning to enhance fruit quality. Crabapples for food are produced in the same manner as apples with the only significant differences being harvest. Early crabapple harvest, beginning at the end of June, helps reduce the number of pesticide applications needed to control pests.

Key pests:

Key pests are codling moth and aphids. San Jose scale and powdery mildew are the biggest disease problems. Fireblight is becoming serious, because newer varieties of crabapple used for pollination are more susceptible however the pollinator trees are within the apple block and are treated at the same time as the commercial apples should there be fireblight outbreak conditions. Weeds are not a significant problem because of grass planted between the rows in the orchard.

Key pesticides:

Codling moth is controlled with a variety of replacements for the organophosphate azinphos-methyl (Guthion). Replacements considered soft or organic include combinations of pheromone dispensers, codling moth specific granulovirus, and horticultural oils. Conventional treatments include Assail, Rimon, Intrepid and Calypso. Aphids are controlled with insecticidal soap. San Jose scale is controlled with a dormant spray of insecticidal soap. Powdery mildew is controlled with Indar, Vanguard, Inspire, Procure, Pristine, Flint, Sovran or wettable sulfur. Wettable sulfur is often combined with one of the

other mildew products to prevent resistance development. Varietal selection is used for fireblight control. Fireblight is also controlled with antibiotics such as terramycin or streptomycin, coppers or biologicals such as competitive bacteria.

**Critical pest
control issues:**

Pest control problems that affect the apple industry also affect the crabapple industry. Organic production and the severe curtailing of organophosphate use have created many new issues within the industry. Development of softer chemical programs that will not exacerbate resistance issues and remain effective is a challenge.

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