UF UNIVERSITY of FLORIDA
IFAS Extension

ENH-555

Malus x 'Spring Snow': 'Spring Snow' Crabapple[1]

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Introduction

`Spring Snow' Crabapple is unusual in that it is typically fruitless. Its use should be limited in areas where scab, fireblight or rust is a problem. The dense, oval crown grows to about 25 to 30 feet tall and 15 to 20 feet wide. Early pruning to remove lower branches and purchasing tree-form specimens at the nursery can usually ensure that pruning requirement can be kept to a minimum.

General Information

Scientific name: *Malus x*
Pronunciation: MAY-lus
Common name(s): 'Spring Snow' Crabapple
Family: *Rosaceae*
USDA hardiness zones: 3A through 8A (Fig. 2)
Origin: not native to North America
Invasive potential: little invasive potential
Uses: espalier; street without sidewalk; tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; parking lot island < 100 sq ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; specimen; deck or patio; urban tolerant; highway median; Bonsai
Availability: not native to North America

Description

Height: 25 to 30 feet
Spread: 15 to 20 feet
Crown uniformity: symmetrical
Crown shape: oval, upright/erect
Crown density: dense

Figure 1. Middle-aged *Malus x* 'Spring Snow': 'Spring Snow' Crabapple

Growth rate: moderate
Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: serrate, serrulate, crenate
Leaf shape: elliptic (oval)
Leaf venation: pinnate, brachidodrome

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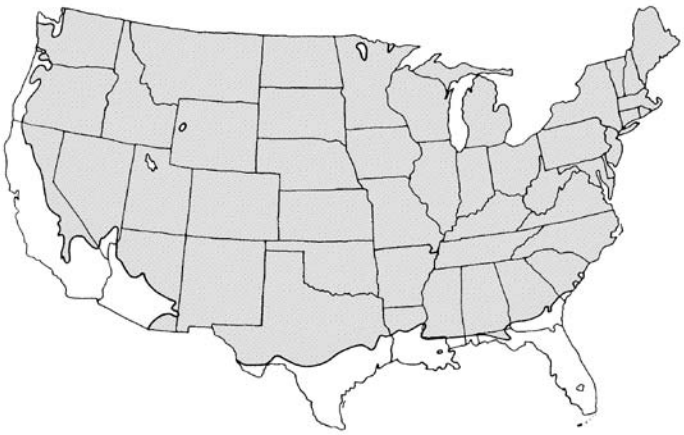

Figure 2. Range

Leaf type and persistence: deciduous
Leaf blade length: less than 2 inches, 2 to 4 inches
Leaf color: green
Fall color: yellow
Fall characteristic: not showy

Flower

Flower color: white/cream/gray
Flower characteristics: very showy

Fruit

Fruit shape: no fruit
Fruit length: no fruit
Fruit covering: no fruit
Fruit color: no fruit
Fruit characteristics: no fruit

Trunk and Branches

Trunk/bark/branches: branches droop; not showy; typically multi-trunked; thorns
Pruning requirement: little required
Breakage: resistant
Current year twig color: brown, reddish
Current year twig thickness: thin, medium
Wood specific gravity: unknown

Culture

Light requirement: full sun
Soil tolerances: clay; sand; loam; acidic; alkaline; well-drained; occasionally wet
Drought tolerance: moderate
Aerosol salt tolerance: low

Other

Roots: not a problem
Winter interest: no
Outstanding tree: no
Ozone sensitivity: unknown
Verticillium wilt susceptibility: resistant
Pest resistance: sensitive to pests/diseases

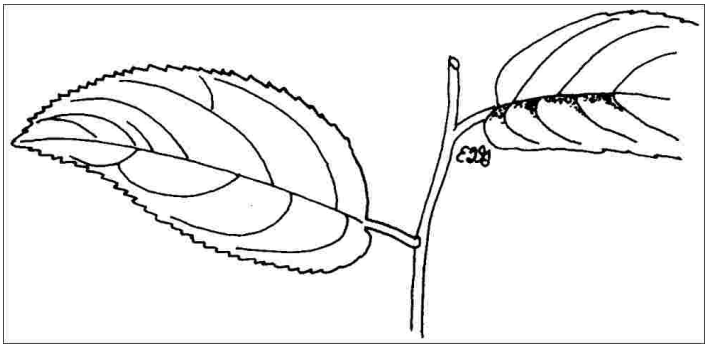

Figure 3. Foliage

Use and Management

Plants are used for specimens, patios, and along streets to create a warm glow of color each spring. They are attractive during the summer, bearing glossy green foliage. A row of Crabapples along each side of the street or median strip can "make" a neighborhood. Select plants which have been grafted onto EMLA 106 or 111 rootstock to reduce root suckering.

It is best grown in a sunny location with good air circulation and have no particular soil preferences, except soil should be well drained. Crabapple is well-adapted to compacted urban soil, tolerates drought and poor drainage well and is somewhat tolerate of salt-spray. Well adapted to all areas within its hardiness zone range, including Texas and Oklahoma. Do not overfertilize since this could increase the incidence of disease. Select only from more disease-resistant cultivars if scab, fireblight or rust is a problem in the area. Root-pruned trees appear to transplant most easily. Crabapples grow well in the Texas panhandle but are not extremely drought tolerant and are not well suited for high pH soil.

According to the Ornamental Crabapple Society, *Malus* spp. adapted for street tree and urban use include `Adams', `Bob White', `David', `Donald Wyman', `Profusion', `Red Splendor' and Malus floribunda. Be sure to specify tree form plants for street tree use since branching may be too low on trees grown for specimen use. Contact the Ornamental Crabapple Society, Morton Arboretum, Lisle, Illinois 60532 for more information on Crabapples.

Other white flowered cultivars include: `Baccata Columnaris' - narrow crown, white flowers, red or yellow fruit; `Baccata Gracilis' - slow-growing, shrub-like, white flowers, fruit small and dark red, annual bearer; `Baccata Jackii' - upright form, white flowers, bright red fruit, annual bearer, also good to excellent disease resistance; `Callaway' - pink buds, white flowers, red fruit; `David' - pink buds open to white flowers, scarlet fruit, good to excellent disease resistance; `Dolgo' - pink buds, white flowers, large red fruits; `Donald Wyman' - disease-resistant but susceptible to fire blight, glossy red showy fruit; `Ellwangeriana' - red fruit, disease-resistant; `Floribunda' - pink to red bud opens to single white flower, yellow or red fruit - commonly available; `Gloriosa' - pink bud opens to white flower, red, large fruit; `Golden Hornet' - upright arching habit, white flower, yellow fruit; `Gorgeous' - pink bud opens to large, white flower, red to orange fruit; `Harvest Gold' - white flowers followed by yellow fruits; `Hupehensis' - Tea Crabapple - pink buds open to white flowers, greenish fruit; `Katherine' - double flowers opening pink, fading to white, fruit yellow and red; `Mary Potter' - pink buds open to single white flowers, red and fairly large fruit, susceptible to scab and powdery mildew; `Red Jade' - weeping habit, white flowers, red fruit persisting after leaves drop; `Sargenti' - dwarf, pink bud opens to white flowers, small dark red fruit; `Snowdrift' - white flowers, orange red fruit; `Tanner' - white flowers, red fruits, susceptible to diseases; `Tschonoski' - white flowers, vigorous growth, good bronze red fall color, fruit brownish; `White Angel' - white flowers, glossy red fruit persisting into winter; `White Candle' - pink buds open to white flowers, red fruit, upright growth habit; `Zumi Calocarpa' - white flowers, bright red persistent fruit.

One of the best Crabapples for the south is *Malus* x Callaway.

Disease-resistant cultivars include: `David', `Dolga', `Donald Wyman', `Ellwangeriana', `Inglis', `Jackii', `Jewelberry', `Margaret', `Mary Potter' `Mount Arbor Special', `Prairifire', `Professor Sprenger', `Tomiko'.

Pests

Aphids infest branch tips and suck plant juices, and are quite common. They can deform newly emerging foliage and secret honey dew creating a sticky mess beneath the tree, but will not kill the tree.

Fall webworm makes nests on the branches and feeds on foliage inside the nest. Small nests can be pruned out or sprayed with *Bacillus thuringiensis* . Controlling severe infestations may require other chemicals.

Scales of various types are controlled with horticultural oil.

Borers can be a problem on stressed trees.

Mites are too small to see easily so they can cause much foliage discoloration before being detected. Mites can be controlled to a degree with horticultural oil, but other chemicals are often required by the time mites are detected. The mite infestation can also be severe by the time foliage chlorosis or bronzing is evident.

Eastern tent caterpillar builds tents or nests in trees in early summer or late spring. Feeding occurs on foliage outside the nest. Defoliation can be extensive if infestation is severe, and repeated defoliations for several years can weaken trees. Small nests can be removed by pruning them from the tree. Spray with *Bacillus thuringiensis* or other approved chemical. Do not burn nests while they are still in the tree.

Diseases

Fairly susceptible to disease.

Scab infection takes place early in the season and dark olive green spots appear on the leaves. In late summer the infected leaves fall off when they turn yellow with black, spots. Infected fruits have black, slightly raised spots. Use resistant varieties to help avoid this severe problem.

Fire blight susceptible trees have blighted branch tips, particularly when the tree is growing rapidly. Leaves on infected branch tips turn brown or black, droop, and hang on the branches. The leaves look scorched as by a fire. The trunk and main branches become infected when the bacteria are washed down the branches. Cankers form and are separated from adjacent healthy bark by a crack. The infected bark may be shredded. Use resistant cultivars when available since severe infections on susceptible trees can kill the tree.

Powdery mildew coats leaves with white fungal growth resembling powder.

Cedar apple rust causes brown to rusty-orange spots on the leaves. Badly spotted leaves fall prematurely, and defoliation can be heavy. Redcedars (*Juniperus virginiana*) are the alternate host.

Crabapples are subject to several canker diseases. Prune out infected branches, avoid unnecessary wounding, and keep trees healthy.