Fact Sheet ST-536
October 1994

Pyrus calleryana 'Aristocrat' 'Aristocrat' Callery Pear[1]

Edward F. Gilman and Dennis G. Watson[2]

INTRODUCTION

'Aristocrat' Callery Pear quickly grows 35 to 45 feet high and 30 to 35 feet wide, with widely-spaced, upright-spreading, thornless branches (Fig. 1). The more dominant trunk and open form of 'Aristocrat' Callery Pear helps to make it less susceptible to wind and ice damage than 'Bradford'. Branch angles are wider and lateral branches grow at a slower rate than on 'Bradford', therefore the branches are better attached to the trunk. In spring before the new leaves unfold, the tree puts on a brilliant display of pure white flowers which, unfortunately, do not have a pleasant fragrance. The leaves emerge as red/purple, then become 1.5 to 3 inches long, glossy green with wavy margins and a red blush. They turn red again in fall before dropping. The small, pea-sized, red/brown fruits which form are quite attractive to birds and other wildlife, and mummify on the tree persisting for several months to a year. Planting two or more cultivars of Callery Pear together could increase fruit set.

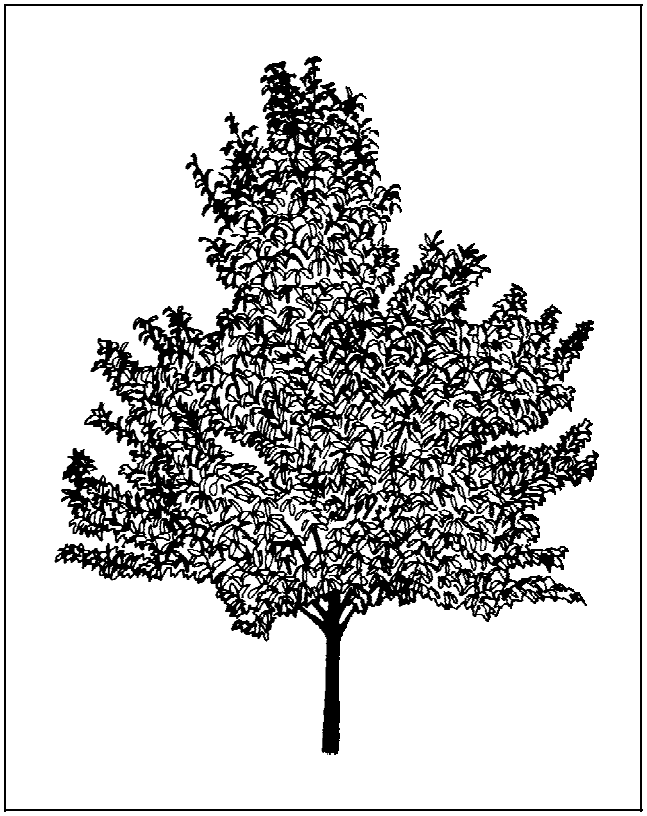

Figure 1. Young 'Aristocrat' Callery Pear.

GENERAL INFORMATION

Scientific name: *Pyrus calleryana* 'Aristocrat'
Pronunciation: PIE-rus kal-ler-ee-AY-nuh
Common name(s): 'Aristocrat' Callery Pear
Family: *Rosaceae*
USDA hardiness zones: 5 through 9A (Fig. 2)
Origin: not native to North America
Uses: container or above-ground planter; large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; screen; shade tree; small parking lot islands (< 100 square feet in size); narrow tree lawns (3-4 feet wide); specimen; sidewalk cutout (tree pit); residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

1. This document is adapted from Fact Sheet ST-536, a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1994.

2. Edward F. Gilman, associate professor, Environmental Horticulture Department; Dennis G. Watson, associate professor, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

Figure 2. Shaded area represents potential planting range.

Availability: generally available in many areas within its hardiness range

DESCRIPTION

Height: 35 to 45 feet
Spread: 25 to 35 feet
Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms
Crown shape: pyramidal
Crown density: moderate
Growth rate: fast
Texture: medium

Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: crenate; sinuate; undulate
Leaf shape: ovate
Leaf venation: pinnate; reticulate
Leaf type and persistence: deciduous
Leaf blade length: 2 to 4 inches; less than 2 inches
Leaf color: green
Fall color: red
Fall characteristic: showy

Flower

Flower color: white
Flower characteristics: spring flowering; very showy

Fruit

Fruit shape: round
Fruit length: < .5 inch
Fruit covering: dry or hard
Fruit color: brown; tan
Fruit characteristics: attracts birds; inconspicuous and not showy; no significant litter problem; persistent on the tree

Trunk and Branches

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns

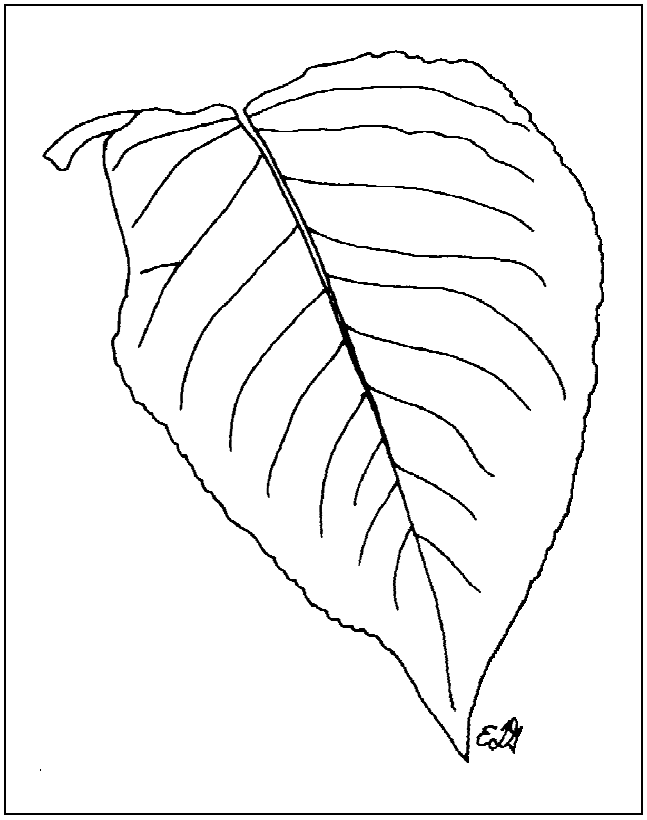

Figure 3. Foliage of 'Aristocrat' Callery Pear.

Pruning requirement: requires pruning to develop strong structure
Breakage: resistant
Current year twig color: brown
Current year twig thickness: thick

Culture

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

Other

Roots: surface roots are usually not a problem
Winter interest: no special winter interest
Outstanding tree: not particularly outstanding
Invasive potential: little, if any, potential at this time
Ozone sensitivity: tolerant
Verticillium wilt susceptibility: not known to be susceptible
Pest resistance: very sensitive to one or more pests or diseases which can affect tree health or aesthetics

USE AND MANAGEMENT

Planted commonly as a street tree or in parking lot islands, it is also quite suited for downtown tree pits due to its urban tolerance. Like 'Bradford' pear, it is able to tolerate small soil spaces. It looks great located along a street on 20 to 25-foot-centers and creates a 'corridor' for traffic flow.

The major problem with the 'Bradford' pears has been too many upright branches growing too closely together on the trunk which leads to branch breakage and splitting. 'Aristocrat' appears to be mostly free of this problem, but has been shown to be more susceptible to fire blight than 'Bradford', particularly in evaluations conducted in the south. Pruning the trees early in their life to space lateral branches along a central trunk should be all that is needed to ensure a strong, well-structured tree. Only buy trees with well-spaced branches.

Callery Pear trees are shallow-rooted and will tolerate most soil types including alkaline and clay, are pollution-resistant and tolerate drought and wet soil well. 'Aristocrat' is a very adaptable tree suited for downtown and other restricted soil spaces.

Pests

Aphids cause distorted growth and deposits of honeydew.

Scales occasionally affect pears.

Several borers may attack pear. Keep trees healthy to prevent attacks.

Diseases

'Aristocrat' pear is very susceptible to fire blight. This disease can devastate a planting. Tips of infected branches appear scorched and burnt. The leaves droop, turn brown, but remain hanging on the tree. The bacteria wash down the branch and form cankers. Bark inside the canker often shreds and peels. When a canker girdles a branch, that branch dies. Prune out infected branches well below the infected area.