Pandanus utilis
Screw-pine

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INTRODUCTION

Creating a striking landscape effect wherever it is used, Screw-Pine has a pyramidal, sometimes irregular, open, but much-branched silhouette, the smooth, stout trunks topped with full, graceful heads of long, thin leaves, three feet long and three inches wide, emerging spirally from stubby branches (Fig. 1). It is not a true pine tree. The blue-green foliage color adds to the striking nature of this exotic tree. The leaves are edged with small red spines and are used to make mats and baskets in the tropics. Branches have prominent leaf scars which encircle the stems. Large brace-roots emerge from the trunk several feet above the ground, helping to support the plant. Screw-Pine is capable of reaching 60 feet in height but is not usually seen over 25 feet in USDA hardiness zone 10 and 11, with a spread of 15 feet. Growth rate is slow to moderate, depending upon fertilization and watering schedules, and Screw-Pine is very popular for use as a specimen or container planting.

GENERAL INFORMATION

Scientific name: Pandanus utilis
Pronunciation: pan-DAY-nus YOO-tih-liss
Common name(s): Screw-pine
Family: Pandanaceae
USDA hardiness zones: 10B through 11 (Fig. 2)
Origin: not native to North America
Uses: container or above-ground planter; recommended for buffer strips around parking lots or for median strip plantings in the highway; near a deck or patio; reclamation plant; specimen; residential street tree; no proven urban tolerance

Availability: generally available in many areas within its hardiness range

DESCRIPTION

Height: 20 to 30 feet
Spread: 12 to 20 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: open
Growth rate: medium
Texture: coarse

Foliage
Leaf arrangement: spiral
Leaf type: simple
Leaf margin: pectinate; spiny
Leaf shape: linear
Leaf venation: parallel
Leaf type and persistence: evergreen
Leaf blade length: 18 to 36 inches
Leaf color: blue or blue-green; green
Fall color: no fall color change
Fall characteristic: not showy

Flower
Flower color: white
Flower characteristics: pleasant fragrance; inconspicuous and not showy; winter flowering

Fruit
Fruit shape: oval; round
Fruit length: 6 to 12 inches
Fruit covering: dry or hard
Fruit color: orange; yellow
Fruit characteristics: attracts squirrels and other mammals; suited for human consumption; fruit, twigs, or foliage cause significant litter; showy

Trunk and Branches
Trunk/bark/branches: grow mostly upright and will not droop; showy trunk; should be grown with a single leader; no thorns (Fig. 3)
Pruning requirement: needs little pruning to develop a strong structure
Breakage: resistant
Current year twig color: brown
Current year twig thickness: stout

Culture
Light requirement: tree grows in part shade/part sun; tree grows in full sun
Soil tolerances: clay; loam; sand; acidic; alkaline; extended flooding; well-drained
Drought tolerance: moderate
Aerosol salt tolerance: high

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
Pest resistance: no pests are normally seen on the tree

USE AND MANAGEMENT

Although the male plants possess conspicuous, fragrant flowers, it is the female plant which is preferred for landscape use because of the large, eight to nine-inch, globular fruits which hang from " cords". The fruits are made up of 100 to 200 tightly compressed drupes, similar to those of a pineapple, and change from green to yellow when ripe. There is only a small amount of edible pulp but the fruits are quite showy.

Screw-Pine produces fruit when grown in full sun but young plants may be kept in the shade. Soil should be well-drained and plants kept well-watered. Screw-Pine may be considered messy due to the constant leaf-drop throughout the year.

Veitch Screw-Pine or Ribbon-Plant (Pandanus veitchii) has white-banded, spiny leaves, does not fruit, and is often used as a pot plant. Sander Screw-Pine (Pandanus sanderi) has denser, more tufted foliage with golden yellow bands from center of leaf to margin.

Propagation is by seed (soaked 24-hours before planting), basal sucker division, or large cuttings.

Pests and Diseases

No pests or diseases are of major concern but occasionally scales.