

Araucaria heterophylla: Norfolk Island-Pine¹

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Introduction

This large evergreen has a single upright trunk, tiered branching habit, and a narrow pyramidal or columnar shape. Eventually reaching a height of about 80 feet, the tree possesses a rapid growth rate. The tree would grow taller, but lightning frequently limits height growth in the eastern United States. The bright green, <2-inch-long, individual leaves on young trees are lanceolate and look somewhat like spruce or fir needles at first glance. Mature leaves are somewhat contorted on twisted branches and scale-like. Both leaf types appear on the tree at the same time. The trunk is often curved and swollen at the base and black. The large, spiny, 10- to 15-pound cones are rare in cultivation.

General Information

Scientific name: *Araucaria heterophylla*

Pronunciation: air-ah-KAIR-ee-uh het-er-oh-FILL-uh

Common name(s): Norfolk Island-pine

Family: *Araucariaceae*

USDA hardiness zones: 10A through 11 (Figure 2)

Origin: native to Norfolk Island, Australia

UF/IFAS Invasive Assessment Status: not considered a problem species at this time, may be recommended (North, Central, South)

Uses: indoors; specimen



Figure 1. Full Form - *Araucaria heterophylla*: Norfolk Island-pine

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Figure 2. Range

Description

Height: 60 to 80 feet

Spread: 12 to 20 feet

Crown uniformity: symmetrical

Crown shape: pyramidal, columnar

Crown density: open

Growth rate: fast

Texture: fine

Foliage

Leaf arrangement: spiral (Figure 3)

Leaf type: simple

Leaf margin: entire

Leaf shape: linear, needle-like (filiform)

Leaf venation: parallel

Leaf type and persistence: evergreen, needled evergreen

Leaf blade length: < 2 inches

Leaf color: bright green

Fall color: no color change

Fall characteristic: not showy

Flower

Flower color: unknown

Flower characteristics: not showy

Fruit

Fruit shape: oval, cone

Fruit length: 5 inches

Fruit covering: dry or hard; spiny

Fruit color: green to brown

Fruit characteristics: does not attract wildlife; showy; fruit/leaves a litter problem



Figure 3. Leaf - *Araucaria heterophylla*: Norfolk Island-pine

Trunk and Branches

Trunk/branches: branches don't droop; not showy; typically one trunk; no thorns

Bark: gray brown and smooth, becoming darker, rougher, and breaking into small, scaly plates with age

Pruning requirement: little required

Breakage: resistant

Current year twig color: green, brown

Current year twig thickness: medium

Wood specific gravity: unknown

Culture

Light requirement: full sun

Soil tolerances: clay; sand; loam; alkaline; acidic; well-drained

Drought tolerance: high

Aerosol salt tolerance: can form large surface roots

Winter interest: no

Outstanding tree: no

Ozone sensitivity: unknown

Verticillium wilt susceptibility: unknown

Pest resistance: resistant to pests/diseases



Figure 4. Bark - *Araucaria heterophylla*: Norfolk Island-pine
Credits: Gitta Hasing

Pests

Scale.

Diseases

No diseases are of major concern. Sooty mold and leaf spot are minor problems.

References

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. University of Florida Institute of Food and Agricultural Sciences.

Koeser, A.K., Friedman, M.H., Hasing, G., Finley, H., Schelb, J. 2017. Trees: South Florida and the Keys. University of Florida Institute of Food and Agricultural Sciences.

Use and Management

Although they provide some shade, they are not suitable for patios or terraces because they are too large and large surface roots are common. In addition, columnar-formed trees generally cast limited shade due to the narrow crown. Many people forget how tall these trees grow. They often have an attractive pyramidal form (like a fir or spruce tree) when they are small, but they quickly grow too tall for most residential sites. They can live as a house plant for a long time if not overwatered.

Growing best in full sun locations, this tree thrives on a variety of soils and is moderately salt tolerant. Young plants should be watered well, especially during periods of drought. Be sure to prune out multiple trunks or leaders as they should be grown with one central leader.

Propagation is by seeds or cuttings of erect shoot tips only.