

Casuarina spp.: Australian-Pine¹

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Introduction

Long-favored for use in erosion control along beaches, Australian-pine tree is now outlawed in many parts of Florida due to its invasive nature, rapid growth rate, and non-native status. It is not a true pine tree and is not related to the pines. A straight, upright tree capable of reaching 70 to 90 feet in height and possessing rough, fissured, dark gray bark, Australian-pine has what appear to be long, soft, gray green needles but these “needles” are actually multi-jointed branchlets, the true leaves being rather inconspicuous. These “needles” sway gently in the breeze and give off a distinctive, soft whistle when winds are particularly strong. The insignificant flowers are followed by small, spiny cones, less than ½-inch-long.

General Information

Scientific name: *Casuarina* spp.

Pronunciation: kass-yoo-ar-EYE-nuh species

Common name(s): Australian-pine, *casuarina*

Family: *Casuarinaceae*

USDA hardiness zones: 9B through 11 (Figure 2)

Origin: native to Australia, Southeast Asia, and the Pacific Islands

UF/IFAS Invasive Assessment Status: prohibited from use in Florida according to the Federal Noxious Weed List, the Florida Department of Agriculture and Consumer Services

(FDACS) 5B-64.011 Prohibited Aquatic Plants, or FDACS 5B-57.007 Noxious Weed List (North, Central, South)



Figure 1. Full Form—*Casuarina* spp.: Australian-pine

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Figure 2. Range

Description

Height: 70 to 90 feet
Spread: 30 to 40 feet
Crown uniformity: irregular
Crown shape: upright/erect
Crown density: open
Growth rate: fast
Texture: fine

Foliage

Leaf arrangement: whorled
Leaf type: simple
Leaf margin: entire
Leaf shape: scale-like
Leaf venation: unknown
Leaf type and persistence: evergreen
Leaf blade length: < 2 inches
Leaf color: gray green
Fall color: no color change
Fall characteristic: not showy



Figure 3. Leaf—*Casuarina* spp.: Australian-pine

Flower

Flower color: yellow
Flower characteristics: not showy; male—emerges on spikes at the end of the needle-like structure; female—emerges in clusters from leaf axils
Flowering: year-round but most abundant in the spring, and then again in late summer/early fall



Figure 4. Flower—*Casuarina* spp.: Australian-pine

Fruit

Fruit shape: round, oval; cone-like
Fruit length: < ½ inch
Fruit covering: dry or hard; spiny
Fruit color: brown
Fruit characteristics: does not attract wildlife; not showy; fruit/leaves a litter problem
Fruiting: year-round but most abundant in early summer, and then again in mid winter



Figure 5. Fruit—*Casuarina* spp.: Australian-pine

Trunk and Branches

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

Bark: dark gray, fissured, and rough

Pruning requirement: needed for strong structure

Breakage: susceptible to breakage

Current year twig color: green

Current year twig thickness: thin, medium

Wood specific gravity: unknown



Figure 6. Bark—*Casuarina* spp.: Australian-pine
Credits: Gitta Hasing

Culture

Light requirement: full sun to partial shade

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

Drought tolerance: high

Aerosol salt tolerance: high

Other

Roots: can form large surface roots

Winter interest: no

Outstanding tree: no

Ozone sensitivity: unknown

Verticillium wilt susceptibility: unknown

Pest resistance: resistant to pests/diseases

Use and Management

Highly salt- and drought-tolerant, Australian-pine was widely used in seaside landscapes as a windbreak, screen, clipped hedge, and for topiary. Its ability to withstand heat and other adverse conditions made Australian-pine a favorite for street tree or specimen use also. It is not planted now due to the problems it has created including the elimination of habitat for native plants. Injured trees compartmentalize wounds poorly and decay advances rapidly through the trunk. Old trees which have been topped and abused often become hazardous and they can fall over or drop large limbs.

Growing in full sun or partial shade, Australian-pine will tolerate many adverse conditions, dry or wet soil, heat or high winds. Trees are hardy to about 25°F. Vigorous sprouts often originate from the roots of older trees knocked back by the cold.

Pests

No pests are of major concern.

Diseases

Root rot.

References

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