

## Longleaf casuarina

*Casuarina glauca* Sieber ex Spreng.

Casuarina family (Casuarinaceae)

Post-Cook introduction

This introduced species differs from related species in the longer and thicker drooping dull green wiry twigs 12–16 inches (30–40 cm) long and nearly  $\frac{1}{16}$  inch (1.5 mm) in diameter, with scale leaves 12–16 in a ring. The conelike fruits are about  $\frac{1}{2}$  inch (13 mm) in diameter. Stands are easily recognized because they are dense or closely spaced due to the root suckering habit of the tree.

Medium-sized evergreen tree to 40–50 ft (12–15 m) high, with straight trunk to  $1\frac{1}{2}$  ft (0.5 m) in diameter, becoming slightly enlarged at base, with thin crown of drooping twigs. Bark on erect branches gray brown, smoothish, on trunk becoming rough, thick, and furrowed. Inner bark light brown, slightly fibrous and astringent. Wiry drooping twigs with 12–16 long fine lines or ridges ending in scale leaves, the twigs shedding and forming rounded scar. A few main twigs become stout, brown, and rough.

Leaves consisting of 12–16 tiny pointed brown scales  $\frac{1}{32}$  inch (1 mm) long, about  $\frac{1}{2}$ – $\frac{3}{4}$  inch (13–19 mm) apart. Main twigs with rings as close as  $\frac{1}{8}$  inch (3 mm), with longer scale leaves to  $\frac{3}{16}$  inch (5 mm) and curved back, becoming stout, brown, and rough.

Flower clusters light brown, male and female apparently on different trees (dioecious). Male flower clusters (like spikes or catkins) at ends of long twigs, narrowly cylindrical, mostly  $\frac{3}{4}$ – $1\frac{1}{2}$  inches (2–4 cm) long and  $\frac{5}{16}$  inch (8 mm) in diameter. Male flowers crowded in rings of narrow pointed scales, consist of one stamen less than  $\frac{1}{8}$  inch (3 mm) long with two tiny sepal scales at base. Female flower clusters are short-stalked lateral balls (heads) about  $\frac{1}{4}$  inch (6 mm) in diameter, consisting of pistil with small ovary and long threadlike style.

The multiple fruit is a gray hard warty ball composed of many finely hairy points about  $\frac{1}{8}$  inch (3 mm) long and broad, each from a flower. An individual fruit splits open in two parts at maturity to release one winged light gray seed (nutlet) less than  $\frac{1}{4}$  inch (6 mm) long.

Sapwood pale yellow and heartwood dark brown, often has a beautiful figure provided by the prominent oak-like rays. The wood is hard, heavy, fine-textured, strong, but not durable in ground contact. It is difficult to season and to work. It takes a good polish, but is said

to be brittle. Uses in Australia include shingles, fence rails, staves, paneling, furniture, oxen yokes, and marine piling. In Hawaii, it is used only for fuel.

By far, this is the most common species of *Casuarina* in the Forest Reserves, with almost 1 million trees planted. Because of its suckering habit, the species was early recognized as excellent for recapturing erosion scars. It has come into disfavor, however, because it also takes over good land wherever planted. Most ranchers in Hawaii regard it as noxious. A typical stand may be seen near the beginning of the Aiea Loop trail on Oahu.

### **Special area**

Kalopa

### **Champion**

Height 65 ft (20.9 m), c.b.h. 10.4 ft (3.2 m), spread 37 ft (11.3 m). Waikoekoe, Waimea Village, Hawaii (1968).

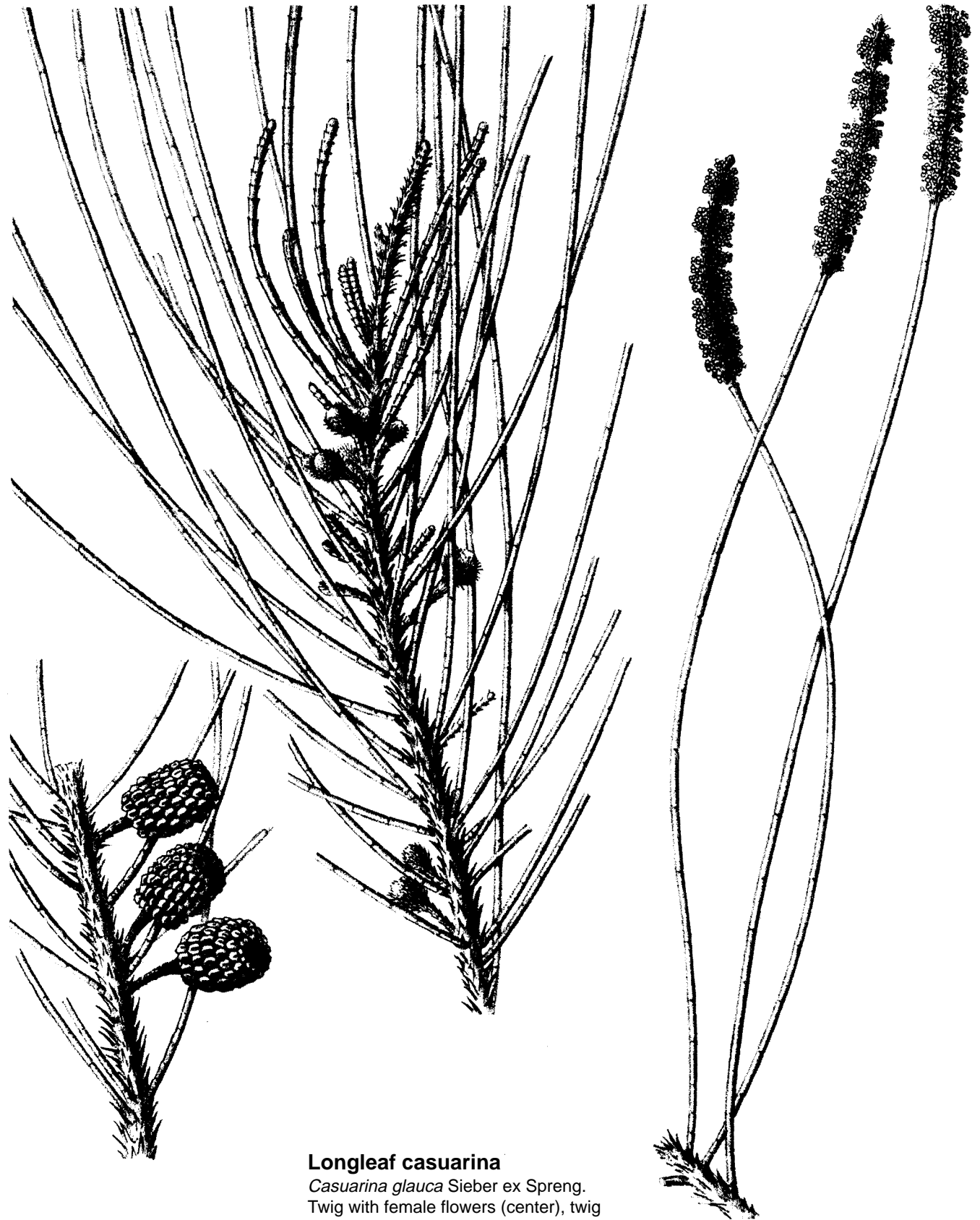
### **Range**

Native of coasts of eastern and southern Australia.

### **Other common names**

“longleaf ironwood,” “salt-marsh ironwood” (Hawaii); swamp-oak, she-oak (Australia)

This species grows naturally in Australia along coasts in swampy margins of tidal areas and should be suitable for planting in saline soils.



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Twig with female flowers (center), twig  
with fruits (lower left), twig with male  
flowers (right), 1 X (Maiden).