



## Expanding Tree Diversity in Hawai'i's Landscapes: Fern Pine, *Afrocarpus gracilior*

Richard Criley and John Montoya  
Department of Tropical Plant and Soil Sciences

Also known as weeping afrocarpus, this East African native tree is a graceful, densely foliated, oval to pyramidal tree with somewhat weeping branches. Distantly related to true pines, it is dioecious, meaning there are separate male and female trees, the latter shedding fruits. In height, it averages 40–60 feet with a spread of about 20–30 feet, but mature old specimens can reach 100 feet with a spread of 80 feet. Moderate growth rate. Low maintenance unless used as a hedge, where it requires frequent shearing.

### Recommended Use in Landscapes

- Street tree
- Specimen tree
- Shade tree
- Accent tree
- Parking lots
- Screen

### Distribution

- Native to Kenya, Uganda, Ethiopia, down into southeastern Africa

### Propagation Techniques

- Propagated by seed
- Cuttings are used to multiply male plants
- Use matured terminals, 2500–4000 ppm auxin

### Cultural Requirements and Tolerance

- Full sun
- Tolerant of many soil types but requires good drainage
- Not salt tolerant, but can be used set back from direct coastal exposure

- Its use as a street tree demonstrates tolerance to air pollution
- Stake to develop a strong leader.

### Flower and Fruit Characteristics

- Female flowers are inconspicuous and solitary; nearby male required for seed set
- Male flowers are 1-inch yellowish catkins.



A large *Afrocarpus gracilior* at Kapi'olani Community College

- The seed is about  $\frac{3}{4}$  inch long, subtended by a fleshy purplish aril.

### Leaf Characteristics

- Flat, linear leaves about  $\frac{1}{8}$  inch wide and 1 to 2 inches long
- Light green when young, maturing to dark green
- Pointed tip and tapered base

### Advantages for Use in Landscapes

- Does well in urban areas
- WRA score=0
- Evergreen
- Many uses in the landscape
- Pest and disease resistant
- Low maintenance

### Disadvantages for Use in Landscapes

- Some twig borer damage has been noted.
- Female trees produce messy fruits.



*Afrocarpus gracillior* foliage



*Afrocarpus gracillior* used as screening. New growth is a soft, light green.



Use as a street tree, but not under power lines.