

Ficus pseudopalma

Philippine fig

Moraceae

Forest Starr, Kim Starr, and Lloyd Loope
United States Geological Survey--Biological Resources Division
Haleakala Field Station, Maui, Hawai'i

January, 2003

OVERVIEW

F. pseudopalma, native to the Philippines, is an ornamental plant that is sparingly cultivated in Hawai'i. Many other *Ficus* species are commonly cultivated, but this peculiar looking small tree with long elliptic leaves, never became a widely popular ornamental. On Maui, only a few specimens can be observed, mostly planted by old buildings or condominiums as a specimen tree. This species does not spread from initial plantings because its pollinator wasp was never introduced. It is not known to be invasive anywhere else and it does not exhibit aggressive tendencies on Maui. Currently, *F. pseudopalma* probably does not represent any significant threat to native ecosystems because of its limited distribution and inability to reproduce. If something were to change, such as if the pollinator wasp was introduced or if it started to show aggressive tendencies, then a re-evaluation of the potential risks at that time may be necessary. The pollinator wasp for this species should not be introduced to prevent future spread.

TAXONOMY

Family: Moraceae (mulberry family)

Latin name: *Ficus pseudopalma* Blanco. (Neal 1948).

Synonyms: None known.

Common names: Philippine fig, *Draceana* fig (Bailey & Bailey 1976), palm fig (Riffle 1998).

Taxonomic notes: The genus *Ficus* is made up of about 1,000 species from pantropical and subtropical origins (Wagner et al. 1999).

Nomenclature: The species name, *pseudopalma*, refers to the similar appearance of this species to a small palm tree.

Related species in Hawai'i: In Hawai'i, about 60 other species of *Ficus* are cultivated (Wagner et al. 1999).

DESCRIPTION

"Erect shrub, glabrous, unbranched; leaves sessile, crowded at tips of branches and giving appearance of a small palm, blades oblanceolate, to 30 in long, nearly cordate, acute to acuminate, coarsely sinuate-toothed, stipules persistent, lanceolate, 2-3 in long; figs paired, ovoid, dark green, to 1 1/2 in long, short-peduncled" (Bailey & Bailey 1976).

BIOLOGY & ECOLOGY

Cultivation: This species is planted for its unique form and gives the appearance of a small palm. It is occasionally planted in Hawai'i and is only known from a few cultivated sites on Maui.

Invasiveness: *F. pseudopalma* is not known to be invasive.

Pollination: The fruit (syconium or fig) and reproduction systems of species in the genus *Ficus* are unique. Each species of *Ficus* has an associated species of agaonid wasp (Hymenoptera: Chalcidoidea: Agaonidae). *Ficus* species can only be pollinated by their associated agaonid wasps and in turn, the wasps can only lay eggs within their associated *Ficus* fruit.

Propagation: *F. pseudopalma* is probably propagated from cuttings or air layers.

Dispersal: *F. pseudopalma* is currently spread by people using the plant in landscaping.

Pests and Diseases: Brickell and Zuk (1997) report the following pests and diseases of *Ficus* spp.: mealybugs, scale insects, spider mites, root knot nematodes, and thrips occur under most environmental conditions, fungal and bacterial leaf spots, crown gall, twig dieback, and Southern blight.

DISTRIBUTION

Native range: *F. pseudopalma* is native to the Philippines (Neal 1965).

Global distribution: *F. pseudopalma* is cultivated in various tropical and sub-tropical regions of the world (Neal 1965).

State of Hawaii distribution: *F. pseudopalma* is cultivated in Hawai'i (Neal 1965). Distribution for islands other than Maui is uncertain.

Island of Maui distribution: On Maui, *F. pseudopalma* is sparingly cultivated. During an island wide survey, only 4 locations were observed. At each location a small planting was observed, often with only a single tree. *F. pseudopalma* can be observed in the front entrance of a condominium in Honokahau, near the corner by the State building in Wailuku, by the East Maui Irrigation building in Hali'i Maile, and by condominiums near the coast in Wailea.

CONTROL METHODS

Physical control: Trees could probably be cut down relatively easily, though may re-grow if not treated.

Chemical control: Cut stump or basal bark application with triclopyr would probably control this fig effectively.

Biological control: No biological control agents are currently known.

Cultural control: This species is currently not invasive in Hawai'i, though there is no guarantee that it will remain non-harmful in the future.

Noxious weed acts: None.

MANAGEMENT RECOMMENDATIONS

F. pseudopalma currently does not set viable seed in Hawai'i and is only sparingly cultivated on Maui. Though not currently invasive, future invasiveness is hard to predict. History shows that other *Ficus* species that have been widely planted through landscaping and forestry efforts in Hawai'i and have had their pollinator wasps introduced are now spreading into native ecosystems, destroying native trees in their path, and converting the native landscape. *Ficus* species also facilitate invasion of other non-native species. To prevent a repeat of the damaging effects of spreading *Ficus* species, the associated pollinator wasp for *F. pseudopalma* should not be introduced.

REFERENCES

- Bailey, L. H. and E. Z. Bailey. 1976. *Hortus*. 3rd ed. Macmillan General Reference, NY.
- Brickell, C. and J. D. Zuk. 1997. *The American Horticultural Society A-Z Encyclopedia of Garden Plants*. DK Publishing, Inc., NY.
- Neal, M.C. 1948. *In Gardens of Hawai'i*. Bernice P. Bishop Museum, Special Publication 40, Honolulu, HI.
- Riffle, R.L. 1998. *The Tropical Look*. Timber Press, Inc., Portland, Oregon.
- Wagner, W.L., D.R. Herbst, and S.H. Sohmer. 1999. *Manual of the Flowering Plants of Hawai'i*. 2 vols. Bishop Museum Special Publication 83, University of Hawai'i and Bishop Museum Press, Honolulu, HI.