



**Paperbark Tree**

*Melaleuca quinquenervia* (Cav.) Blake  
Myrtle family (Myrtaceae)

**NATIVE RANGE**

Australia, New Guinea and New Caledonia

**DESCRIPTION**

Melaleuca, also known as paperbark tree, punk tree, cajeput tree, and white bottlebrush tree, is a subtropical tree in the eucalyptus family, with spongy, white, paper-like bark that can grow to 50 feet in height. The 1-2 inch long, gray-green, oval leaves of paperbark tree are arranged alternately along the stem and smell of camphor when crushed. Flowers are white, brush-like spikes and the fruits are small, woody, button-like seed capsules.

**ECOLOGICAL THREAT**

Paperbark tree is an aggressive invader that spreads rapidly, converting native plant communities such as sawgrass marshes, wet prairies, and aquatic sloughs into impenetrable paperbark thickets. In a single year, one paperbark tree can produce a dense island hammock nearly 600 feet in diameter. Its greatest threat is to the Florida Everglades ecosystem, which faces extreme and possibly irreversible alteration as a result of intrusion by paperbark tree and another troublesome exotic, Brazilian pepper (*Schinus terebinthifolius*).



**DISTRIBUTION IN THE UNITED STATES**

The distribution of paperbark tree in the U.S. is currently confined to southern Florida, where it occupies an estimated several million acres, primarily within the Florida Everglades system.

**HABITAT IN THE UNITED STATES**

Paperbark tree tolerates most subtropical ecosystems, preferring wet to intermittently wet sites.

**BACKGROUND**

Introduced into southern Florida in the early 1900s, paperbark tree was widely planted for landscaping and for "swamp drying."

**BIOLOGY & SPREAD**

About three years after germination, paperbark trees begin to produce and store copious numbers of seeds in closed woody capsules. The seeds are stored until some form of stress, such as frost, fire or human-induced injury, including herbicide, causes the capsules to open. A mature tree can produce more than a million seeds per year and store an estimated 20 million. Seeds of paperbark tree are dispersed by wind and water.

**MANAGEMENT OPTIONS**

Restoration of areas infested with paperbark tree requires a well planned, long term commitment to elimination of all paperbark trees from the site and prevention of reinfestation. The age and extent of an infestation, the availability of people and other resources, and the proximity to open water or wetlands will dictate the type of management best suited for each site.

### **Manual**

Seedlings can be pulled by hand, especially when the soil has dried out some, small to medium-sized trees can be pushed over, and larger trees may be cut. Resprouting will likely occur after cutting or hand-pulling, requiring follow-up removals or treatment with herbicide.

### **Chemical**

Herbicides are usually needed for extensive infestations and mature paperbark trees and may be applied to freshly cut stumps or to girdled trunks. However, as noted previously, herbicide use will cause paperbark tree to release large caches of stored seeds.

### **Biological**

Biological control may offer some help in management of this aggressive invader. Several species of Australian snout beetles are being released or evaluated by the U.S. Department of Agriculture. The beetles are specific to *Melaleuca* and feed on its shoots, reducing the plant's ability to reproduce.

**USE PESTICIDES WISELY:** Always read the entire pesticide label carefully, follow all mixing and application instructions and wear all recommended personal protective gear and clothing. Contact your state department of agriculture for any additional pesticide use requirements, restrictions or recommendations.

**NOTICE:** mention of pesticide products on this page does not constitute endorsement of any material.

### **CONTACTS**

For more information on the management of melaleuca, please contact:

- Francois Laroche, francois.laroche at sfwmd.gov

### **OTHER LINKS**

- <http://www.invasive.org/search/action.cfm?q=Melaleuca%20quinquenervia>
- [http://www.hear.org/starr/hiplants/images/thumbnails/html/melaleuca\\_quinquenervia.htm](http://www.hear.org/starr/hiplants/images/thumbnails/html/melaleuca_quinquenervia.htm)

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### **PHOTOGRAPH**

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