



# Invasive Species Management Plans for Florida

# **Coral Ardisia**

## ***Ardisia crenata* (Sims) Myrsinaceae**

### INTRODUCTION

*Ardisia crenata*, or Coral Ardisia, is a small upright shrub that is used and sold extensively in the horticulture industry as an ornamental plant – often called Christmas berry. Ardisia's native range includes areas of Japan and northern India. Ardisia escaped cultivation in 1982, spreading into wooded areas. Currently ardisia has established in many counties in northern and central Florida. In the landscape, ardisia is known and grown for its persistent red berries, glossy foliage and low maintenance.

### DESCRIPTION

Coral ardisia is a small upright shrub that can grow up to 6 feet in height. Ardisia can be seen growing in clumps, often times multi-stemmed. Leaves are dark green and thick, somewhat glossy, roughly 8 inches long with scalloped margins. The flowers are white or pinkish, borne in axillary clusters. The berries, which are readily eaten by birds, turn a bright coral red color and hang or droop on the plant. Ardisia is usually seen in fairly large colonies with its persistent red berries. Recent research has also shown the presence of large seedling clumps in association with larger plants. These seedlings can remain juvenile for quite some time and once removal of the larger, dominant specimens occurs, the seedlings begin to grow.

### IMPACTS

Coral ardisia has naturalized in many natural areas across Florida, such as hardwood hammocks, becoming a significant pest. The Florida Exotic Pest Plant Council lists Coral ardisia as a category I species because of its invasive nature and ability to disrupt native plant communities. Ardisia can potentially shade out native seedling and understory plants, preventing their growth and development. Mature plants are prolific seed producers and can be surrounded by many seedlings, also leading to reduced seed germination of valued native species.

Ardisia is capable of resprouting after cutting back or after a fire. Heavy fruit set is produced after 2 years. Viable seed can remain on plants throughout the year, providing a food source for birds and other wildlife. Birds and raccoons have been shown to consume and disperse fruits. Germination rates are fairly high for ardisia, ranging from 84-98%, with germination taking up to 40 days once the fruit has been removed from the plant. Ardisia seeds can germinate in a wide range of soil types from acidic to alkaline and at temperatures of 25 C or higher.

## MANAGEMENT

Preventative: The first step in preventative control of ardisia is to limit planting and removal of existing plants within the landscape. If possible, removal should occur before seeds are produced. Since seeds remain on the plant for several months, care must be exercised to prevent seed spread and dispersal during the removal process.

Cultural: Cultural management is difficult once the plant has established, but a healthy ground cover will limit seedling establishment.

Mechanical: Mechanical methods can be grouped into several strategies. With small or isolated infestations, hand-pulling is effective for seedling control. Larger plants can be cut or burned, but regrowth from underground rhizomes and root crowns. Disking can be very effective if the disking operation is frequent and sufficiently deep to cut the rhizome/rootstocks. However, the use of disking is very limited due to the type of areas that ardisia is most problematic – woodlands. It must also be noted that any type of mechanical operation, whether it be disking or burning, should be monitored for at least one year to inspect and remove seedlings and/or resprouts.

Biological: There are no known biological control agents for ardisia.

Chemical: In areas with a dense groundcover of seedlings, a broadcast spray of a glyphosate or triclopyr-ester may be effective, generally a 2-3% solution. The waxy leaves of ardisia may limit glyphosate uptake, so a surfactant is recommended. Due to the non-selective nature of glyphosate, use precaution to avoid damaging desirable plants. The woody bark of desirable trees may be contacted, but avoid green bark. Triclopyr herbicide is also very effective, especially on larger, more mature specimens. A low-volume basal application mixed with an oil diluent has shown very promising

results. Triclopyr applications containing 18% basal oil is effective. Ardisia is also susceptible to 2,4-D, but more so at the seedling stage or regrowth after cutting/burning of mature plants.

REFERENCES AND USEFUL LINKS:

Floridata Homepage:

[http://www.floridata.com/main\\_fr.cfm?state=Welcome&viewsrc=welcome.htm](http://www.floridata.com/main_fr.cfm?state=Welcome&viewsrc=welcome.htm)

University of Florida Center for Aquatic and Invasive Plants:

<http://aquat1.ifas.ufl.edu/welcome.html>

University of Florida's Cooperative Extension Electronic Data Information Source:

<http://edis.ifas.ufl.edu/index.html>

Langeland, K.A. and K. Craddock Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas. IFAS Publication SP 257. University of Florida, Gainesville. 165 pp.

Pacific Island Ecosystems at Risk (PIER). Plant Threats to Pacific Ecosystems:

<http://www.hear.org/pier/threats.htm>

## Mature Plant

- Small upright shrub, up to 6 feet tall
- Often grows in large colonies
- Shade tolerant, understory species



## Seedlings

- Seedlings often found encircling a mature plant
- Plants will remain in juvenile stage until mature specimen is removed



## Leaves

- Alternate arrangement, but tight to the main stem
- Scalloped margins
- Dark, thick, glossy green



## Flowers and Fruit

- Flowering occurs in spring – small white/pink clusters
- Fruit are bright red and hang from the plant
- Persist on the plants for several months



## Fruit and Seed

- Fruit readily consumed by wildlife - birds
- Seed viability is very high and germinate in a wide range of soil conditions

