

Air Potato

Dioscorea bulbifera

Order: Liliales

Family: Dioscoreaceae

Description: Air potato is an invasive vine in Florida, consisting of large, green, heart-shaped leaves. It can quickly grow 60-70 feet in length, which is long enough to blanket even the tallest trees like those found in hardwood hammocks. As a member of the yam family, air potato produces large numbers of aerial tubers (potato-like growths attached to the stem) that will grow into new stems.

Special Features:

- **Medicine** – *Dioscorea* varieties contain the steroid diosgenin, which is a principle material used in the manufacture of birth control pills.
- **Food for Thought** – Air potato is cultivated in West Africa for their edible underground tubers. Uncultivated forms, such as in Florida, are reported to be bitter and even poisonous.
- **Growth** – Air potato has a winter dormant period in which stems die back to the ground. After dormancy, the underground tubers give rise to new stems, which grow very quickly often reaching 70 feet by the end of the growing season.

Similar Species:

Dioscorea alata and *Dioscorea sansibarensis* are two other members of the yam family that are similar to the air potato. *D. alata* is easily distinguished from the other two species because it twines to the right instead of the left. *D. sansibarensis* twines left like the air potato, but is further characterized by its small, purplish bulbs.

Range and Habitat: The origin of air potato is uncertain, however some believe the plant is native to both Africa and Asia. Others believe it was originally native to Asia and subsequently introduced into

Africa. Air potato prefers growing in hardwood forests and invades thickets, disturbed areas and tropical hammocks. It is rarely found along disturbed edges of pinelands, and because it is not salt tolerant, air potato avoids marine areas as well.

Reproduction:

Dioscorea species are dioecious, meaning they have male reproductive organs in one individual and female in the other. In Florida, flowers occur during the summer months (but not every year). The inconspicuous flowers are pleasant smelling and green to white in color. Seeds are wind-dispersed although fruit set in Florida occurs only occasionally.

Notes:

- **History** – Air potato was probably introduced into Florida as an ornamental and a food plant in about 1905. By the early 1970s it was already recognized as a pest plant throughout the state.
- **Ecology** - Potato vine is a serious weed in central and southern Florida. Vines grow as rapidly as 7 inches per day, quickly spiraling up to tree tops. The vines form dense masses that shade out trees and may eventually kill them.
- **Preventative Measures** – Vines grow rapidly in areas of direct sunlight so efforts to remove the plant should be concentrated in these areas first.