

# Knox County Cooperative Invasive Species Management Area

Invasive Species of the Month for August 2021

# Chinese Yam (Dioscorea polystachya)

Origin: China and India

Introduction: First introduced as an ornamental/food species in the 1800s

**Interesting Fact:** Chinese Yam is sometimes also called Cinnamon Vine, which refers to the cinnamon smell of its flowers.

### **Botanical Terminology:**

Bulbil – a type of asexual reproductive structure that can form a new plant.

Leaf Axil – where the leaf/leaf petiole connects to the stem

**Description**: Chinese Yam is an herbaceous perennial vine in the Yam Family. It has mainly opposite, mostly fiddle-shaped leaves and aerial bulbils in the leaf axils.

## **Defining characteristics:**

- Mainly opposite (occasionally alternate) leaves with cordate bases and often a fiddle shape
- White to greenish flowering spikes hang from leaf axils
- Aerial bulbils form in late summer and look like small, warty potatoes



<u>Left Image</u>: Chinese Yam climbing up a tree sapling.

Right Image: Aerial bulbils



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**Habitat:** Forests, disturbed areas, right-of-ways, forest edges, riparian areas, floodplain forests, and fence rows



Above Image: Chinese Yam spreading as groundcover in Knox County.

**Ecological threat:** Chinese Yam can smother small trees and shrubs by its twining, vigorous growth habit. The weight from a dense Chinese Yam patch can break small branches. Chinese Yam can also form dense groundcover, inhibiting native herbaceous species as well. Its primary mode of dispersal are its aerial bulbils which can be spread by rodents and waterways.

### **Control Methods:**

- <u>Manual</u>: Repetitive mowing/clipping of the vines can eventually exhaust the root system after several growing seasons. To reduce spread, bulbils can be handpicked and bagged.
- <u>Chemical</u>: Generally, the most effective method especially on large, dense patches. Foliar applications of herbicides with 2-3% glyphosate\* or triclopyr\* have been shown to be effective. Foliar applications near the end of the season are better for controlling old populations with extensive root systems. However, applications in early to mid summer can help prevent bulbil production.

#### References

Kaufman, Sylvan R. and Wallace Kaufman. 2012. Invasive Plants. Stackpole Books.

Tu, Mandy. (2002). "ELEMENT STEWARDSHIP ABSTRACT for *Dioscorea oppositifolia* L. *syn. Dioscorea batatas* (Decne), Chinese yam, cinnamon vine." *The Nature Conservancy.* 

<sup>\*</sup>Always follow herbicide label instructions.