

NAME OF SPECIES: *Dioscorea oppositifolia*

Synonyms: *Dioscorea batatas*

Common Name: Chinese Yam, Cinnamon vine, Air potato

**A. CURRENT STATUS AND DISTRIBUTION**

I. In Wisconsin?	1. YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	2. Abundance:
	3. Geographic Range:
	4. Habitat Invaded: first invades fencerows, edges of mesic forests, streambanks, then moves to more undisturbed areas Disturbed Areas <input checked="" type="checkbox"/> Undisturbed Areas <input checked="" type="checkbox"/>
	5. Historical Status and Rate of Spread in Wisconsin:
	6. Proportion of potential range occupied:
II. Invasive in Similar Climate Zones	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Where: Connecticut, Illinois, Indiana, New Jersey, New York, Ohio, Pennsylvania, Vermont, Massachusetts
III. Invasive in Similar Habitat Types	1. Upland <input type="checkbox"/> Wetland <input type="checkbox"/> Dune <input type="checkbox"/> Prairie <input type="checkbox"/> Aquatic <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Grassland <input type="checkbox"/> Bog <input type="checkbox"/> Fen <input type="checkbox"/> Swamp <input type="checkbox"/> Marsh <input type="checkbox"/> Lake <input type="checkbox"/> Stream <input type="checkbox"/> Other: edges and streambanks
IV. Habitat Effected	1. Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH): favors silty loam, high Nitrogen content, riparian
	2. Conservation significance of threatened habitats:
V. Native Habitat	1. List countries and native habitat types: China, India, Sri Lanka
VI. Legal Classification	1. Listed by government entities? No, but listed by Southeast Exotic Pest Plant Council as invasive in Tennessee
	2. Illegal to sell? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Notes:

**B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS**

I. Life History	1. Type of plant: Annual <input type="checkbox"/> Biennial <input type="checkbox"/> Monocarpic Perennial <input type="checkbox"/> Herbaceous Perennial <input type="checkbox"/> Vine <input checked="" type="checkbox"/> Shrub <input type="checkbox"/> Tree <input type="checkbox"/>
	2. Time to Maturity: can reproduce during first growing season
	3. Length of Seed Viability: less than a year unless protected i.e. by leaf litter.
	4. Methods of Spread: Asexual <input checked="" type="checkbox"/> Sexual <input checked="" type="checkbox"/> Please note abundance of propagules and other important information: Not documented to reproduce sexually in N. America but can; spreads "rapidly" via bulbils (aerial tubers)
	5. Hybridization potential:
II. Climate	1. Climate restrictions: ranges from Vermont to Florida in US
	2. Effects of potential climate change:

III. Dispersal Potential	<p>1. Pathways - Please check all that apply:  Intentional: Ornamental <input checked="" type="checkbox"/> Forage/Erosion control <input type="checkbox"/>  Other:</p> <p>Unintentional: Bird <input type="checkbox"/> Animal <input checked="" type="checkbox"/> Vehicles/Human <input type="checkbox"/>  Wind <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other: Rodents carry bulbils to infect new areas</p> <p>2. Distinguishing characteristics that aid in its survival and/or inhibit its control: Tubers can grow to 1m deep and are difficult to remove.</p>
IV. Ability to go Undetected	HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW <input checked="" type="checkbox"/>
<b>C. DAMAGE POTENTIAL</b>	
I. Competitive Ability	<p>1. Presence of Natural Enemies: none</p> <p>2. Presence of Competitors: none found (out competes natives)</p> <p>3. Rate of Spread:  HIGH (1-3 yrs) <input type="checkbox"/> MEDIUM (4-6 yrs) <input type="checkbox"/> LOW (7-10 yrs) <input type="checkbox"/>  Notes: Spread can be high in riparian corridors and steep slopes. Dispersed primarily by gravity and hydrochory so range of dispersal can depend on energy flow and flood disturbance.</p>
II. Environmental Effects	<p>1. Alteration of ecosystem/community composition?  YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>  Notes: covers tops of shrubs and small trees completely shading understory killing other plants, animals not seen using sp. as habitat</p> <p>2. Alteration of ecosystem/community structure?  YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>  Notes: removes light from understory and shades out plants</p> <p>3. Alteration of ecosystem/community functions and processes?  YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  Notes:</p> <p>4. Allelopathic properties? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  Notes:</p>
<b>D. SOCIO-ECONOMIC Effects</b>	
I. Positive aspects of the species to the economy/society:	Notes: sold as ornamental species, tuber edible (though not generally eaten in N. America)
II. Potential socio-economic effects of restricting use:	Notes: Potentially harm ornamental trade as species could no longer be sold
III. Direct and indirect effects :	Notes:
IV. Increased cost to a sector:	Notes:
V. Effects on human health:	Notes: edible and has medicinal uses
<b>E. CONTROL AND PREVENTION</b>	
I. Detection Capability:	Notes: easy to detect when established
II. Costs of Prevention (including education; please be as specific as possible):	Notes:
III. Responsiveness to prevention	Notes: can be removed if caught early, moderate success if plants

efforts:	are already established
IV. Effective Control tactics:	Mechanical <input checked="" type="checkbox"/> Biological <input type="checkbox"/> Chemical <input checked="" type="checkbox"/> Times and uses: in small patches tubers can be manually excavated; in larger patches vines can be repeatedly cut (must be repeated for a few years); herbicide can be applied but must be reapplied, best results when herbicide applied before bulbil production, can also be applied in dormant season to reduce risk to non-target species.
V. Minimum Effort:	Notes:
VI. Costs of Control:	Notes:
VII. Cost of prevention or control vs. Cost of allowing invasion to occur:	Notes: effort in removing small patches much much less than that of patches that are allowed to develop
VIII. Non-Target Effects of Control:	Notes: Herbicides will kill native species as well
IX. Efficacy of monitoring:	Notes:
X. Legal and landowner issues:	Notes:

**F. REFERENCES USED:**

- UW Herbarium
- WI DNR
- TNC
- Native Plant Conservation Alliance
- IPANE
- USDA Plants
- Other invasive.org

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