NAME OF SPECIES: Humulus japonicus
Synonyms: Humulus scandens
Common Name: Japanese Hops

A. CURRENT STATUS AND DISTRIBUTION	
I. In Wisconsin?	1. YES ☒ NO ☐
	2. Abundance: locally abundant in small populations
	3. Geographic Range: Grant, Crawford, Lafayette, and Dane Counties
	4. Habitat Invaded: watersheds, drainage ditches, streambanks and banks of lakes Disturbed Areas ☒ Undisturbed Areas ☒
	5. Historical Status and Rate of Spread in Wisconsin: historically a slow spreader but a few populations have become very agressive
	6. Proportion of potential range occupied: small proportion of potential range currently occupied
II. Invasive in Similar Climate Zones	YES ☒ NO ☐ Where: ND, SD, NY, CT, MA, MN, MI, VT, IL, IN, OH, PA, (NE United States)
III. Invasive in Similar Habitat Types	1. Upland ☐ Wetland ☒ Dune ☐ Prairie ☐ Aquatic ☐ Forest ☐ Grassland ☐ Bog ☐ Fen ☐ Swamp ☐ Marsh ☒ Lake ☐ Stream ☐ Other: watersheds
IV. Habitat Effected	1. Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH): moist soil, prefers sandy, loamy and clay soils; will grow in full sun or shade, prefers part shade
	2. Conservation significance of threatened habitats: has invaded natural areas, completely takes over wetland habitats
V. Native Habitat	1. List countries and native habitat types: China and Japan
VI. Legal Classification	1. Listed by government entities? Connecticut: potentially invasive, banned; Massachusetts: prohibited
	2. Illegal to sell? YES ☒ NO ☐ Notes: CT, MA
B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS	
I. Life History	1. Type of plant: Annual ☒ Biennial ☐ Monocarpic Perennial ☐ Herbaceous Perennial ☒ Vine ☒ Shrub ☐ Tree ☐ (plant can be both annual or perennial, appears to be only annual in WI)
	2. Time to Maturity:
	3. Length of Seed Viability: ~3 years
	4. Methods of Spread: Asexual ☐ Sexual ☒ Please note abundance of propagules and and other important information:
	5. Hybridization potential:
II. Climate	1. Climate restrictions:
	2. Effects of potential climate change: plant is annual here because of colder winters but is a perennial further south; could become perennial if WI becomes too warm

III. Dispersal Potential	1.Pathways - Please check all that apply: Intentional: Ornamental ☒ Forage/Erosion control ☐ Other: The single plant growing in the Longenecker Horticultural Gardens of the UW Arboretum has never produced any seeds. Unintentional: Bird ☐ Animal ☐ Vehicles/Human ☒ Wind ☒ Water ☒ Other:
	2. Distinguishing characteristics that aid in its survival and/or inhibit its control: grows very quickly, grows over other plants
IV. Ability to go Undetected	HIGH ☐ MEDIUM ☒ LOW ☐
C. DAMAGE POTENTIAL	
I. Competitive Ability	1. Presence of Natural Enemies: Pseudocercospora humuli (a fungi that infects japanes hop), Epirrhoe sepergressa and Chytonix segregata (insects); unsure if these are from home range or US (likely home range)
	2. Presence of Competitors: out competes natives
	3. Rate of Spread: HIGH(1-3 yrs) ☐ MEDIUM (4-6 yrs) ☐ LOW (7-10 yrs) ☐ Notes:
II. Environmental Effects	1. Alteration of ecosystem/community composition? YES ☒ NO ☐ Notes: forms thick, tangles of vines (chest or head tall)
	2. Alteration of ecosystem/community structure? YES ☒ NO ☐ Notes: dominates understory
	3. Alteration of ecosystem/community functions and processes? YES ☒ NO ☐ Notes: If burned could spread fire to forest canopy
	4. Allelopathic properties? YES ☐ NO ☐ Notes:
D. SOCIO-ECONOMIC Effects	
I. Positive aspects of the species to the economy/society:	Notes: Occasionally sold as garden ornamental.
II. Potential socio-economic effects of restricting use:	Notes: would potentially have small impact on ornamental industry (but rarely sold in WI) The cultivar 'Aureus' is planted as an ornamental vine.
III. Direct and indirect effects :	Notes:
IV. Increased cost to a sector:	Notes:
V. Effects on human health:	Notes: Hairs on plant cause dermatitis and blistering
E. CONTROL AND PREVENTION	
I. Detection Capability:	Notes: easy to detect later in the growing season, difficult to see when plants are just sprouting in the spring
II. Costs of Prevention (including education; please be as specific as possible):	Notes:
III. Responsiveness to prevention	Notes:

efforts:	
IV. Effective Control tactics:	Mechanical ☒ Biological ☐ Chemical ☒ Times and uses: mechanical: be sure to pull all rootstock. Plant can likely resprout root or vine so remove from place where it could resprout. Pull at any time (as act as annual here) but before they set seed (flower Aug-Sept). Chemical: apply glyphosate at any time before flowering. If biological controls were used, would affect Humulus lupulus (hops used in beer manufacture), so biological controls not an option
V. Minimum Effort:	Notes:
VI. Costs of Control:	Notes:
VII. Cost of prevention or control vs. Cost of allowing invasion to occur:	Notes: forms dense, tangled, chest high monocutlures when established. Much easier to treat if only a few plants.
VIII. Non-Target Effects of Control:	Notes: Use of herbacides will kill other plants.
IX. Efficacy of monitoring:	Notes: good monitoring could locate the fast growing plants as they begin to establish themselves.
X. Legal and landowner issues:	Notes: Occasionally used as ornamental. May occur on private lands.

F. REFERENCES USED:

1 Ed Hasselkus, UW Emeritus Horticulture Professor. Comments on Invasive Plant Classification 2007.

☐ UW Herbarium
☒ WI DNR
☒ TNC
☐ Native Plant Conservation Alliance
☐ IPANE
☐ USDA Plants
☒ Otherhttp://www.invasive.org/weeds/asian/humulus.pdf

Author(s), Draft number, and date completed: Mary Meier, 3-27-07

Reviewer(s) and date reviewed: B. Edgin

Approved and Completed Date: Thomas Boos, 9-11-07