NAME OF SPECIES: *Vincetoxicum rossicum*
Synonyms: Cynanchum rossicum
Common Name:*Pale Swallow-wort, European Swallow-wort, dog-strangling vine*

A. CURRENT STATUS AND DISTRIBUTION		
I. In Wisconsin?	1. YES ☐	NO ☒
	2. Abundance:	
	3. Geographic Range:	
	4. Habitat Invaded: Invades disturbed areas and with then move on to undisturbed areas Disturbed Areas ☒ Undisturbed Areas ☒	
	5. Historical Status and Rate of Spread in Wisconsin:	
	6. Proportion of potential range occupied: very small: range is rapidly expanding in N. America and is not near max. distribution, future growth is expected	
II. Invasive in Similar Climate Zones	YES ☒ NO ☐ Where: Ontario, MA, NJ, NY, PA, MI, IN, CT, NH, Quebec, MO, MD	
III. Invasive in Similar Habitat Types	1. Upland ☒ Wetland ☐ Dune ☐ Prairie ☐ Aquatic ☐ Forest ☒ Grassland ☒ Bog ☐ Fen ☐ Swamp ☐ Marsh ☐ Lake ☐ Stream ☐ Other:	
IV. Habitat Effected	1. Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH): neutral to calcarious soils , generalist, tolerates a wide array of soil types	
	2. Conservation significance of threatened habitats: Will form monocultures in grasslands and forests removing habitat for birds, negatively affecting monarch butterflies, and outcompeting native plants	
V. Native Habitat	1. List countries and native habitat types: Ukraine and southwestern Russia	
VI. Legal Classification	1. Listed by government entities? Connecticut: invasive, banned; Massachusetts: prohibited; New Hampshire: prohibited invasive species	
	2. Illegal to sell? YES ☒ NO ☐ Notes: MA, CT, NH	
B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS		
I. Life History	1. Type of plant: Annual ☐ Biennial ☐ Monocarpic Perennial ☐ Herbaceous Perennial ☒ Vine ☒ Shrub ☐ Tree ☐	
	2. Time to Maturity: 1 year under ideal conditions; usually several years	
	3. Length of Seed Viability: unknown	
	4. Methods of Spread: Asexual ☒ Sexual ☒ Please note abundance of propagules and and other important information: can sprout via root crown, spread by seed	
	5. Hybridization potential: can hybridize with congeners	
II. Climate	1. Climate restrictions:	
	2. Effects of potential climate change:	

III. Dispersal Potential	1.Pathways - Please check all that apply: Intentional: Ornamental ☒ Forage/Erosion control ☐ Other: original introduction to NA intentional Unintentional: Bird ☐ Animal ☐ Vehicles/Human ☒ Wind ☒ Water ☒ Other: main dispersal by wind. Water dispersal would be very unusual.
	2. Distinguishing characteristics that aid in its survival and/or inhibit its control: polyembryonic seeds, seeds germinate in both fall and spring facultative self-pollination
IV. Ability to go Undetected	HIGH ☐ MEDIUM ☐ LOW ☒ Seedlings are shade tolerant and can establish and grow for many years below herb canopy without being easily detected
C. DAMAGE POTENTIAL	
I. Competitive Ability	1. Presence of Natural Enemies: no
	2. Presence of Competitors: outcompetes natives
	3. Rate of Spread: HIGH(1-3 yrs) ☐ MEDIUM (4-6 yrs) ☐ LOW (7-10 yrs) ☐ Notes: more aggressive than Black Swallow-Wort; smaller seeds more easily dispersed by wind
II. Environmental Effects	1. Alteration of ecosystem/community composition? YES ☒ NO ☐ Notes: outcompetes and dominates ground cover. Can prevent tree, shrub and forb regeneration
	2. Alteration of ecosystem/community structure? YES ☒ NO ☐ Notes: removes habitat for other species; Can prevent tree, shrub and forb regeneration
	3. Alteration of ecosystem/community functions and processes? YES ☐ NO ☐ Notes:
	4. Allelopathic properties? YES ☐ NO ☐ Notes: unknown
D. SOCIO-ECONOMIC Effects	
I. Positive aspects of the species to the economy/society:	Notes: No current economic uses for species. No commercial value in Wisconsin (4)
II. Potential socio-economic effects of restricting use:	Notes: none
III. Direct and indirect effects :	Notes:
IV. Increased cost to a sector:	Notes:
V. Effects on human health:	Notes: poisonous to livestock if eaten and likely also humans
E. CONTROL AND PREVENTION	
I. Detection Capability:	Notes:
II. Costs of Prevention (including education; please be as specific as possible):	Notes:
III. Responsiveness to prevention	Notes: removal of single plants is relatively effective with a few

efforts:	years of follow up treatment
IV. Effective Control tactics:	Mechanical ☒ Biological ☐ Chemical ☒ Times and uses: dig up: root crowns must be completely removed; herbicides may be used and must be repeated to eliminate all plants
V. Minimum Effort:	Notes:
VI. Costs of Control:	Notes:
VII. Cost of prevention or control vs. Cost of allowing invasion to occur:	Notes: once species dominates, it is very difficult to eradicate; much easier to remove individual plants as they occur
VIII. Non-Target Effects of Control:	Notes: use of pesticide spray on foliage will also kill other plants, application on stems will have little non-target effects
IX. Efficacy of monitoring:	Notes:
X. Legal and landowner issues:	Notes: landowners in NY have abandoned horse pastures after failing to push the plant back after years of battle; if occured on private lands landowners will likely want the plant gone to preserve retail value

F. REFERENCES USED:

☐ UW Herbarium
☒ WI DNR
☒ TNC
☐ Native Plant Conservation Alliance
☐ IPANE
☐ USDA Plants
☒ Other

(1) Weston, LA, Barney, JN, DiTommaso, A. 2005. "A Review of the Biology and Ecology of Three Invasive Perennials in New York State: Japanese knotweed (*Polygonum cupidatum*), Mugwort (*Artemisia vulgaris*) and Pale Swallow-wort (*Vincetoxicum rossicum*). < http://www.ipcnys.org/files/Plant%20and%20Soil%20Review%20Final%20without%20photos%20February%202005.pdf > Accessed 2/26/2007.

(2) DiTommaso, A., Lawlor, F.M. and Darbyshire, S.J. 2005. The Biology of Invasive Alien Plants in Canada. 2. *Cynanchum rossicum* (Kleopow) Borhidi [= *Vincetoxicum rossicum* (Kleopow) Barbar.] and *Cynanchum louiseae* (L.) Kartesz & Gandhi [= *Vincetoxicum nigrum* (L.) Moench]. Can. J. Plant Sci. 85: 243–263. http://tncweeds.ucdavis.edu/moredocs/cynros01.pdf

(3) Lawlor, F. 2002. Element Stewardship Abstract for *Vincetoxicum nigrum* (L.) Moench. & *Vincetoxicum rossicum* (Kleopov) Barbarich Swallow-wort. http://tncweeds.ucdavis.edu/esadocs/documnts/vinc_sp.pdf

(4) SAG Meeting- 9-17-07

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