

<b>NAME OF SPECIES:</b> <i>Belamcanda chinensis</i> (L.) DC.	
<b>Synonyms:</b> <i>Gemmingia chinensis</i> (L.) Kuntze.	
<b>Common Name:</b> Blackberry Lily, Leopard Flower	
<b>A. CURRENT STATUS AND DISTRIBUTION</b>	
I. In Wisconsin?	1. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	2. <u>Abundance:</u> Uncommon in Wisconsin (1).
	3. <u>Geographic Range:</u> Reported in 5 counties in south-central and southwestern Wisconsin (Crawford, Grant, Iowa, Rock, Dane)(1).
	4. <u>Habitat Invaded:</u> Thin woods, oak woodlands, dry prairies. Disturbed Areas <input type="checkbox"/> Undisturbed Areas <input checked="" type="checkbox"/>
	5. <u>Historical Status and Rate of Spread in Wisconsin:</u> Earliest herbarium specimen was collected in 1926 in Iowa County (1).
	6. <u>Proportion of potential range occupied:</u> Capable of expanding, but generally spread is slow and minimal.
II. Invasive in Similar Climate Zones	1. YES <input type="checkbox"/> NO <input type="checkbox"/> <u>Where (include trends):</u> N/A
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: Open or thin woods, edges of cedar glades, old home sites.
IV. Habitat Effected	1. <u>Soil types favored (e.g. sand, silt, clay, or combinations thereof, pH):</u> Prefers medium-textured soils, slightly acidic to slightly alkaline (3).
	2. <u>Conservation significance of threatened habitats:</u> Oak woodlands are of conservation priority (Wisconsin Wildlife Action Plan).
V. Native Habitat	1. <u>List countries and native habitat types:</u> Native to China and Japan
VI. Legal Classification	1. <u>Listed by government entities?</u> No (2).
	2. <u>Illegal to sell?</u> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Notes:
<b>B. ESTABLISHMENT POTENTIAL AND LIFE HISTORY TRAITS</b>	
I. Life History	1. <u>Type of plant:</u> Annual <input type="checkbox"/> Biennial <input type="checkbox"/> Monocarpic Perennial <input type="checkbox"/> Herbaceous Perennial <input checked="" type="checkbox"/> Vine <input type="checkbox"/> Shrub <input type="checkbox"/> Tree <input type="checkbox"/> In the iris family
	2. <u>Time to Maturity:</u> Plants grown from seed generally bloom in the second growing season (4).
	3. <u>Length of Seed Viability:</u> N/A
	4. <u>Methods of Reproduction:</u> Asexual <input checked="" type="checkbox"/> Sexual <input checked="" type="checkbox"/> <u>Please note abundance of propagules and and other important information:</u> Spreads vegetatively by tubers (3), although other sources describe rhizomes (4). Commonly self-seeds.
	5. <u>Hybridization potential:</u> High. <i>Belamcanda</i> x <i>pardancanda</i> is a registered ornamental hybrid (3).
II. Climate	1. <u>Climate restrictions:</u> Seems to prefer warm, subtropical climates (3). Hardy to Zone 5.

	2. <u>Effects of potential climate change</u> : May expand its range in response to global climate change.
III. Dispersal Potential	<p>1. <u>Pathways - Please check all that apply</u>:</p> <p><u>Intentional</u>: Ornamental <input checked="" type="checkbox"/> Forage/Erosion control <input type="checkbox"/>  Medicine/Food: _____ Other: _____</p> <p><u>Unintentional</u>: Bird <input type="checkbox"/> Animal <input checked="" type="checkbox"/> Vehicles/Human <input type="checkbox"/>  Wind <input type="checkbox"/> Water <input type="checkbox"/> Other: _____</p>
	2. <u>Distinguishing characteristics that aid in its survival and/or inhibit its control</u> : N/A
IV. Ability to go Undetected	1. HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> LOW <input checked="" type="checkbox"/>
<b>C. DAMAGE POTENTIAL</b>	
I. Competitive Ability	<p>1. <u>Presence of Natural Enemies</u>: No insect pests seems to affect this species long-term health, but it is susceptible to crown rot (3).</p> <p>2. <u>Competition with native species</u>: Grows fast and forms dense clones, but not as competitive under full sun when soil moisture is limiting (3).</p> <p>3. Rate of Spread:  HIGH(1-3 yrs) <input type="checkbox"/> MEDIUM (4-6 yrs) <input checked="" type="checkbox"/> LOW (7-10 yrs) <input type="checkbox"/>  Notes: _____</p>
II. Environmental Effects	<p>1. <u>Alteration of ecosystem/community composition?</u>  YES <input type="checkbox"/> NO <input type="checkbox"/>  Notes: uncertain</p> <p>2. <u>Alteration of ecosystem/community structure?</u>  YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>  Notes: Can form monotypic vegetation stands.</p> <p>3. <u>Alteration of ecosystem/community functions and processes?</u>  YES <input type="checkbox"/> NO <input type="checkbox"/>  Notes: N/A</p> <p>4. <u>Allelopathic properties?</u> YES <input type="checkbox"/> NO <input type="checkbox"/>  Notes: N/A</p>
<b>D. SOCIO-ECONOMIC Effects</b>	
I. Positive aspects of the species to the economy/society:	Notes: Ornamental plant. Also grown for the hiny black seeds, cut for use in floriculture.
II. Potential socio-economic effects of restricting use:	Notes: Several growers and vendors and cut flower growers would be affected. Still sold commercially.
III. Direct and indirect effects :	Notes: N/A
IV. Increased cost to a sector:	Notes: N/A
V. Effects on human health:	Notes: Berries are poisonous.
<b>E. CONTROL AND PREVENTION</b>	

**F. REFERENCES USED:**

I. Costs of Prevention (including education; please be as specific as possible):	Notes: N/A
II. Responsiveness to prevention efforts:	Notes: N/A
III. Effective Control tactics:	Mechanical <input checked="" type="checkbox"/> Biological <input type="checkbox"/> Chemical <input type="checkbox"/> Times and uses: Hand pulling/digging probably effective
IV. Minimum Effort:	Notes: N/A
V. Costs of Control:	Notes: N/A
VI. Cost of prevention or control vs. Cost of allowing invasion to occur:	Notes: N/A
VII. Non-Target Effects of Control:	Notes: Control may require the use of herbicides.
VIII. Efficacy of monitoring:	Notes: If detected early, <i>B. chinensis</i> can be eradicated. Subsequent monitoring is usually necessary.
IX. Legal and landowner issues:	Notes: NA

- UW Herbarium
- WI DNR
- TNC
- Native Plant Conservation Alliance
- IPANE
- USDA Plants

Number	Reference
1	Wisconsin State Herbarium. 2007. WISFLORA: Wisconsin Vascular Plant Species ( <a href="http://www.botany.wisc.edu/wisflora/">http://www.botany.wisc.edu/wisflora/</a> ). Dept. Botany, Univ. Wisconsin, Madison, WI 53706-1381 USA.
2	USDA, NRCS. 2007. The PLANTS Database ( <a href="http://plants.usda.gov">http://plants.usda.gov</a> , 16 March 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
3	Gilman, E.F. 1999. <i>Belamcanda chinensis</i> . University of Florida Cooperative Extension Service Fact Sheet FPS-64.
4	<a href="http://www.plantoftheweek.org/week099.shtml">http://www.plantoftheweek.org/week099.shtml</a> .

**Author(s), Draft number, and date completed:** Craig A. Annen, Draft 1, June 30, 2007.

**Reviewer(s) and date reviewed:** Kelly Kearns, Sept. 17, 2007

**Approved and Completed Date:**