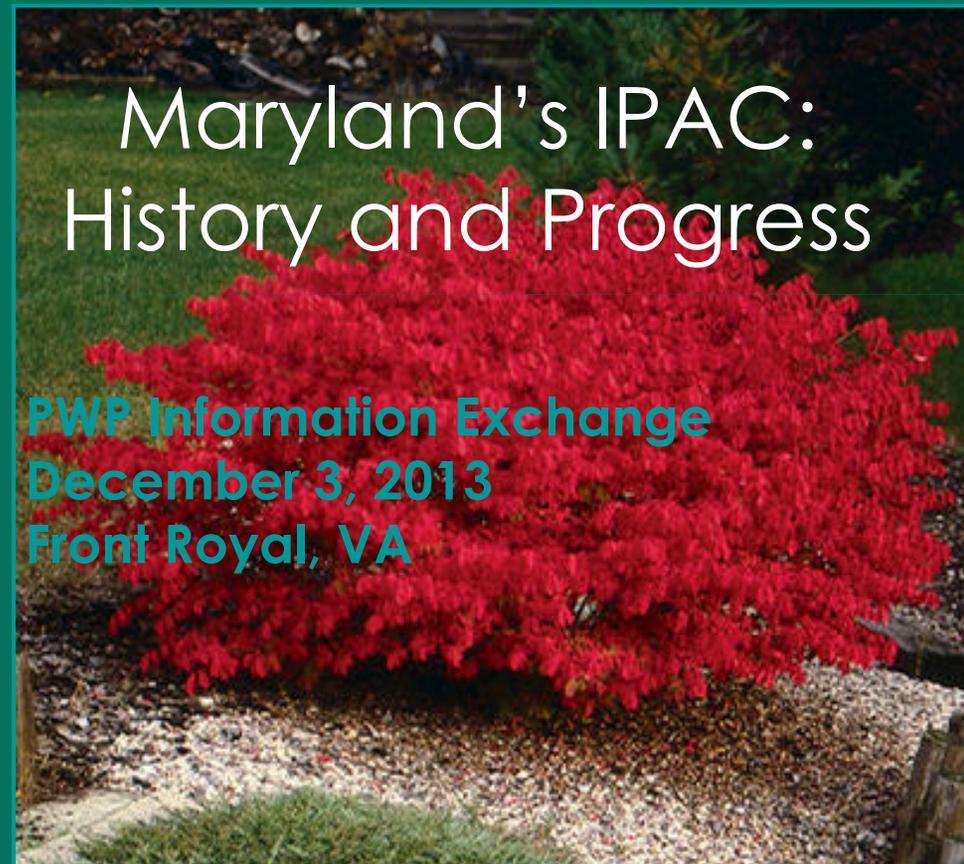


## Are You Really Banning Burning Bush?!



Kerrie Kyde  
Maryland DNR  
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# MARYLAND DEPARTMENT OF NATURAL RESOURCES

## Maryland's IPAC at Work



Jake Robinson went to the garden center with his mother. . . .



## H.B. 1360

- ☒ Named 45 species as invasive
- ☒ Banned sales or use in commercial landscape planting unless plants were labeled
- ☒ Required permanently affixed labels, supplied by MDA, reading

**“INVASIVE PLANT SPECIES – HARMFUL TO  
THE ENVIRONMENT”**



# MARYLAND DEPARTMENT OF NATURAL RESOURCES

## Maryland's IPAC at Work

Norway maple      Purple loosestrife      Bradford and other Callery pears  
Tree of heaven      Sawtooth oak      Empress tree      Mimosa  
Edible and ornamental cherries      Russian or autumn olive  
White mulberry      Multiflora rose      Bush honeysuckle      Japanese iraea  
Privet      Burning bush or winged Euonymus      Japanese barberry  
Purple deadnettle      Japanese honeysuckle      Chinese and Japanese wisteria  
Oriental bittersweet      Porcelainberry      English ivy      Wintercreeper  
Periwinkle      Crown vetch      Bugleweed      Spearmint      Creeping Charlie  
Kudzu      Indian strawberry      Garlic mustard      Mile-a-minute weed  
Japanese knotweed      Common reed      Siberian elm      Celandine buttercup  
Pampas grass      Japanese Silver grass      Reed canary grass  
Japanese stiltgrass      Beefsteak      Giant reed      Spotted knapweed  
Canada thistle or Bull thistle      Running bamboos

**HOUSE BILL 831**



**Jake Robinson – our secret weapon!**

## **Md. AGRICULTURE Code Ann. § 9.5-101-306**

-  Defines “Invasive plant”
-  Establishes an Invasive Plant Advisory Committee (IPAC), its membership and terms
-  Requires the Secretary to Agriculture to promulgate regulations within one year that adopt a weed risk assessment system
-  Requires the Secretary of Agriculture to promulgate regulations within two years that classify assessed plants as Tier 1 or Tier 2.
-  Sets out exceptions and penalties for violation

"Invasive plant" means a terrestrial plant species that:

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2)  
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or  
pr

(1) did not evolve in the state; and

(2) if introduced within the state, will cause or is likely to cause, as determined by the secretary:

(i) economic harm;

(ii) ecological harm;

(iii) environmental harm; or

(iv) harm to human health.

<http://www.lexisnexis.com/hottopics/mdcode/>

## IPAC

-  Members include MDA, DNR, SHA, MDE, UMd, the landscaping industry, the nursery industry, an environmental advocacy organization, two people with plant experience and a consumer
-  Appointed members serve 3-year terms
-  Meets at least quarterly
-  Serve to advise the Secretary of Agriculture

## IPAC's Mandate

-  Establish a science-based risk assessment for invasive plants (WRA)
-  Use WRA to develop a two-tiered list of invasive plants
-  Review the WRA annually
-  Establish procedures to classify or declassify plants
-  Set up system to permit certain otherwise prohibited activities

**§ 9.5-302. Prohibited Acts**

**(a) Tier 1 plants. --**

**(1) This subsection does not apply to the transfer, lease, sale, or purchase of real property on which an invasive plant is located.**

**(2) Except as provided in paragraph (3) of this subsection and in accordance with regulations adopted by the Secretary, a person may not propagate, import, transfer, sell, purchase, transport, or introduce any living part of a tier 1 invasive plant in the State.**

## § 9.5-302. Prohibited Acts

(b) Tier 2 plants. -- In accordance with regulations adopted by the Secretary, a person may not:

(1) **Sell or offer for sale at a retail outlet** a tier 2 invasive plant **unless the retail outlet posts** in a conspicuous manner in proximity to all tier 2 plant displays, **a sign identifying the plants as tier 2 plants**; or

(2) **Provide landscaping services** to plant or supply for planting a tier 2 invasive plant **unless the person provides** to its customer **a list of tier 2 invasive plants**.



## Md. AGRICULTURE Code Ann. § 9.5-101-306

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## IPAC Uses APHIS' Weed Risk Assessment

-  Evaluates four risk factors
-  Uses logistic regression to score species' invasion probability
-  Employs Monte Carlo simulation as secondary screening
-  IPAC applies "Maryland Filter" to WRA High Risk species to classify as Tier 1 or Tier 2

	A	B	C	D	E	H	I	J	K
1	Species:								
2	Question ID	Question	Answer	Uncertainty	Score	Notes (and references)			Revi
5	<b>Establishment / Spread Potential</b>								
6	ES-1	Select one: (A) Introduced elsewhere long ago (>75 years) but not escaped; (B) Introduced recently (<75 years) but not escaped; (C) Never introduced elsewhere; (D) Escaped Casual; (E) Naturalized; (F) Invader.			???				
7	ES-2	Is the species highly domesticated (y, n, or ?).			???				
8	ES-3	Congeneric weed (y, n, or ?).			???				
9	ES-4	Shade tolerant at some stage of life cycle (y, n, or ?).			???				
10	ES-5	Climbing or smothering growth habit (y, n, or ?).			???				
11	ES-6	Forms dense thickets (y, n, or ?).			???				
12	ES-7	Aquatic (y, n, or ?).			???				
13	ES-8	Grass (y, n, or ?).			???				
14	ES-9	Nitrogen-fixing woody plant (y, n, or ?).			???				
15	ES-10	Produces viable seed or spores (y, n, or ?).			???				
16	ES-11	Self-compatible or apomictic (y, n, or ?).			???				
17	ES-12	Requires specialist pollinators (y, n, or ?).			???				
18	ES-13	Minimum generative time (A) less than 1 (multiple generations per year), (B) 1 year (annual-1 gen per year), (C) 2or3 years, (D)>3years; (?)			???				
19	ES-14	Prolific seed/spore production (see scoring guide) (y, n, or ?).			???				
20	ES-15	Propagules likely to be dispersed unintentionally by people (y, n, or ?).			???				
21	ES-16	Propagules likely to disperse in trade as contaminants and hitchhikers (y, n, or ?).			???				
22	ES-17	No. natural dispersal vectors	0		4				
23	ES-17a	Propagules adapted to wind dispersal (y, n, or ?).			???				
24	ES-17b	Propagules water dispersed (y, n, or ?).			???				
25	ES-17c	Propagules bird dispersed (y, n, or ?).			???				
26	ES-17d	Propagules dispersed by other animals (externally) (y, n, or ?).			???				
27	ES-17e	Propagules dispersed by other animals (internally) (y, n, or ?).			???				
28	ES-18	Evidence that a persistent propagule bank (e.g., seed bank) is formed (>1yr) (y, n, or ?).			???				

**Alternate Choices**

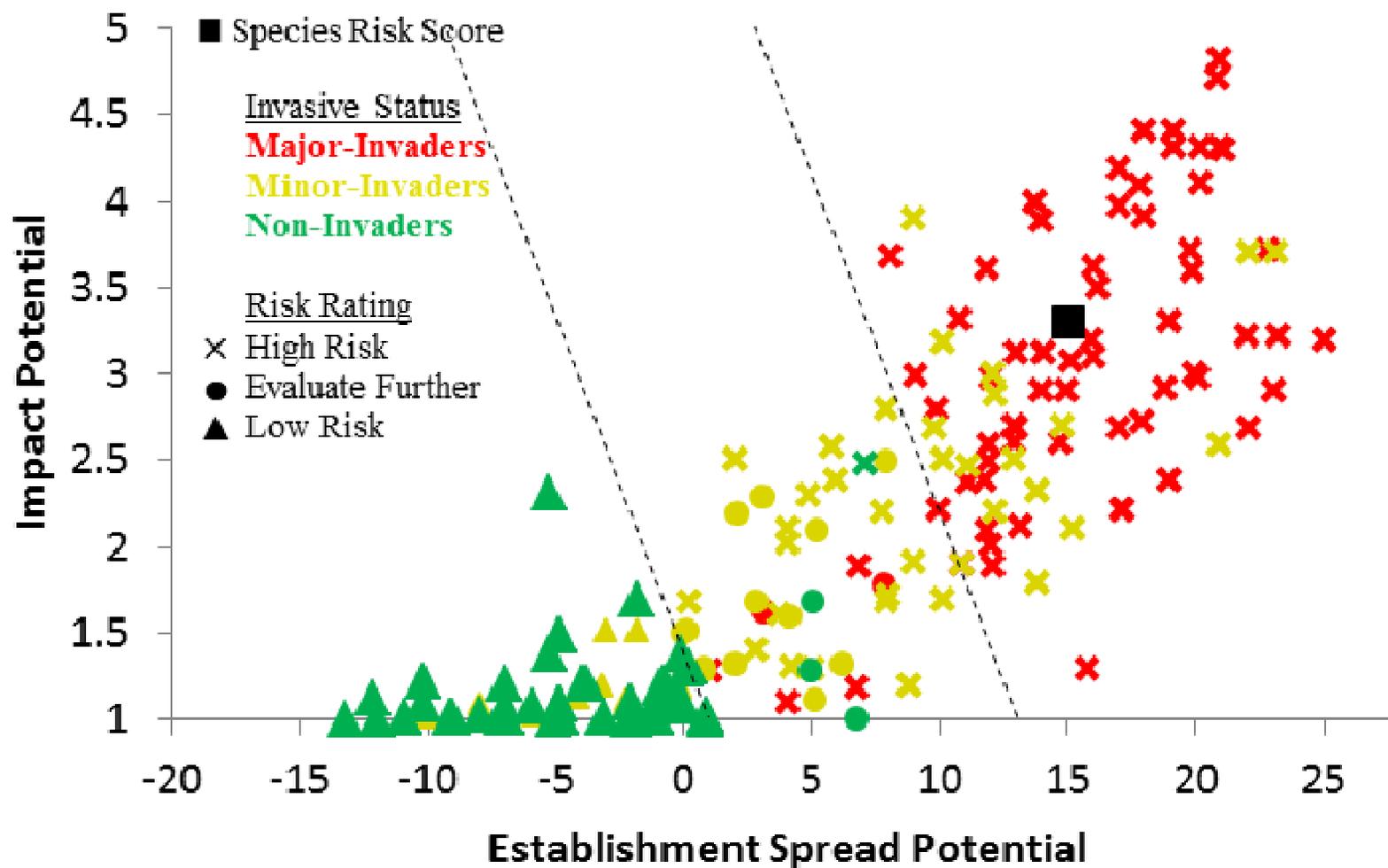
Question    2nd Choice    3rd Choice

	A	B	C	D	E
1	<b>Species:</b>				
2	<b>Question ID</b>	<b>Question</b>	<b>Answer</b>	<b>Uncertainty</b>	<b>Score</b>
38	Imp-G1	Allelopathic (y, n, or ?).			
39	Imp-G2	Parasitic (y, n, or ?).			
40	<i>Impact to</i>	<i>Natural areas (national parks, wildlife/conservation areas)</i>			
41	Imp-N1	Change ecosystem processes and parameters that affect other species? (y, n, ?).			
42	Imp-N2	Change community structure? (y, n, ?)			
43	Imp-N3	Change community composition? (y, n, ?).			
44	Imp-N4	Likely to affect any federal Threatened and Endangered plant species? (y, n, ?)			
45	Imp-N5	Likely to affect any globally outstanding ecoregions? (y, n, ?)			
46	Imp-N6	For conservation/natural areas, choose the best answer. (A) Plant not a weed; (B) Plant a weed but no evidence of control by people; (C) Plant a weed and evidence of control			

**Imp-G2 Parasitic**  
 Is the plant parasitic and d  
 Answer 'yes' for any parasi  
 chlorophyll) and hemiparas  
 may be parasitic. Parasitic  
 not in one of the 20 plant f  
 plant is in one of these pla  
 higher uncertainty, as appr  
 Based on information from  
 Balanophoraceae, Convolu  
 Lennoaceae, Loranthaceae  
 Scrophulariaceae, and Visc  
 • Parasitic Plant Classificati

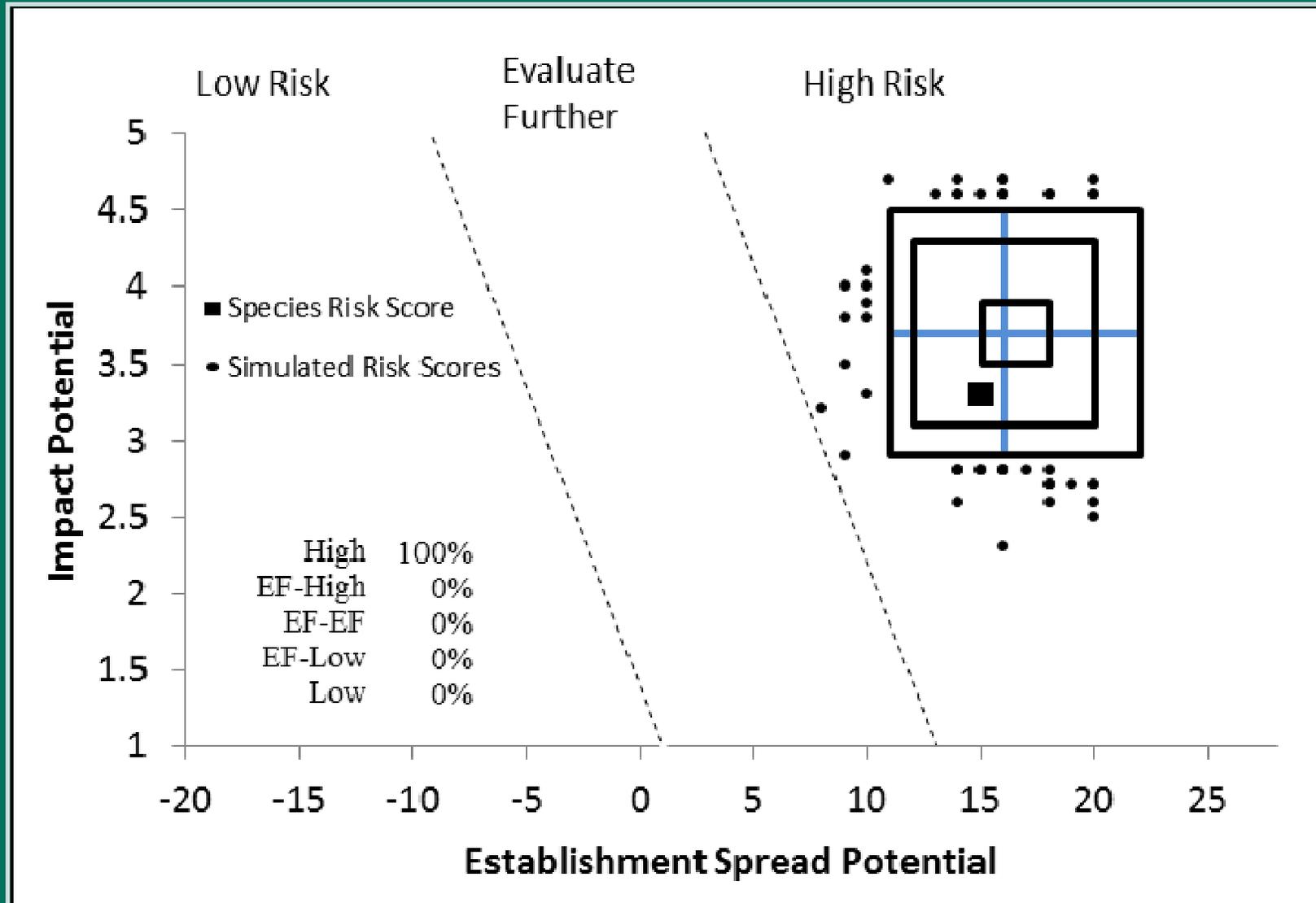
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United States  
Department of  
Agriculture

Animal and Plant  
Health Inspection  
Service

September 21, 2012

Version 3



## Weed Risk Assessment for *Oplismenus hirtellus* (L.) P. Beauv. subsp. *undulatifolius* (Ard.) U. Scholz (Poaceae) – Wavyleaf basketgrass



*Oplismenus hirtellus* subsp. *undulatifolius* infestation (photo by Kerrie L. Kyde). Insets from left to right show foliage (photo by K. L. Kyde), flower (photo by K. L. Kyde), and seeds (photo by Garrett Waugaman). Source for images : [www://invasives.org](http://www://invasives.org).

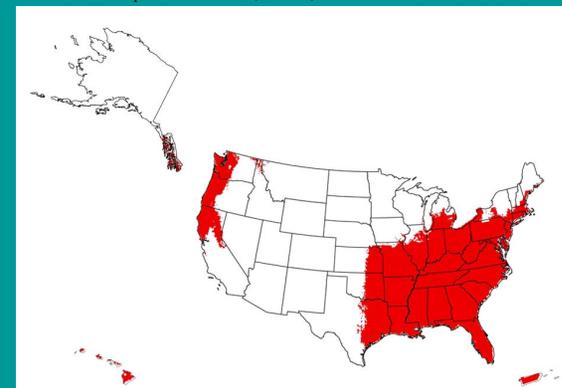
### Agency Contact:

Plant Epidemiology and Risk Analysis Laboratory  
Center for Plant Health Science and Technology

Plant Protection and Quarantine  
Animal and Plant Health Inspection Service  
United States Department of Agriculture  
1730 Varsity Drive, Suite 300  
Raleigh, NC 27606

## DEPARTMENT OF NATURAL RESOURCES PAC at Work

Figure 1. Predicted distribution of *Oplismenus hirtellus* subsp. *undulatifolius* in the United States. Map insets for Alaska, Hawaii, and Puerto Rico are not to scale.



### 2. Results and Conclusion

Model Probabilities: P(Major Invader) = 80.0%  
P(Minor Invader) = 19.3%  
P(Non Invader) = 8.0%

Risk Result = High Risk

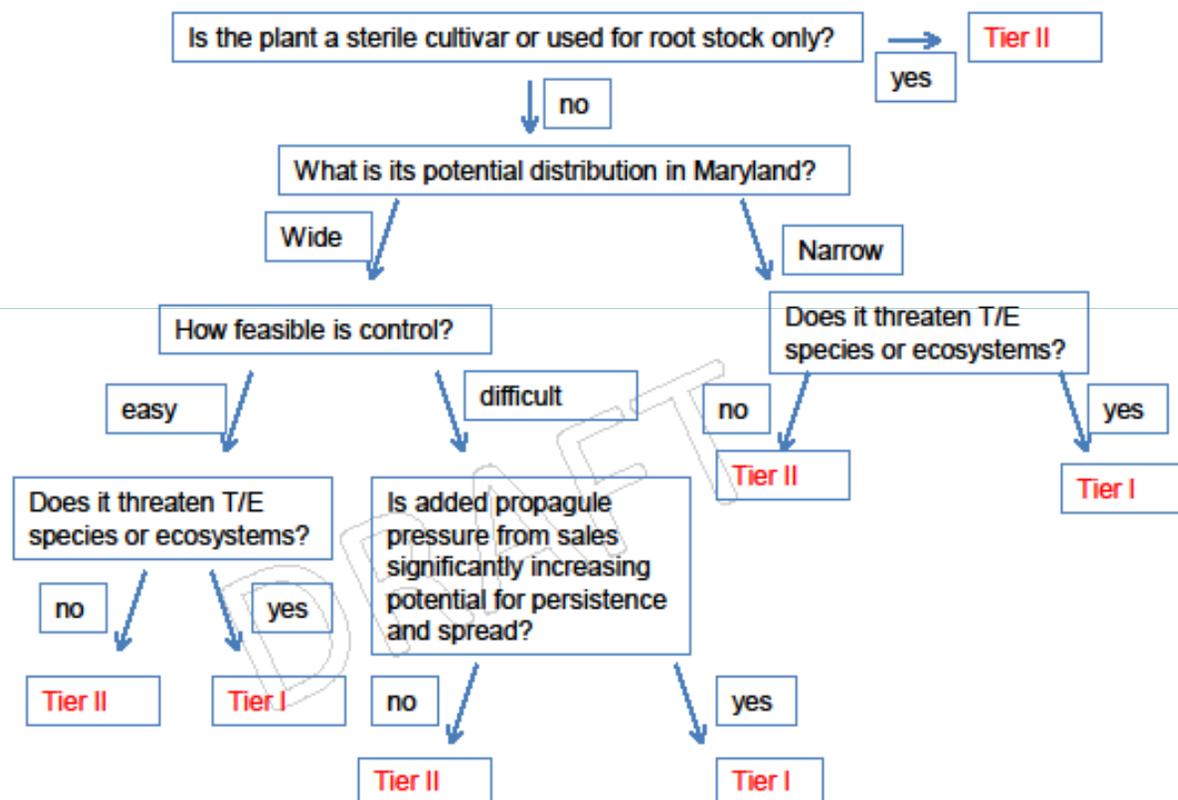
Secondary Screening = Not Applicable



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### DRAFT - Maryland Tier Filter for High Risk Plants

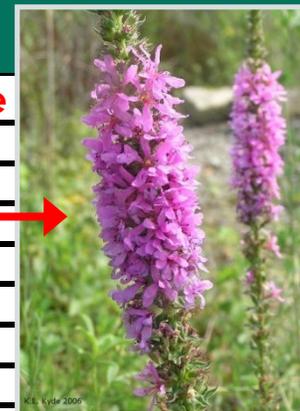


# MARYLAND DEPARTMENT OF NATURAL RESOURCES

## Maryland's IPAC at Work



SpeciesName	CommonName
<b>Ornamentals</b>	
Imperata cylindrica	Cogongrass
Lythrum salicaria	Purple loosestrife
Cytisus scoparius	Scotch broom
Oplismenus hirtellus subsp. undulatifolius	Wavy leaf basketgrass
Elaeagnus umbellata	Autumn olive
Triadica sebifera	Chinese tallow
Rosa multiflora	Multiflora rose
Berberis thunbergii	Japanese barberry
Albizia julibrissin	Mimosa or silktree
Akebia quinata	Chocolate vine
Euonymus alatus	Burningbush or winged euonymus
Lonicera maackii	Amur honeysuckle
Ligustrum sinense	Chinese privet
Wisteria sinensis/W. floribunda	Chinese wisteria
Nandina domestica	Nandina or sacred bamboo
Dioscorea oppositifolia	Chinese yam or cinnamon vine
Ligustrum obtusifolium	Border privet



# Maryland's IPAC at Work

**Additional species for consideration**

Aralia elata	Japanese angelica tree
Phyllostachys aurea	Golden bamboo
Iris pseudacorus	Yellow flag
Imperata cylindrica 'Red Baron'	Red Baron cogon grass
Paulownia tomentosa	Princess tree
Pyrus calleryana	Callery pear
Lonicera japonica	Japanese honeysuckle
Ligustrum vulgare	Common or European privet
Ficaria verna	Lesser celandine
Phellodendron amurense	Amur corktree
Rhodotypos scandens	Jetbead
Euonymus fortunei	Wintercreeper
Humulus japonicus	Japanese hops



## IPAC's Plans

- Professional assessor(s)
- Funding from USDA Specialty Crop Block Grant
- Ongoing effort (30 additional spp in Year Two)
- Work with APHIS to share literature and assessments with multiple states

## What does this mean for you?

-  Invasive plants in natural areas
-  Plant producers
-  Gardening public
-  Volunteer weed removals



## **COMAR 15.06.04.04:**

- (1) Name;**
- (2) Business, nursery or plant dealer license # if applicable;**
- (3) Phone;**
- (4) Email;**
- (5) Tier 1 plant for which approval is being requested, full botanical name;**
- (6) Specific location of the Tier 1 plant;**
- (7) Proposed activity;**
- (8) Method of safeguarding from propagule dispersal;**
- (9) Time-frame of the proposed activity; and**
- (10) Any other information required by the Secretary.**

## Prevention

the single best  
exotic invasive plant  
control technique



<http://www.caribbeanbusinesspr.com/news/cbp-roots-out-valentines-day-invaders-81047.html>

**Thank you!**



Kerrie Kyde  
Maryland DNR  
kkyde@dnr.state.md.us

PWP Information Exchange  
December 3, 2013  
Front Royal, VA

<http://kickapocreeknursery.com/menu/burning-bush/>