OZARK NATIVE PLANTS FOR PHYTOREMEDIATION OF PESTICIDES

COMPILED BY ERIC FUSELIER 3/23/2021

The following list represents the results of my review of published research and literature. I'm sharing it with the intention of encouraging others to consider using these species when planting in or near **residential areas**, **rail corridors**, **utility corridors**, **agricultural fields** (current and historical), and **orchards**. Note that not all of the species listed here are ideal for home gardens and landscaping projects where a clean, manicured aesthetic is desired. Please cross-reference the species contained on this list with <u>Lissa's List of Well Behaved Natives</u> before planting them in a location where a "well behaved" plant species is more desirable.

NATIVE SPECIES FOR PHYTOREMEDIATION OF PESTICIDES							
Common Name	Scientific Name	Vegetation Type	Sunlight requirements	Soil moisture requirements	Pesticide Targeted		
Big bluestem	Andropogon gerardii	Grass	Full sun	Dry to medium	Atrazine, Chlorpyrifos, Chlorothalonii, Pendimethalin, Propiconazole		
River Birch	Betula nigra	Tree	Full sun to part shade	Medium to wet	Bentozon		
Coontail	Ceratophyllum demersum	Aquatic	Full sun to full shade	Inundated	Metolachor		
Pondweed	Elodea canadensis	Aquatic	Full sun	Inundated	Atrazine, Copper sulfate, Dimethormorph, Flazasulfron		
Common rush	Juncus effusus	Rush	Full sun	Wet	Anthracene		
Common Duckweed	Lemna minor	Aquatic	Full sun to part shade	Inundated	Demeton-8- methyl, Copper sulfate, Dimethomorph, Flazasulfron, Glyphosate Isoproturon, Malathion, Metolachlor		
Red mulberry	Morus rubra	Tree	Full sun to part shade	Medium	Anthracene		

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Switchgrass	Panicum virgatum	Grass	Full sun to part shade	Medium to wet	Atrazine, Pendimethalin
Eastern Cottonwood	Populus deltoides	Tree	Full sun	Medium to wet	Alachlor, Atrazine, Chlorpyrifos, Dinoseb, Dioxane, Metolachlor, Metribuzin
Black Willow	Salix nigra	Tree	Full sun to part shade	Medium to wet	Bentazone
Indiangrass	Sorghastrum nutans	Grass	Full sun	Dry to medium	Altrazine, Pendimethalin
Eastern Gamagrass	Tripsacum dactyloides	Grass	Full sun to part shade	Medium	Anthracene, Chlorpyrifos, Chlorothalonil, Pendimethalin, Propiconazole
Southern Cattail	Typha domingensis	Grass	Full sun	Wet	Atrazine
Broadleaf Cattail	Typha latifolia	Grass	Full sun to part shade	Wet	Atrazine