

Kentucky Native Plant Evaluation

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Introduction

Plants native to Kentucky are already well-known in the nursery landscape industry. Dogwoods, oaks, maples, ashes, and rhododendrons are a few of the woody plants; purple coneflowers, trilliums, phlox, lilies and black-eyed Susan are a few of the many Kentucky perennial native plants used in landscapes. Kentucky native plants have characteristics that add to the aesthetics, and to the biodiversity, of residential, industrial, institutional and recreational landscapes. Government agencies and academics alike have called for increased use of “regionally native” plants. A Kentucky native plant evaluation has been established at the UK Nursery Crops Development Center at Princeton, Ky.

Results and Discussion

Native plants are sought out and found in the wild in Kentucky, seed are collected, plants are produced from the seed and those plants are placed into the University of Kentucky Research and Education Center Botanic Garden and/or the UK Nursery Crops Development Center research nursery for evaluation of their potential as landscape plants. Desirable characteristics include: long bloom period, good clean (disease and insect damage-free) foliage, environmental tolerance, and a commercially acceptable means of propagation.

Significance to Industry

Indian Pink, *Spigelia marilandica*, has the greatest potential for development as a mass produced landscape plant because of its long bloom period and ease of propagation. The development of a source of *Quercus phellos*, willow oak, of a Kentucky provenance with tolerances of Midwestern environmental conditions will be advantageous to Kentucky nurseries over currently available seed from provenances of the deep South. *Cunila origanoides*, dittany, shows potential as a landscape plant.

Table 1 contains individual plant evaluation information. The bolded scientific names indicate native plants that show significant promise as landscape plants.

Literature Cited

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Additional References (and Resources)

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Online Resources

Invasive Weeds of Kentucky and Adjacent States, KY.
http://plants.usda.gov/cgi_bin/invasive_one.cgi?pub=KY

InvasiveSpecies.gov What's in My Neighborhood: Kentucky.
<http://invasivespecies.gov/geog/state/ky.shtml>

Wildflowers of Western Kentucky. <http://knps.org/Wildflowers/flora.htm>

Table 1. Kentucky Native Plants in Evaluation at the UKREC, Princeton, KY

Scientific name	Common name	Notable ornamental characteristic	Evaluation results	Current status	Future evaluation and research efforts
<i>Asclepias tuberosa</i>	Butterfly Weed	Bright orange bloom, attracts butterflies	Native equal to cultivars	Off-station ¹ landscapes and butterfly garden	maintain in landscape for public viewing
<i>Amsonia tabernaemontana</i>	Blue-star, Amsonia, Blue Dogbane	Pale blue spring flowers	Easily propagated from seed or by division	UKRECBG ²	Cutting propagation and distribution
<i>Anemonella thalictroides</i>	Rue Anemone	Fine-textured plant, dainty flower	Spring bloomer	UKRECBG	Further evaluation in a better drained site
<i>Arisaema atrorubens</i>	Jack in the Pulpit, Indian Turnip	Unique flower and fruit	None to date	Seed source located	Propagate and evaluate as landscape plant
<i>Arisaema dracontium</i>	Green Dragon	Unusual leaf and flower	None to date	Seed source located	Propagate and evaluate as landscape plant
<i>Cephalanthus occidentalis</i>	Buttonbush	Summer flowering woody shrub; very tolerant of wet feet	Attractive glossy foliage, uniquely round flower	In landscape and nursery	Evaluate invasiveness
<i>Cimicifuga racemosa</i>	Black Snakeroot, Black Cohosh	Striking tall white spike flowers in fall	Prone to scorch/dieback in nursery and landscape environment	In two landscape sites and research nursery	Determine best landscape environment; collect seed from plants in other sites

<i>Cunila organoides</i>	Dittany	Rounded small plant of 18 inches; small purple flowers in late summer-fall	Attractive; divides easily.	In research nursery	Continue landscape evaluation; develop protocol for container production
<i>Erythronium americanum</i>	Yellow Trout-Lily	Aesthetic foliage and flower	Very short bloom and foliage show	Unable to grow bulb in container	Protocol to store and plant bulbs to landscape
<i>Euphorbia corollata</i>	Flowering Spurge	Attractive small white bracts	Not complete	In containers	Evaluate for landscape use and invasiveness
<i>Hydrangea arborescens</i>	Wild Hydrangea, Smooth Hydrangea	Corymbs with few showy sterile flowers	Fairly long bloom period, flushes new growth in July, leaf spot	In nursery and landscape	The parent species of 'Annabelle' is worth continued seedling evaluation
<i>Hymenocallis occidentalis</i>	Spider-Lily	Stunning white bloom in late July-early August	Seems tolerant of landscape environment	UKRECBG landscape	Expand evaluation from current shaded site
<i>Hypericum spathulatum</i>	Shrubby St. John's-Wort	Yellow spring bloom and good foliage	Vigorous, requires pruning	UKRECBG	Stop evaluation; maintain in UKRECBG for public viewing
<i>Kalmia latifolia</i>	Mountain Laurel	Magnificent Spring bloom	Native stands seem susceptible to leaf spot; tolerant of Western Kentucky environs	Not in evaluation	Collect seed, grow a collection of plants, evaluate for flower color and leaf spot susceptibility

<i>Lillium superbum</i>	Turk's-Cap Lily	Late summer red-orange bloom of great aesthetic value	Difficult to establish	Not established	Further evaluation and production protocol study warranted
<i>Lonicera sempervirens</i>	Trumpet Honeysuckle	Full-season red trumpet-shaped bloom	Excellent bloom, foliage, and habit	UKREC Vine Collection	Propagate for distribution and continued evaluation
<i>Monarda fistulosa</i>	Monarda or Bergamot	Pale blue spring flowers	Susceptible to powdery mildew	UKRECBG	Maintain in native plants garden
<i>Nyssa Sylvatica</i>	Blackgum	Glossy foliage; red-orange fall foliage	Great variation in seedlings	UKRECBG	Develop and protect name of a selected clone with weeping habit
<i>Passiflora incarnata</i>	Passion Flower	Unique purple-white flower on perennial vine but considered a weed (2)	Attractive flower; re-seeds	UKREC Vine collection	Potential as pot plant
<i>Polygonum biflorum</i>	Solomon's Seal	Attractive habit and spring bloom	Species not as vigorous as cultivars; produces fruit	UKRECBG	Continue evaluation in new site

<i>Pycnanthemum incanum</i>	Hoary Mountain-Mint	White leaves subtend a small bloom	Grows well in landscape, spreading	UKRECBG	Continue evaluation
<i>Quercus phellos</i>	Willow Oak	Tolerant of soil environments; small leaves	Easy to grow from seed; seeds not consistently produced	Seedlings in evaluation for selection of superior plant(s)	Continue seed collection from Kentucky provenances
<i>Rudbeckia</i> species	Black-Eyed Susan	Attractive, well-known summer flower	Tolerant of dry environs; variation in flower color and size	Discontinue cultivar evaluation (1)	Continue development with seedlings from natives
<i>Silene virginica</i>	Fire Pink	Bright red spring flower	"Fleeting" in garden.	Dropped from evaluation	n/a
<i>Sabatia angularis</i> ,	Rose Gentian, Rose Pink	Late summer pink flowering plant of uniform habit	Difficult to maintain in landscape	Continue to seek seed sources	Reestablish in research nursery; protocol for use as an annual
<i>Sanguinaria canadensis</i>	Bloodroot	White spring flowering	Bloom period short, foliage attractive	Maintain in evaluation	Examine container production potential

<i>Spigelia marilandica</i>	Indian Pink	Bright red flower with yellow throat.	Long bloom period, full-season foliage	Continue in UKRECBG establish stock plant bed	Greatest potential as an underutilized Kentucky native
<i>Vernonia gigantea</i>	Tall Ironweed	Fantastic purple late summer/fall flowers in a large cluster	Stunning bloom frequently on attractive dark stems	Extremely invasive	Eliminate from evaluation site
<i>Viola pubescens</i> Alton	Smooth Yellow Violet	Yellow spring bloom	Bloom above and separate from foliage	Evaluate in UKRECBG	Investigate invasiveness
¹ Plants considered potentially invasive are evaluated off-station ² UKRECBG - University of Kentucky Research and Education Center Botanic Garden at Princeton					