Overview of the Plant Evaluation Program at the Chicago Botanic Garden

- committed to evaluating plants for the horticultural industry and gardening public since 1982
- goal is to identify superior garden plants for the Upper Midwest
- one of the largest and most diverse herbaceous perennial evaluation program in the U.S.
- currently evaluating approximately 1,150 taxa representing about 37,000 herbaceous perennials, shrubs, vines and small trees
- 29 target genera currently in the program
- plants are evaluated primarily in sun and shade gardens; special trial sites for testing invasive species, landscape roses, clematis, and green roofs

Benefits of the Comparative Trials Program

- compare old cultivars to new cultivars
- examine the breadth of a genus
- identify superior forms of popular garden plants
- evaluate new garden plants, including plants from the Garden’s breeding program

The Evaluation Process and Procedures

We observe plants and collect data regularly throughout the evaluation period.

- evaluation periods—4 years for perennials, 6 years for vines and shrubs, and 10 years for trees
- data collection using 30 descriptors, tracking both evaluation and characterization criteria
- floral descriptions—bloom period, floral character, flower color coding
- growth measurements and habit quality ratings
- landscape performance/adaptability to soil and environmental conditions of the test site
- minimal maintenance and cultural care is given to the plants during the trial

The 30 descriptors fit into four general evaluation criteria:

1) Cultural adaptability—how plants adapt to our soils and climate; we also track weediness
2) Winter hardiness in USDA Zone 5b
3) Disease and pest resistance without control measures
4) Ornamental qualities of the plants

Results and Reporting

*Plant Evaluation Notes* is a periodic publication of the Chicago Botanic Garden and is available at [www.chicagobotanic.org/plantevaluation/](http://www.chicagobotanic.org/plantevaluation/).
Four-star Plants

**Achillea ‘Pomegranate’** – yarrow (Zones 4-8) Full Sun
Purple red flowers in mid-June to late August; 30 in. tall and wide; bushy habit with upright stems; part of Tutti Frutti series, selected for their vivid colors, compact habits and durability in heat and humidity

**Achillea ‘Pink Grapefruit’** – yarrow (Zones 4-8) Full Sun
Lavender pink flowers in early June through August; 26 in. tall × 36 in. wide; bushy habit with sturdy stems; holds up in heat and humidity; Tutti Frutti series

**Agastache ‘Black Adder’** – hyssop (Zones 5-8) Full Sun
Lavender flowers with purple blue calyces give the 7-inch long inflorescence a darker appearance; late June to October; 48 in. tall and wide; robust bushy habit and long-blooming nature

**Agastache foeniculum ‘Golden Jubilee’** – anise hyssop (Zones (5)6-9) Full Sun
Lavender blue flowers with purplish calyx in late June to September; strong bloomer with robust habit, 38 in. tall and wide; yellow to bright chartreuse leaves; excessive seeder but easy to control

**Amsonia hubrichtii** – Arkansas blue star (Zones 5-9) Full Sun to Partial Shade
Starry pale blue flowers in mid-June to late June; 50 in. tall and wide; shrublike habit; fine-textured foliage; good orange to golden yellow fall color; 2011 Perennial Plant of the Year

**Amsonia ‘Blue Ice’** – blue star (Zones 5-9) Full Sun to Partial Shade
Deep lavender-blue flowers in May and June; 20 in. tall × 36 in. wide; compact habit; seedling of *Amsonia tabernaemontana*; originally named ‘WFF Select’ when introduced by White Flower Farm

**Amsonia montana ‘Short Stack’** – dwarf blue star (Zones 5-9) Full Sun to Partial Shade
Pale blue flowers, to 5/8 in. wide, in early May to mid-June; 20 in. tall × 36 in. wide; compact, bushy mounded habit but taller than expected (listed as 10 in. tall); limey green fall color

**Baptisia ‘Midnight’ – Midnight Prairieblues™** false indigo (Zones 4-8) Full Sun
Deep blue violet flowers, to 24 in. long, in late spring to early summer; reblooms on secondary branches; 42-48 in. tall × 54 in. wide; robust vase-shaped habit; Chicagoland Grows™ Introduction

**Baptisia ‘Solar Flare’ – Solar Flare Prairieblues™** false indigo (Zones 4-8) Full Sun
Lemon yellow flowers turn rustic orange with age, to 15 in. long, in late spring to early summer; up to 48 in. tall × 48-54 in. wide; robust and quick to mature; Chicagoland Grows™ Introduction

**Brunnera macrophylla** – heartleaf brunnera (Zones 3-7) Partial Shade (morning sun best)
‘Jack Frost’ – silver with green veins; blue flowers in early spring; 12 in. tall × 18 in. wide;
‘Dawson’s White’ (syn. ‘Variegata’) – irregularly edged in creamy white; 15-18 in. tall × 18 in. wide;
‘Spring Yellow’ – blooms in late April to early June; 18 in. tall × 32 in. wide; light yellow leaves in spring, becoming green; strong-grower

**Campanula ‘Sarastro’** – Sarastro bellflower (Zones 5-8) Full Sun
Purple bell-shaped flowers, 2¾ in. long, in early June to late July; 24 in. tall and wide; shorter than ‘Kent Belle’; non-spreading habit

**Campanula takesimana** – Korean bellflower (Zones 5-7) Full Sun to Light Shade
Creamy white tubular flowers, 2 in. long, in late June to mid-August; 24 in. tall × 36 in. wide; glossy bright green leaves; semi-evergreen foliage; rhizomatous habit; ‘Elizabeth’ has pink tubular flowers up to 3 in. long from mid-June to late July; 27 in. tall and spreading; habit more spreading than the species
**Clematis ‘Rüütel’** – “Knight” clematis (Zones 3-8) Full Sun
Red flowers with ruffled margins, 6 in. wide, in early June to late July; to 6 ft tall; compact habit and floriferous; pruning group 3

**Clematis ‘Piilu’** – “Little Duckling” clematis (Zones 4-9) Full Sun
Two-tone mauve pink flowers with creamy anthers, to 5 in. wide but many flowers may be smaller, in late June to early August; 4-5 ft tall; floriferous, compact bushy habit; small size ideal for containers; pruning group 2

**Coreopsis verticillata ‘Cremebru’** – Crème Brulee™ threadleaf coreopsis (Zones 5-7) Full Sun
Bright yellow flowers, 1½ in. wide, in late June to October; 18 in. tall × 34 in. wide; lacy, bright green leaves; heavy flowering selection; can be troubled by wet winter soils

**Echinacea purpurea ‘Pica Bella’** – coneflower (Zones 3-8) Full Sun
Purple flowers, boat-shaped ray florets, 4 in. wide, in mid-June to mid-September; 30 in. tall and wide; robust bushy habit

**Echinacea ‘Milkshake’** – coneflower (Zones (4) 5-8) Full Sun
Double creamy white flowers, 2½ in. wide, in June to September; 33 in. tall × 36 in. wide; strong bloomer with long-lasting flowers; stiff stems and bushy habit

**Geranium maculatum ‘Elizabeth Ann’** – spotted cranesbill (Zones 4-8) Shade to Partial Sun
Lavender pink flowers, 1¼ in. wide, in early May to early June; 30 in. tall (with flowers) and wide; chocolate bronze leaves early; generously reseeds; similar to ‘Espresso’, which has darker leaves

**Helleborus ‘Walhelivor’ Ivory Prince™ – hellebore (Zones 4-9) Partial to Full Shade**
Creamy white to chartreuse flowers with rose accents in mid-April to late May; sepals remain colorful for an extended period; 12 in. tall × 30 in. wide; silvery green leaves but not reliably evergreen for us

**Hydrangea paniculata ‘Big Ben’** – panicle hydrangea (Zones 3-8) Full Sun to Partial Shade
Creamy white flowers, turning deep fuchsia pink; large panicles to 9 in. long × 6 in. wide; mix of sterile bracts and fertile florets; begins flowering in July; 6 ft tall and wide; mildew resistant

**Hydrangea paniculata ‘Zwijnenburg’ – Limelight® panicle hydrangea (Zones 3-8) Full Sun to Partial Shade**
Creamy white to soft green flowers, turning pink in autumn; 9 in. long × 7 in. wide; 6-8 ft tall and wide, but easily maintained as a smaller plant; good as fresh or dried cut flowers

**Miscanthus sinensis ‘Gold Bar’** – silver grass (Zones 5-8) Full Sun
Gold-striped leaves; burgundy flowers in autumn; 60 in. tall × 24 in. wide at base; slow to reach mature size; about half that height after four years in trial; compact habit with strong horizontal markings

**Phlox maculata ‘Flower Power’** – wild sweet William (Zones 5-8) Full Sun to Partial Shade
White flowers with a pink blush, fragrant, in early July to September; 48 in. tall × 36 in. wide; robust habit with erect dark stems; resistant to powdery mildew but troubled by rabbits

**Pulmonaria ‘Diana Clare’** – lungwort (Zones 4-8) Shade to Partial Sun
Violet blue flowers, open rosy pink in mid-April to late May; 12 in. tall × 26 in. wide; silver green leaves

**Rodgersia aesculifolia** – fingerleaf rodgersia (Zones 5-7) Light to Full Shade
Palmate leaves with 5-9 leaflets; creamy white flowers in large clusters (to 24 in. long) in late spring to midsummer; 36-72 in. tall × 48-72 in. wide, rhizomatous habit

**Schizachyrium scoparium ‘Jazz’** – little bluestem (Zones 4-10) Full Sun
Blue green leaves; silvery inflorescences in fall; 24-30 in. tall and 18-24 in. wide; full habit, remains upright; shorter than ‘The Blues’; introduced by Intrinsic Perennial Gardens, Hebron, IL
Stachys officinalis ‘Pink Cotton Candy’ – wood betony (Zones 4-8) Full Sun
Bright pink two-tone flowers in late June to late August; 24 in. tall and wide; robust habit and dark green leaves; 2010 Chicagoland Grows™ Introduction

Stachys minima – dwarf betony (Zones 3-8) Full Sun
Bright violet flowers in July and early August; 8 in. tall × 12 in. wide; dark green leaves; tight compact mounds

Stokesia laevis ‘Honeysong Purple’ – Stokes’ aster (Zones 5-9) Full Sun to Light Shade
Dark purple flowers, 3 inches wide, early July into September; 18 in. tall × 24 in. wide; most consistent performer in our trials; uniform habit; does not like wet feet in winter

Veronica gentianoides ‘Pallida’ – gentian speedwell (Zones 4-7) Full Sun
Pale blue flowers, ½ in. wide, in mid-May to mid-June; 24 in. tall and wide; mat-forming habit

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