



Peonies on Trial

by
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The University of Alaska Fairbanks Georgeson Botanical Garden has conducted cultivar trials on peonies since 2001. Trial results including height, bloom time and flower productivity have been published, and results are available on our website (georgesonbg.org; search under research then peonies). A yearly list of first bloom dates for all cultivars is also available. Currently we have 91 peony cultivars in our trial plots. Some are strictly garden flowers, while most have cut flower potential. Over the next five years we will be digging out our perennial trial beds and replacing them with plants that will help the cut flower trade. If we can secure funding, look for lots of peonies, lilacs, delphiniums, bleeding hearts and other flowers that are suitable as cut flowers. Sorry, no more trees and shrub trials for Fairbanks.



Peony 'Largo'

We would like to thank Oregon Perennials for donating 10 cultivars to our trials. Two cultivars, Festiva Maxima and Gay Paree are comparison standards that have been grown previously, but the others are new to our trials. We will report annually on their survival and growth, potential as cut flowers, disease susceptibility, stem strength and any other odd growth patterns we observe. We learned this year that the standard white, Duchess de Nemours, can indeed become bright pink under Fairbanks growing conditions, so we will pay particular attention to flower color and form in our evaluations. Everyone is welcome to visit our trial plots in Fairbanks any time in July to view these blooms

Table 1. Cultivars donated to the UAF trial gardens by Oregon Perennials. Information is from published sources from commercial businesses, American Peony Society and others.

Cultivar	Type	Flower Color	Stem length (inches)	Comments
Avis Varner	Full double	Deep red	36	Needs disbudding
Cheddar Supreme	Semi- to fully double	White with abundant petaloids and gold staminoids throughout	28-33	
Claudia	Semi-double	Light cherry fading to salmon pink, gold centers	36+	Small flowers
Festiva Maxima	Double	White, red flecks	36	Reliable,
Gay Paree	Japanese	Pink guards, white/pink petaloids	33	Light fragrance
Heidi	Japanese	Lavender Pink	26	
Henry Bockstoce	Double	Red	40	Fragrant, may need trellising
Leslie Peck	Japanese	Pink with lighter pink/peach petaloids	38	Disbudding required

Cultivar	Type	Flower Color	Stem Length (inches)	Comments
Lora Dexheimer	Double	Red	34	Outstanding flower form, not fragrant
Many Happy Returns	Anemone to bomb double	Red	34	Long lasting cut flower, prolific, APS Gold medal 2007
Mary Jo Legare	Double	Deep pink to light red	24	No stamens, pollen, seeds

In addition to the new plantings, we have been conducting trials on eight Itoh (Intersectional) Hybrid peonies. Their survival has been so successful, that they definitely need more widespread experimentation in the Interior. Plant Biotechnologies, Inc. donated \$7000 worth of roots to the garden in 2010, and they are growing well, far better than we ever dreamed possible. The Itoh hybrids are a cross between the non hardy tree peony (*Paeonia suffruticosa*) and the herbaceous peony (*Paeonia lactiflora*). The latter species is the traditional garden peony, but it is getting a lot of competition from the Itohs in recent years.

The hybrids have a more dissected leaf than the herbaceous garden peony, and the leaves are a bluegreen color rather than the glossy dark green of the herbaceous. The flower buds on herbaceous peonies are mostly round, while the Itohs are pointed like Hershey Kisses®! The most amazing thing about the Itohs is they produce at least one bud on the stem above ground, and that bud produces growth for the next season. The herbaceous peonies have buds buried in the ground right next to the crown. It is very easy to forget this bud and cut it off at the end of the season when removing all the old foliage.

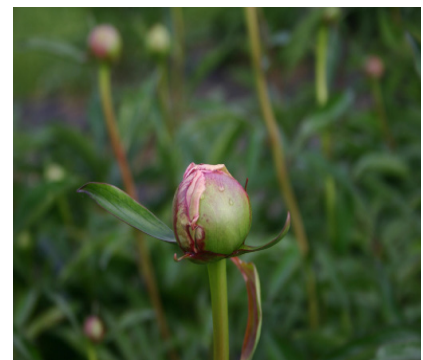
The Itohs also have stunning flower colors. Most of them are two-toned, and some are bright yellow rather than the pink, white and red of the herbaceous varieties. Most are single petaled, but nothing prepares you for the big, brilliant yellow puffball called *Bartzella*. It is worth a trip to the garden in July to see these spectacular peonies with names like Going Bananas, Yellow Submarine and Singing in the Rain! Another note about Itohs. One of the top Itoh breeders in the world, Don Smith, who lives in New Hampshire began breeding full time after he retired. His peonies routinely bring hundreds of dollars per root at plant auctions each year. Don's job, before he got swept away by peonies, was as a technician at Poker Flat helping shoot off rockets to study the auroras! Small world, huh?



Itoh hybrid peony, "Going Bananas"



Flower buds of Itoh (Intersectional) hybrid peonies (left) and lactiflora hybrid (herbaceous) peonies (right)



Originally published in *Georgeson Botanical Garden Review* Vol. 21, No. 1, 2012

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