

Rhapis (RAY-pis): From the Greek rhaps (a needle); with reference to the needle-like segments of these sucker producing palms.

Robusta (roe-BUSH-tuh) Stout, strong in growth.

Roebelenii (roe-bel-EE-nee): After M. Robelin who collected plants in S.E. Asia.

Romanzoffiana (roe-man-zoff ee-AN-uh.) Names for Prince Nicolas Romanzoff, who financed a round-the-world expedition.

Trachycarpus (tra-kee-KAR puhs): From the Greek trachys (rough) and karpos (fruit); an allusion to the fruit of some species.

Urens (EWR-enz): Stinging burning, with reference to the voluminous sap that quickly ferments into a highly intoxicating product.

Washingtonia (wah-shing-TOEN-ee-uh): Named for George Washington.

Robusta (roe-BUSH-tuh) Stout, strong in growth.

From the Wild to the Garden Center: *Pulmonaria* and *Heuchera*®

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Terra Nova has been exciting plant nerds and the American public for 11 years. Our goal has been “to boldly grow what no man has grown before”. While this sounds humorous, we have been quite serious about breeding the best new perennials in the marketplace with 406 new introductions to North American horticulture. This process has involved the growing, trialing, and evaluation of hundreds of thousands of seedlings on our property and trial sites around the world. Our deliberate breeding work has paid off well with our new introductions becoming some of the most sought after new perennials.

Pulmonaria

Natives of shady woods and scrublands from Siberia to Italy, these plants are often the harbinger of spring. I've seen glorious photographs of orchards in France where the plants have naturalized. Wall-to-wall carpets of cobalt-blue *P. angustifolia* reflecting the sky through the naked apple branches makes quite a show. The flowers range from salmon (*P.* 'Redstart') through raspberry (*P.* 'Berries and Cream') to sky blue (*P.* 'Roy Davidson'). An outstanding characteristic of most *Pulmonaria* is the fact that the flowers turn totally different shades as they age; pinks may fade to blues, wines to reds, or the reverse! Some, like *P.* 'Sissinghurst White' and the coral 'Bowles' Red' hold their color for the whole blooming period.

The other exciting aspect of *Pulmonaria* is foliage. Background colors may vary from apple-green through olive to an almost black-emerald. Brilliant silver spotting may run from lightly dusted to solid silver (*P.* 'Excalibur' PP# 8958). Foliage shape is another variable. Leaves can be lanceolate (spear-shaped) like *P.* 'Cotton Cool' to oval as in *P. angustifolia* subsp. *azurea*. The latter plant is one of the dwarves of the genus, rarely reaching 8 inches high. Plants like *P. mollis* 'Samobor' can top out

at 30 inches tall! One characteristic that I've added to my plants is that of ruffled edges. This is seen in *P.* 'Berries and Cream'. *P.* 'Silver Streamers' is an extremely wavy form that I have recently patented.

Seed is variable in outcome, but is very large and easy to germinate. The most difficult part is in the collection of fresh seed. Looking into the calyx after the flower has dropped off, you will see the single seed developing. Over the next few weeks the seed will change from white to black and will detach with the slightest breeze and disappear unless you construct a collection facility of some sort. Most gardeners let nature take its course and find many delightful seedlings about the garden. Bumble bees and honeybees are rabid pollinators which I've watched flitting from one species to the other. This opens the possibilities of some wonderful natural crosses. I've set up many crosses in the greenhouse between *P. vallisarvae* 'Margery Fish', *P. saccharata*, *P. longifolia*, *P. angustifolia*, and *P. rubra* (syn. *P. montana*). Most bloom simultaneously although I have had to take pollen of the early birds on black pipe-cleaners. I store these in plastic film cans, frozen until others bloom. Crosses need to be made several times during the day for best fertilization. Remember, that unless you are very lucky, it takes hundreds or thousands of seedlings and years of testing to come up with a plant that can be introduced.

While the British Plant Finder lists over a hundred taxa of *Pulmonaria* in their '02-'03 edition, we in America can only find the following common cultivars;

***Pulmonaria* 'Mrs. Moon'** — Applied to many spotted forms. Mildew-prone. Fair flowers. Mediocre to good silver in the spotting, compact shape.

***Pulmonaria rubra* 'Redstart'** — A very good, almost over vigorous grower with large salmon bells. No spotting.

***Pulmonaria rubra* 'Bowles' Red'** — Similar to the above. Foliage is muddy green with faint spotting.

***Pulmonaria saccharata* 'Sissinghurst White'** — Nice white flowers, dull spotting. Mildew-prone.

***Pulmonaria longifolia* 'Bertram Anderson'** — Small cobalt bells held tightly together over delicious dark-green strap leaves. Brightly silver spotted. Looks poor at the end of blooming with a floppy form.

***Pulmonaria* 'Roy Davidson'** — A child of the above with broader leaves. More spotting and light-blue flowers which fade to pink.

Pulmonaria angustifolia* subsp. *azurea — Extremely early cobalt flowers make a wonderful foil for Narcissus. Leaves are unspotted and compact.

***Pulmonaria vallisarvae* 'Margery Fish'** — Large flowers, early, no mildew, vigorous. Large leaves, well spotted. A superior plant and my main breeder.

Some newer cultivars from Terra-Nova and other growers:

***Pulmonaria* 'Berries and Cream'** — Unique flower color of raspberry with a light ruffling.

***Pulmonaria* 'Cotton Cool'** — Lovely upright leaves that are entirely silvered. Good blue flowers.

***Pulmonaria* 'Dark Vader' PPAF** — Very dark green leaves reminded Ken of the dark one. Silver spotting and nice blue- to rose-pink flowers adorn this plant.

***Pulmonaria rubra* 'David Ward'** — Variegated form named after her propagator, David Ward. Mint-green leaves bordered in white support salmon pink blooms.

***Pulmonaria* 'Emerald Isles' PPAF** — Named for its unique foliage, like emerald isles floating in a sea of silver. Nice blue flowers augment this new addition to our line.

***Pulmonaria* 'Excalibur' PP#8958** — Striking silver leaves edged in emerald green.

***Pulmonaria* 'Golden Haze' (Walters) PPAF** — Here's *Pulmonaria* 'Bertram Anderson' with a twist; creamy gold edges and a 'golden haze' overlay.

***Pulmonaria* 'High Contrast' PPAF** — Brilliantly contrasting foliage.

***Pulmonaria* 'Ice Ballet'** — Large pure-white blooms, great vigor, and nice spotting.

***Pulmonaria* 'Little Star'** — Fuzzy, lance-shaped leaves. Unusual silver spotting and magnificent, large cobalt-blue blooms.

Pulmonaria longifolia* var. *cevennensis — Fabulous lance-shaped leaves, well silvered and the blooms are larger and a dark blue.

***Pulmonaria* 'Majesté'** — A silvery mound with broad, lance shaped leaves introduced by Sunny Border Nurseries.

***Pulmonaria* 'May Bouquet' PPAF** — Our absolute winner in the 1999 trials for profusion of bloom *and* individual flower size. This plant was stunning here for over a month in masses and masses of blue flowers that change to pink.

***Pulmonaria* 'Milchstrasse' (syn. 'Milky Way')** — Well spotted, lance-shaped leaves. Blue to wine-colored blooms.

***Pulmonaria* 'Pierre's Pure Pink'** — Good spotted foliage and moderate pink flowers.

***Pulmonaria* 'Silver Streamers' PPAF** — Brilliant, pure-silver lance-shaped leaves, uniquely stippled and ruffled.

***Pulmonaria* 'Polar Splash' PPAF** — Brilliantly spotted form we have. Blue to pink flowers.

***Pulmonaria* 'Spilled Milk'** — Compact foliage is 'splashed' with silvery milk. Mildew resistant, robust. Flowers are borne tightly on compact stalks. Blue flowers fade to pink.

***Pulmonaria* 'Trevi Fountain' PPAF** — Superb, brightly silver-spotted, long leaves give rise to profuse clusters of large cobalt-blue flowers in spring. A stunner!

***Pulmonaria* 'Victorian Brooch' PPAF** — Attractive long (but compact) silver-spotted foliage, upright and outfacing gorgeous magenta-coral flowers with ruby-red calyces. This Victorian-tinted marvel bloomed 2½ months in Oregon last year!

Heuchera

Heuchera, once used medicinally by the Native Americans, were adopted by the American gardener for their bright flowers and toughness in the border. A new generation has brought an explosion of stunning foliage and flower forms. Thousands of seedlings have been drawn from to produce plants that are superior in foliage,

flower production, and hardiness. Handsome plants bearing satiny silver leaves measuring 9 inches across, have been chosen from these cultivars. Others include those with breakthrough forms showing ruffled foliage, flowerscapes to 3 ft tall (superior cut flowers), awesome container plants, and new, dwarf rock garden plants. As you can see, the possibilities with these plants are endless.

There are three *Heuchera* breeding programs in the U.S.A. and one in Canada. Each program concentrates on specific goals. Charles Oliver of the Primrose Path in Pennsylvania is pursuing dwarf forms and some splendid \times *Heucherella* (the sterile hybrid between *Heuchera* and *Tiarella*). In California, the late Dara Emery worked with the many dwarf, mountainous species and the not-so-hardy-but-showy *H. maxima* to produce a series of tall, floriferous hybrids. His torch has been passed on to Carol Bornstein of the Santa Barbara Botanical Garden (where plants can be bought) and Bart O'Brien of the Santa Ana Botanical Gardens. Lynn Collicutt and Campbell Davidson of the Agriculture Canada Morden Research Station have bred "prairie hardy" forms of *Heuchera*. These can tolerate temperatures to -40 °F! The Terra Nova line pursues excellence in foliage, emphasizing leaf form, size, and showiness. The latest line, the 'tri-specifics', carries traits from three distinct species to produce a showy plant with attractive flowers as well.

Most *Heuchera* are hardy between Zones 4 and 9; however, there are the variables of snow-cover and microclimate that can allow these plants to grow in colder zones. A subject rarely broached is summer hardiness. There are areas of the South Atlantic which swelter in high heat and humidity for months. Some *Heuchera* which originate in the high mountains of Mexico (like *H. sanguinea*) simply do not prosper. Enter our friend, *H. americana*, a native of the dry and rocky woods of North Carolina. Here we have a plant with built in drought resistance, shade resistance, summer and winter hardiness. Who could ask for anything more? I can. I set criteria for each new variety: Is it garden worthy? Is it different from anything else on the market? Does it have a "WOW" factor? Breakthrough crosses were made from a new strain from Nancy Goodwin of Montrose Nursery. A chance, extremely ruffled seedling of *H. micrantha* was obtained at a Hardy Plant Society sale.

A new and exciting cultivar, *H. 'Amber Waves'* has broken the rules for colored foliage with ruffled leaves of a rich amber tone, offset by a rose-colored back that "peeks" through the ruffles. More color forms are on the way and we would hope that all gardeners give "the new generation" of coral bells a try!