

Sensational *Salvia*

This relatively under-utilized group of salvia is available in a range of colors and has low water requirements, so why aren't more of these salvia being produced and sold?

**By Luis Masvidal
and Jack Williams**

By consistently improving varieties, plant breeders have been able to refine and reinvent some species. These old standbys have been transformed from troublemakers to industry sweethearts, from plants no one wanted to grow to ones they can't keep in stock. To show the potential of these emerging crops, GPN is running a 6-part series detailing each crop's transformation and some tips for success.

January: Lobelia
February: Penstemon
March: Euphorbia
April: Salvia
May: Hellebores
June: Phlox hybrids

Go into any greenhouse in North America or other parts of the world, and you are likely to find a crop of salvia being grown. This family has an abundance of great plants, including the popular *Salvia gurgantia* 'Black and Blue', perennial favorites such as salvia 'May Night', or any one of the tri-color sages in the *Salvia leucantha* group. As you can see, there is no shortage of options for growers to produce and sell.

However, a relatively under-utilized group of salvia is the *Salvia greggii* types that are native to the North American continent and until now have been used mostly by nursery producers and native plant collectors.

***Salvia greggii* Characteristics**

In the wild, *Salvia greggii* is usually an evergreen shrub growing natively in rocky soils in Central, Western and Southern Texas and Mexico. It has small, dull, pale green, glandular, aromatic leaves. The normally red-flowered species also has white and pink forms and many named cultivars with slightly larger or smaller, rounder or more elongated leaves. Growth habits can vary from very upright to sprawling.

Pale yellow, orange, salmon, fuchsia, purple, red-violet, burgundy and some varieties with white variegation of leaves or flowers are commonly available.





There also are numerous named hybrids with *Salvia microphylla* and other species, which often are referred to as *Salvia greggii* types. All of the plants in this group are valued as magnets for hummingbirds and for their adaptability to garden soils and a very long blooming season.

Specific characteristics of *Salvia greggii* are:

Form. Rounded, irregular shrub or perennial.

Seasonality. Evergreen in Tucson, Az., treated as annual elsewhere.

Size in the garden. Up to 3 ft. with equal spread.

Leaves. Large variation from simple elliptical to round.

Flowers. On stem terminals, trumpet-shaped spikes, color usually red, but varies; blooms intermittently from February to November depending on climate.

Stems and trunks. Angular, new growth is lush green; old growth can be woody.

Range and origin. Texas, Chihuahuan desert, other locations of Mexico.

Hardiness. To single digits, some top damage may occur on young stems. When transplanted in the garden, soft frost can be tolerated.

The real news in *Salvia greggii* is habit. Breeders are starting to produce plants that look and behave more like annuals than perennials. The new, naturally dwarf varieties can easily be controlled for 4- to 6-inch production, and the sturdy, upright habit gives a great show of color. Add to the improved habit larger flowers, more color choices and actual series behavior, and *Salvia greggii* starts to show real promise in the marketplace.

Salvia Availability

Today there is a limited range of commercially produced *Salvia greggii* genetics available for growers to choose from. Current series include Navajo from Ball FloraPlant, which offers five colors; the Savannah and Stampede series from Bodger

Top: The Navajo series from Ball FloraPlant has enough vigor to stand out in a landscape planting. **Bottom:** The dark calyx typical of *salvia greggii* makes for a dramatic contrast to flower colors. (Photos: Ecke Ranch and Ball FloraPlant, respectively)

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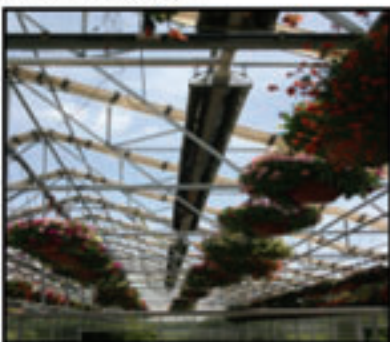
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Botanicals that include two and four colors, respectively; the Heatwave series from Plant Growers of Australia (PGA) that includes four colors; and minor groupings of individual cultivars being grown in the perennial market. Fortunately, there are some salvia collections being managed by different botanic gardens, and these plants may help breeders yield significant enhancements for future introductions through the diversity gene pool.

The obvious question is why aren't more of these salvia being produced and sold? Certainly, the issue is not due to limitations in the range of flower color or with plant hardiness. In fact, with the recent drought problems impacting various parts of North America, crops like this one should be welcome additions to any production and retail program due to their typical low water requirements. Most likely, the lack of enthusiasm may be because this crop has always been caught somewhere between the nursery and the annual color producer. Uniformity of plant habit also has been less than ideal, but that objection is quickly being addressed.

Varieties To Come

One of the great new series on the market comes from PLA International in Denmark. The company's breeders are working with a collection of salvia that has been purposely bred for prolific flowering, a spectrum of bright colors and a medium-compact and mounded habit. This salvia is under evaluation in trials throughout Europe and at select sites in North America, hopefully for introduction in the next 1-2 seasons. So far, seven varieties have been selected for potential market introduction in 2007: White, Peach, Orange, Salmon Red, Cherry Red, Vivid Pink and Rose.

The collection comes from targeted breeding and selection programs in Spain. It uses crosses of *Salvia greggii* and *Salvia microphylla* with focused selection on: more uniform and compact plant habits; free branching; larger, round-shaped foliage; larger flowers that present horizontally for maximum color; a dynamic range of colors; and heat tolerance.

Kieft Seeds Holland has been breeding *Salvia greggii* for many years, and 2007 might be the pay-off year. The efforts have culminated in a 4-color series that is being marketed by Bodger Botanicals. Stampede includes a dark pink, white, light purple and salmon, probably the most unusual color of the series. The Stampede series is already receiving a lot of attention even before its release, and a full series like this with lots of colors and a good habit is exactly what this species needs.

Several other breeders are actively working on *Salvia greggii*, and the market should be



Crops To Watch

Ball FloraPlant
www.ballfloraplant.com
Navajo series

Bodger Botanicals
www.bodger.com
Stampede series

Plant Growers of Australia
www.pga.com.au
Heatwave series



Top: 'Stampede Punch'. **Bottom:** 'Navajo Rose'. (Photos: Bodger Botanicals and Ball FloraPlant, respectively)

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seeing a wealth of new varieties in the next few years...many of which are fast flowering and address the habit issue bedding plant growers have with perennial salvia.

Growing Guidelines

Salvia greggia can be scheduled for three different sales periods: Plant in October/November for finishing early-mid spring; plant in

December/January to finish plants in late spring/summer; or plant in June/July to finish plants for fall.

Recommended pot size is 5-6 inches (one cutting per pot) or 1 gal.

(two cuttings per pot). Plants should be pinched twice to obtain a compact form; a third pinch is advised to obtain compact plants in late spring plantings, especially for taller varieties. When using two pinches, PGRs generally are not required; however, Bonzi (Syngenta Professional Products) can be used as a spray at 10 ppm if two pinches cannot be performed.

Salvia greggia is drought-tolerant so avoid over-irrigation; keep moderate water levels throughout production. Use constant liquid feed programs at moderate levels (200-250 ppm nitrogen) of a balanced and complete fertilizer mix. Avoid high EC (more than 3.0 based on saturated media extract SME). *Salvia* are tolerant of higher pH ranges during production, target for an optimum 6.0-6.5.

Crop time for 5-6 inch pots is about 10-12 weeks while time for gallon to 8-inch pots is approximately 12-14 weeks. However, for late spring/summer crops, production time can be reduced by about two weeks due to longer days and warmer temperatures. Crop time also depends on the number of pinches made, as each pinch delays flowering.

Consumer/Landscaper Advantages

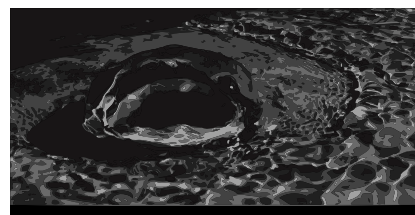
Salvia greggia has a number of benefits that can be quite appealing to consumers and landscapers. It has a new range of colors available, from creamy white to cherry red and an extended flowering season. *Salvia greggia* is heat tolerant and winter hardy in the main consumption areas.

You can put plants in terra cotta containers for decorative use or group plants by colors in mass plantings. Most *salvia greggia* have a fresh, intense fragrance that is attractive to hummingbirds. **GPN**

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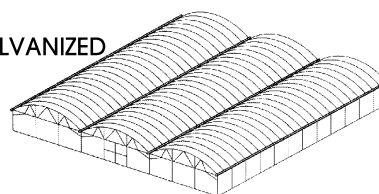
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