

# Tender Perennials

Even when perennial plants are not rock hardy, some can still have great market potential for northern growers.

By Art Cameron, Beth Fausey, Cathy Whitman and Erik Runkle

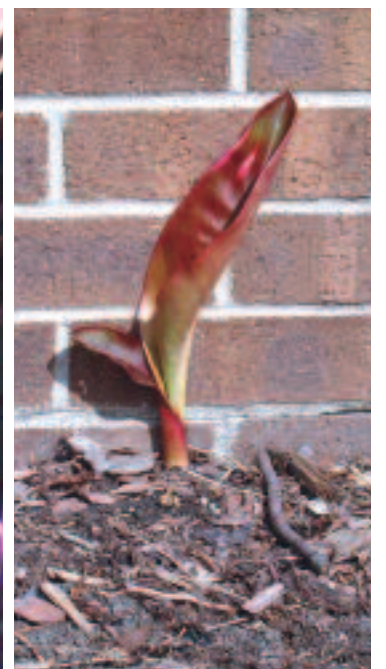
**N**ew plants, new trends, new looks for the garden. It's that quest for "new" that motivates many consumers. Since "new" can often translate into profits, plant producers have joined the hunt, ever on the lookout for new and potentially profitable plants.

While greenhouse production of hardy herbaceous perennials has been a focus of our research efforts here at Michigan State University (MSU) for several years, we can't help but look south on occasion for plants with garden potential — purple fountain grass, lantana and gazania; all are great tender perennials — just not in Zone 5! Though they can't make it through our winters, we can grow them with great success. What they also have in common is that they propagate quickly (often vegetatively), grow rapidly and have distinct ornamental value the first season. Tender perennials are now contributing to the rich and varied group of plants now offered to northern consumers.

Many "annuals" available up north are simply tender perennials. They usually benefit greatly from a "head start," sold in flower or at least well developed in a larger container. Retailers are finding that many savvy gardeners are willing to pay the extra price for an opportunity to grow something just a little different and exciting.

So, just what is a tender perennial? It really depends on your point of view. The best definition is a perennial (usually herbaceous) plant that will not overwinter in the garden because it's too cold. Simple as that. According to this definition, the list of tender perennials will increase for each step north you take, including half-hardy perennials, subtropicals and tropicals.

Here, we give a handful of tender perennials that have proven to be relatively easy to produce, grow rapidly from seeds or cuttings, and are ornamental enough to make a splash in a container or garden even if they cannot survive the winter.



Top: Cannas, grasses, sweet potato vine and more give a tropical look to a Northern garden; bottom left to right: Lavandula in front of Phormium in a Northern garden.; Brave Canna sprouting overwinters in Zone 5. (Photos courtesy of Art Cameron)

### HALF-HARDY PERENNIALS

The term half-hardy perennial is vague largely because it depends on your frame of reference. If you live in Zones 4, 5 or 6 perennials are considered half-hardy, while further south in Zone 5, half-hardy would be Zone 6 or even Zone 7 perennials.

Sometimes, survival can relate to the amount of snow cover or to a certain microclimate. In fact, we have a few brave cannas (usually listed as Zone 7 or higher) that have survived for several years in our MSU demonstration gardens, huddled up against the foundation of our greenhouses. This certainly points out the influence of microclimate. In the late 90s, we had several Zone 7 winters in a row, and a whole host of half-hardy perennials made it through. For go-for-it gardeners, this was a great opportunity to come up with something new for garden displays. In the past two years, the winters have been colder, and without consistent snow cover, these brave plants are now history.

**Lavandula stoechas/Spanish lavender (sometimes French lavender).** Though often listed as Spanish lavender, *L. stoechas* is actually native from Morocco up into France. Known for the showy flag petals (which are actually sterile bracts), *L. stoechas* has a distinct look when compared to the hardier *Lavandula angustifolia*. *L. stoechas* will not survive a Zone 5 winter and is typically listed as Zone 7. In the upper Midwest, we can overwinter large plants indoors in a bright sunny window. During the winter, it can even push out a flower or two by late March or April. It's fair to conclude that most consumers would prefer to purchase new plants each year.

There are numerous *L. stoechas* hybrids and cultivars on the market, and we have not begun to test them all. 'Otto-Quast' is an old favorite, while 'Willow Vale' is a promising English introduction. New selections from New Zealand such as 'Pukehou' have performed well in our trials. In the greenhouse *L. stoechas* selections do

not appear to require or benefit from a cold or vernalization treatment. They are facultative long-day plants and definitely benefit from supplemental lighting during the winter in cloudy parts of the country. Under short days, they take considerably longer to flower. They are propagated vegetatively, and like the Zone 5 hardy *Lavandula angustifolia*, larger starting material will result in a larger finished plant.

*L. stoechas* selections are good in containers and outdoors in Northern gardens. Plants bloom for an extended period and make an excellent display, especially for gardeners trying to develop a Mediterranean look. In addition to the colorful flowers, they have nice texture and aroma. They will take all the sunshine they can get and are remarkably drought tolerant.

**Salvia guaranitica 'Black and Blue'.** Native to Brazil, Argentina, Paraguay and Uruguay, this half-hardy perennial grows to about 3-4 feet in one summer. When planted with flowers, it blooms from the beginning of the season to the end in Northern gardens. Though there are other cultivars, Black and Blue has distinct dark blue flowers and provides a unique look for Northern gardens.

Salvia Black and Blue is propagated from cuttings, and plants grow very rapidly — perhaps too rapidly. The plants have no cold requirement and do not benefit from exposure to cold. They are day neutral with respect to flowering — or at best facultative long-day plants. Under 9-hour days, plants are far more compact, which can actually be an effective means of controlling plant height. They do respond to PGR treatments, but the best bet is to grow under short days and to market promptly — before they get too large and floppy. We have found that they tend to stretch under incandescent lighting and benefit from supplemental lighting in the greenhouse.

It is common knowledge that Black and Blue is susceptible to white fly. We suggest you grow and market promptly, and this will greatly



Research plants of *Salvia guaranitica* 'Black and Blue' under short days, long days and 16-hour HPS lighting.

## crop cultivation



Top, left to right: *Salvia* 'Black and Blue'; *Yellow Phygelis aequalis*; bottom, left to right: *Red Phygelis* sp.; *Panicum virgatum* 'Shenandoah'.

reduce the problem. Overgrown floppy plants are not only difficult to treat with chemicals; they are a pain to ship. Overall, it is best to market short plants with flowers. Indeed it is the intensely dark blue flowers that are of ornamental interest. After a recent plant sale, we observed that the only Black and Blue plants remaining were those with no flowers. Photos can never substitute for the real thing.

Black and Blue flowers are a sure-fire hummingbird attractant, which can be another marketing angle. Even in Northern gardens, hummingbirds can be seen feeding on the flowers one after the other. Though generally thought to require moisture, in Midwest gardens, Black and Blue appear to be rather drought tolerant compared to most annuals and bedding plants.

*Phygelis aequalis* and *P. capensis* *cape fushias*. While probably still considered difficult to find, *Phygelis* species are another great plant for northern go-for-it gardeners. They are full of brilliant yellow or red tubular flowers that, like those of Black and Blue, are a treat for local hummingbirds. Typically considered Zone 7 perennials,

they have managed to survive at least a few Michigan winters over the years. Still, even when grown for just a single season, they give great ornamental interest and are dazzling to those who are not familiar with the plant.

In our greenhouse trials, seed-propagated varieties grow and flower rapidly within 7-8 weeks under all photoperiods. They do not appear to benefit from a cold treatment and are completely day neutral with regards to flowering. In fact, incandescent lighting should be avoided, as it causes undesirable stretching and presumably a far-red effect. We have found that pinching works well to increase branching and improve container display. Pinched plants should be given 1-2 weeks extra time for finishing.

### SUBTROPICAL PLANTS

Subtropical plants can tolerate temperatures down to about freezing but not much lower. The climates of Southern California and parts of Florida are considered subtropical. The old-fashioned cannas are subtropical in origin and were a classic Midwest favorite that has fallen in favor ▶

## crop cultivation

over the past 20 years; they usually have green foliage with red or yellow flowers. A lot has changed over the past few years. The interesting foliage of cannas such as 'Wyoming', 'Tropicana' and 'Stuttgart' gives an instant tropical air to Northern and Southern plantings. They are aggressive growers the first season and merit even more attention than they are receiving from growers and gardeners. They do benefit from a "head start" and can easily be produced to a salable plant from dormant tubers in 10-inch containers in 6-8 weeks.

### TROPICAL PLANTS

Tropical plants can do well in Northern gardens when the summers are warm. Many are sensitive to temperatures much below 50° F or 60° F and should not be put into the garden until well after the last frost-free date. The tropical purple fountain grass will quickly be injured if exposed to 35-40° F, and leaves will turn a ghastly brown. Extended periods less than 50° F will actually kill many tropical plants.

*Colocasia esculenta*, better known as elephant ears, is one particularly noteworthy tropical perennial plant. In Hawaii, colocasias are better known as taro and are grown for the stored starch, which can be pounded and served as poi. This Polynesian favorite has great ornamental value, and though not well-known, it is at least recognized by the more avid gardeners. In our garden trials, colocasias have been met with great enthusiasm. 'Black Magic' is just one of many popular cultivars.

Since they are traditionally sold as dormant tubers, gardeners are much more likely to purchase a started plant. The straight species grows rapidly in the garden and puts on an excellent summer display. The ambitious gardener can harvest the tubers at the end of the season after the plant has frozen to the ground. After a bit of cleaning, they can easily be stored in a cool (50-60° F), relatively dry basement. They can probably take colder temperatures, but to be honest, we haven't tested the possibilities. From dormant tubers, plants grow relatively rapidly in the spring if started at warm temperatures: about 1-2 weeks to emergence and 6-8 weeks until they fill a 10-inch container for sales.

It could be said that there are never enough plants! Still, the palette can be broadened significantly by adding in a few tender perennials. The sky really is the limit. GPN

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