

# Hybrid Phlox

## *Have A Sunny Future*

New breeding techniques for vegetative hybrid phlox are proving very advantageous for growers and consumers.

**By Rick Schoellhorn**

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**

The hybrid phlox market continues to expand, and that is a very good thing. We have existed as an industry on the old standards for so long that this genus is overdue for revitalization. In the past, most of the development was with hybrids of annual phlox (*Phlox drummondii*). In the last few years, however, breeders have started crossing this colorful spring annual with species that have increased heat tolerance, reduced sensitivity to powdery mildew and an extended blooming season. The result is that a whole new line of vegetative annual phlox has entered the market. While they are still annuals, these plants represent a breakthrough in breeding with huge benefits for growers and consumers.

### Series Characteristics

It all began at the 2003 Pack Trials with the release of the Intensia phlox series from Proven Winners. Suntory released the Astoria phlox series at the 2004 Pack Trials, and this year Westhoff released the PowerPhlox series. All the genetics are very similar, but if you are a breeder, you know that the parent stock and the selection process is different for each. Both Astoria and Intensia were bred in Japan and are very similar in their genetics. In the selection process, however, Proven Winners selected for larger landscape plants, and Suntory appears to





## emergingcrops



have worked for a more compact plant. To my knowledge, the Westhoff series has not been trialed yet. We will know more about how this series performs after the university trials are completed this summer, but it appears to be more compact than Astoria.

You can't talk phlox without discussing the 21st Century series from PanAmerican Seed. This is arguably one of the top seed-produced phlox varieties on the market. The main difference between 21st Century and the vegetative types is that 21st Century does not have the influx of heat-tolerant genes like the other series. It will do extremely well in most situations but, like all seed phlox, produces seed. When plants make seed, they are diverting energy away from additional flowers. The peak season for this crop is slightly more concentrated than the newer hybrids. For growers, this is a great crop, and seed is almost always less expensive than vegetative cuttings. It comes down to making a choice about what you want to grow, and I highly recommend trialing all these varieties at your operation to see for yourself what works best for your nursery.

### Understanding Production

Intensia and Astoria production is basically the same, and until we know differently about PowerPhlox, you should apply the same guidelines to it. The key to success is to time your orders correctly and follow some simple guidelines upon rooting and transplanting. The main problem most growers have with this crop is they try to get started too early, and the combination of cold temperatures, low light levels, cold soil and overwatering leads to problems in producing strong 4-inch plants.

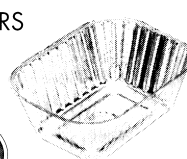
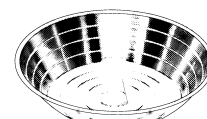
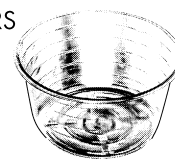
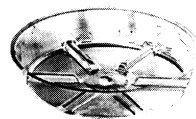
There are three important culture requirements for hybrid

Both 'Astoria Lavender' (top) and 'PowerPhlox White' (bottom) indicate a trend toward more compact series.

## FOR YOUR POT PLANTS & BASKETS YOU NEED *WHOLE YEAR*

CLEAR VINYL SAUCERS

CLEAR BASKET LINERS



CLEAR DEEP LINERS



WHOLE YEAR TRADING CO., INC.

**WHOLE YEAR**

**1-800-238-6694**

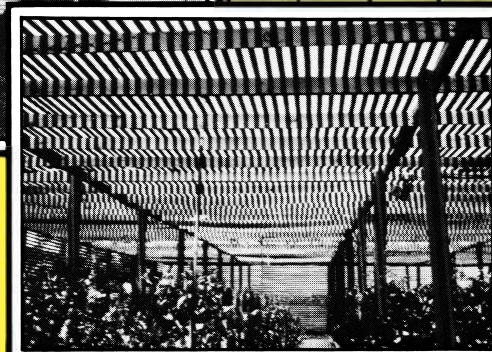
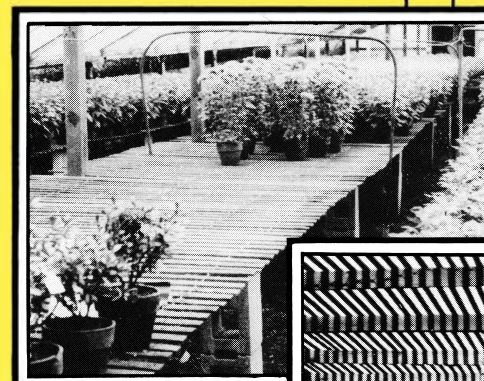
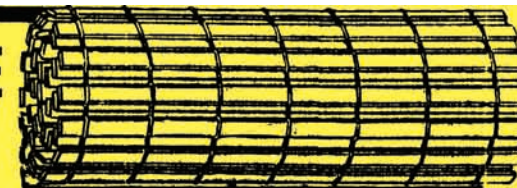
1 Kimberly Rd., Unit 104, East Brunswick, NJ 08816. FAX: 732-238-1148

wholeyear@verizon.net

www.wholeyeartrading.com

Write in 781

## GREENHOUSE BENCH AND SHADE FABRIC



Woven lath shade and bench fabric is made of specially selected Grade "A" or better lath 1 1/4" space between pickets. The 6' wide material is woven between seven two-wire cables of copper bearing, galvanized wire. The 4' wide is woven between five two-wire cables.

Pressure treated. 55% closed, 45% open. These choice pickets are available hot dipped in a red oxide stain, or natural finish; please specify.

### Wood lath provides floriculture with many benefits.

- Versatile—lightweight—easy to assemble or dismantle.
- Modernize at prices you can afford.
- Ideal protection against frost and wind damage—helps control moisture for plants and gives a uniform sun control.
- Long lasting—no stretching or tearing.

Available in 4' and 6' wide, 50' rolls.

# Southeastern WOOD PRODUCTS COMPANY

P.O. Box 113 1-800-722-7486 Phone (770) 227-7486 Griffin, Georgia 30224

Write in 714



# The choice is YOURS...



Helleborus 'Ivory Prince'



Penstemon 'Lilliput Rose'



Hydrangea 'Little Honey'



Aster 'Ballad'

McHutchison has hundreds of independent breeders working to provide you with the very best genetics to meet *your* specific needs. Our sales representatives will suggest the best *for you*. Call your representative today.

**McHUTCHISON**  
HORTICULTURAL DISTRIBUTORS SINCE 1902

(800) 943-2230 phone • (866) 234-8884 fax • [www.mchutchison.com](http://www.mchutchison.com)

Write in 740

## It's Cost Effective!

With Phyton-27® Bactericide and Fungicide you get more than effective disease control. Many growers report increased yields, improved quality and greater profits, making Phyton-27® surprisingly cost effective. Improve your disease management – and profitability – with Phyton-27®.

Savvy growers rely on *Phyton-27®*!

**Phyton®**  
**27**  
BACTERICIDE & FUNGICIDE

**NEW**  
**California**  
**Registration**

**Phyton-27®**  
**New**  
**Dimension**  
**BACTERICIDE & FUNGICIDE**  
**Introducing Phyton-27®**  
**New Dimension**  
• CAUTION signal word  
• Easier to mix & clean up  
• Same reliable disease control



Available in  
1 & 2.5  
gallon  
bottles



For technical information, call 1-800-356-8733 or visit our website at [www.phytoncorp.com](http://www.phytoncorp.com)  
Phyton Corporation – Manufacturer of Phyton-27® Read and follow all label directions.

Write in 719

## emerging crops



## Crops To Watch

**Proven Winners**  
[www.provenwinners.com](http://www.provenwinners.com)  
Intensia series

**Suntory Collection**  
[www.surfinia.com](http://www.surfinia.com)  
Astoria series

**Westhoff**  
[www.westflowers.de](http://www.westflowers.de)  
PowerPhlox series

phlox. As with all phlox, one of the crucial keys to success is high light levels: Without this, you are fighting an uphill battle all the way. Secondly, because these hybrids include phlox species with more heat performance, they also prefer a warmer production environment. So you want to keep the plants warm to encourage vigorous growth. Lastly, part of the beauty of these hybrids is that they have quite a bit of drought tolerance and prefer well-drained soils, which means growers need to watch their watering and avoid prolonged wet conditions. This has two benefits: The plants do better, and lower water levels mean less stretch, so it is easier to produce higher quality plants.

When I was trialing for the University of Florida, the Intensia series was probably the highest-rated plant in our trials for three years running. Another thing we learned is that hybrid phlox can be a great winter plant for the Deep South. Although they prefer a warm production environment, under temperate winter conditions (with high light levels) they are outstanding winter color, blooming through the Southern (no freeze) winter and holding flowers in field trials down to the 20° F range. So for milder winter areas, don't limit yourself on the season you use these plants. The key here is high light! ♦



**Top:** 'PowerPhlox Purple Star' introduces a new color pattern and petal shape to this group of plants.  
**Bottom:** 'Intensia Pink' was among the first vegetative hybrid phlox cultivars introduced. (Photo: Proven Winners)



# THE ART OF RETAIL.



# THE SCIENCE OF GROWTH.



In today's market of educated, demanding, and discriminating customers, you may have only one chance to make the right impression. A new passionate and loyal consumer base recognizes and demands the highest quality plants, while seeking beautiful, enjoyable, and, most importantly, unique Garden Centers to make their purchases. Whether you are a grower, retailer, or retailer grower, you are now faced with an opportunity to instantly distinguish yourself from your competition. Private Garden is an industry leader in creating distinctive Garden Centers and unparalleled Growing Ranges and has been selected by some of the nation's most respected growers and retailers to continue their tradition of excellence. Private Garden's unique ability to design and construct one-of-a-kind greenhouse, automation, heating, and benching systems can help you take the first step towards exceeding your customer's highest expectations. Whether you are just starting to plan a new Garden Center or searching for a way to increase your yields, let our family show you how your business can grow.

# PRIVATE *PG* GARDEN

GROWING RANGES • GARDEN CENTERS • VICTORIAN GLASSHOUSES • WINTERGARDENS • CONSERVATORIES • ORANGERIES • GLASS ENCLOSURES

Private Garden, a division of HSS, Inc. - P.O. Box 600, 36 Commercial Drive, Hampden, MA 01036 - 413.566.0277 - <http://www.Private-Garden.com>



## What's Next?

What is in the future for annual phlox? I think there will be an increasing number of new hybrids with differing levels of perennial performance, fragrance, habits and colors. Even with all the

improvements we have seen so far, there is still a lot of room to grow this group of plants into a larger market.

The improvements don't stop with *Phlox drummondii* and its hybrids. We are beginning to see

the emergence of a new group of *Phlox paniculata* cultivars as well, and I think this is just the tip of the iceberg. The goal here is to take this traditional perennial crop and overcome its natural flowering cycle so it can be pro-



'PowerPhlox Light Pink'

## Calibrachoa NOA™



Noa™ Yellow Cream®

- Flowers in short days (10 hours)
- Flowers open early in the morning
- Blooms from early spring until late autumn
- Strongly branched, compact trailing growth habit
- The Noa™ series is splendid for baskets, pots, mixed containers and window boxes placed outdoors in sunny areas
- Noa™ varieties bloom in great profusion of exquisite flowers



Noa™ Orange Eye®



Noa™ Blue Legend®

Danziger - "Dan" Flower Farm Moshav Mishmar Hashiva 50297. P.O.Box 24 Beit-Dagan, Israel  
Tel: 972-3-9602525, Fax: 972-3-9605896, E-mail: [danziger@danziger.co.il](mailto:danziger@danziger.co.il) [www.danziger.co.il](http://www.danziger.co.il)



Write in 709

duced on a more year-round basis. Hybridizing with other species offers a lot of potential, and it will be interesting to see what the future brings. Though neither series is new, I think the Flame series from Ball FloraPlant and the Volcano series from Anthony Tesselaar are both good indications of where this crop may be moving.

Currently, we have phlox species that survive from Anchorage to Miami, and that is a very good thing if you are a breeder as it means there is a lot of variability out there that can be used to reshape this plant for new gardeners. The advances in molecular genetics and tissue culture as well as embryo-rescue techniques are opening doors to new concepts in plant hybridizing.

I think the future is very bright, not just for phlox, but for many species. Color, texture, performance, disease tolerance — all of these factors can be improved through good breeding. It is great to see good plant breeding at work in all the plants discussed here, and though it frustrates plant breeders to no end, the question is always the same: "That's beautiful...What's next?" **GPN**

**Rick Schoellhorn is director of new products for Proven Winners LLC; he can be reached at [rick@provenwinners.com](mailto:rick@provenwinners.com).**

## LearnMore

For more information related to this article, go to [www.gpnmag.com/lm.cfm/gp060601](http://www.gpnmag.com/lm.cfm/gp060601)