

GREENHOUSE GROWER

VARIETIES | PRODUCTION | MANAGEMENT

The Ultimate New Variety Guide to Spring Trials:

California Promises

Check out 39 of the promising new varieties you'll see at California Spring Trials this year.

010# 020S 02233 The Unseen Benefits of Automation

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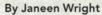
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The Ultimate New Variety Guide to Spring Trials:

California Promises

California Spring Trials 2018 is a little over a month away. Here's a sampling of 39 of the promising new varieties you'll see as you travel along the California coast in April.



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f you're a plant person, there's no better place to be in April than California Spring Trials. Promising new plant introductions hold unlimited potential, and with any luck, you're going to find some winners among the mix for your business.

Greenhouse Grower editors Laura Drotleff and Janeen Wright, accompanied by Allan Armitage and Andrew Scheldorf, winner of the Dr. Allan Armitage Scholarship for the Ornamental Spring Trials, will be front and center at California Spring Trials 2018, updating you on the latest plants, trends, and marketing ideas seen at the trials. Watch for daily news during the week in special Benchrunner editions with insider views on promising plants, slideshows of new introductions, and Allan Armitage's top plant picks. But until then, here's a sampling of what's in store for you at trials, with a peek at some of the 2018 introductions that will hit the retail market in 2019. See even more new intros in our online CAST preview slideshows on GreenhouseGrower.com.

NORTHERN REGION

Proven Winners, Gilroy, CA

Spring Meadow Shrubs

1 Spiraea 'Double Play Doozie'

Sterile, reblooming, hot pink-red flowers open in June and continue until frost

Syngenta Flowers, Gilroy, CA

2 Geranium interspecific Moxie Series

New series; dark red flower color, compact, mounded habit matches well to the series













Headstart Nursery, Gilroy, CA

Danziger

3 Calibrachoa 'Lia Melon'

Controlled mounding habit with tighter internodes for good flower coverage; plants flower in a 10-hour day

Suncrest Nurseries, Watsonville, CA

Cohen Nurseries

4 Diascia 'Morning Mist Basket Red'

Early flowering, compact; bred by Breier in Israel; heat and drought tolerant series; versatile for landscape and container use

Hishtil Nurseries

5 Funtastick Calibrachoa Tree

Standard-tree calibrachoa with round-shaped head and massive flower power; drought tolerant, long-lasting flowers, comes in four colors

Jaldety Nurseries

6 Senecio 'Silvery Velvet'

Evergreen, shrubby perennial; heat and drought tolerant; low maintenance; versatile for landscape and container use

























Nir Nurseries

7 Wax flower (Chamelaucium) 'Jupiter'

New line; high flower volume, terminal flowers; flowers do not exceed the stems

Pacific Plug & Liner, Watsonville, CA

Bailey Nurseries

8 Hydrangea macrophylla 'Endless Summer Summer Crush'

Intense, deep coloration; wilt resistant, compact; color breakthrough in reblooming garden hydrangeas; works well for containers and small spaces; Zone 4

Cultivaris

9 Rehmannia hyb. 'Crouching Tiger'

Pure-white flowers with tiger-spotted throat; after cold treatment it flowers from May to October, 10-inch flower spike on tidy plant; Zone 8

Sunset Western Garden Collection/Southern Living Plant Collection (Plant Development Services)

10 Agapanthus 'Ever Amethyst'

Semi-dwarf, blooms early, reblooms with multiple spikes, fast growing, drought tolerant; Zones 8 to 11

Ernst Benary of America, Watsonville, CA

11 Marigold 'Super Hero Spry'

All-America Selections winner; more uniform, stable color pattern, earlier to bloom, no deadheading

Speedling, Inc., Salinas, CA

Hem Genetics

12 Pansy 'Cello Raspberry Surprise'

New addition to large flowered Pansy Cello Series (now 27 colors); series performs well in fall and spring

Thompson & Morgan

13 Isotoma 'Fizz n' Pop Dark Blue'

Large, nectar-rich blooms; long-season interest in patio pots and containers; works well for borders and mass landscape planting

American Takii, Salinas, CA

14 Canna 'South Pacific Orange'

2018 All-America Selections winner; compact habit, repeat blooming, uniform, vigorous, better basal branching, daylength neutral

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Industry | Cover Story

















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Hilverdakooij

15 Echinacea Mooodz Series

Propagated by tissue culture; full plants with many side shoots in 12 to 13 weeks

Sakata Seed, Salinas, CA

16 Begonia Senator iQ Series

New series; large, bold blooms, uniform, compact habit; series includes: Deep Rose, Pink Rose, Rose Bicolor, Scarlet, and White

Floricultura, Salinas, CA

Beekenkamp

17 Begonia Dreams Collection

Easy tool to position the much-loved begonia; high vitality from grower to consumer; good shelf life, high quality

Plug Connection

18 Pixie Grapes

Dwarf grape; expect miniature clusters of grapes and fruiting throughout the season; available as a 102-cell liner from weeks 17 to 22 for spring finish the next season

Westhoff

19 Begonia 'RiseUp Grenadine Red'

Strong branching, flowers stay upright, flower power in both sun and shade

CENTRAL REGION

Ball Horticultural Co., Santa Paula, CA

Ball FloraPlant

20 Verbena Firehouse Series

Medium-mounded basket verbena, performs well in heat with less cycling; nine colors in series; powdery mildew resistant

Ball Ingenuity

21 Hydrangea 'Kanmara'

Supplied from Aldershot Greenhouses, large blooms in unique shades; works for the terrace, doorstep, or balcony

Burpee

22 'Atlas' Beefsteak Tomato

Suitable for porches, decks, and balconies; old-time flavor; bushy, compact habit easily shoulders bountiful loads of 1 lb. tomatoes; good balance of sweetness and acidity

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Industry | Cover Story



















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Darwin Perennials

23 Salvia 'Sky Blue Marvel'

New addition to the Marvel family with the same great habit as Blue and Rose Marvel, large flowers; Zones 4 to 9

Kieft Seed

24 Coreopsis 'Double the Sun'

Large, semi-double flowers; two to three weeks earlier in the early cool season, one to two weeks earlier in summer; quart or gallon production in spring and summer with 13-hour critical daylength

PanAmerican Seed

25 Dianthus 'Corona'

Regal choice for cool-season landscapes, gardens, and patio planters; uniform flowering time and habit

Selecta

26 Calibrachoa 'MiniFamous Uno Double Pinktastic'

Early-to-finish; ball-shaped habit that is half trailing; heavily contrasted double flowers; Fleuroselect winner for 2017

Star Roses and Plants

27 Blueberry 'Bushel and Berry Southern Bluebelle'

Medium-sized berries with mild sweet flavor; grows 2 to 3 feet high with a mounded habit; Zones 6 to 10; low-water, low-chill blueberry

Wave

28 Petunia 'Easy Wave Red Improved'

Spreading; improved seed quality, denser plant with more branching; shorter peduncles for a more controlled, holdable plant structure

Ch. Morel

29 Cyclamen 'Halios White Silverleaf'

Round, regular growth; maxi flower size for 5% to 8% inch pots; excellent lifespan in winter

Dümmen Orange,

San Luis Obispo, CA

30 New Guinea Impatiens Wild Romance Series

'Wild Romance Red' new to series; semi-double, trueshade New Guineas; uniformity across series

Floranova and Vegetalis,

Santa Paula, CA

31 Geranium Reach Out Series (Floranova)

Superb branching, short internodes; produces lots of flowers on a full but tidy habit; available in six bold colors

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Green Fuse Botanicals,

Santa Paula, CA

32 Rex Begonia Dibs Series

Strong vigor eliminates weeks of crop time, brightly colored leaf patterns glow in even the heaviest shade

GroLink Plant Company, Oxnard, CA

Florist

33 Gerbera 'Garvinea Sweet Fiesta'

Pink-white, two-toned flowers; robustness, disease resistance, good weather tolerance, blooms spring to frost

PlantHaven

34 Vibe Ignition Salvia Collection

Two new additions — White and Fuchsia, same habit as 'Vibe Ignition Purple;' grower-friendly product; available to North American customers Jan 1, 2019

Royal Van Zanten

35 Aster Showmaker Series

Two new additions — Blossom Pink and Magenta; suitable for indoor and outdoor cultivation; natural finishing period in weeks 39 to 40

Suntory Flowers

36 Catharanthus 'Soiree White Peppermint'

Compact plants produce a profusion of white blooms with red centers, thrive in the heat

Vivero Internacional

37 Pelargonium 'Pinkerbell'

Regal hybrid with compact habit; no cooling required, but can be grown under traditional zonal geranium conditions as long as they are kept dry

Windmill Nursery,

Buellton, CA

Kientzler

38 New Guinea *Impatiens* 'Paradise Select Dark Moyo'

Uniform flower genetics that perform well in the garden; bright, two-tone bicolor addition to the series.

Terra Nova Nurseries

39 Echinacea 'Prima Cinnamon'

Low and compact with tight double, cinnamon-red flowers; works well for containers or borders; forms a crown with multiple blooms in the first year; Zones 4 to 10

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GREENHOUSE GROWER VARIETIES

How to Keep Your Perennials Healthy and Disease-Free

Disease control through scouting, chemical rotation, and disease-resistant plants is essential to keep your perennials in top-notch shape.

Starting with diseaseresistant varieties saves you time, money, and labor. The Agastache Kudos Series is bred to be resistant to downy mildew.

By Dan Heims

obody likes diseased plants. When opening cases of plugs or cuttings from producers around the world, it's reasonable to expect healthy plants. Disease takes its toll on a plant, delaying the ready time, stunting or disfiguring it, or at the worst, killing it.

Terra Nova Nurseries has to approach disease with the utmost of seriousness. Most of its plants are from tissue culture. As one spore or one bacterium can destroy a culture of plants, it starts with the cleanest of stock, already tested for viruses before initiation. Once a plant hits the greenhouse for weaning, growers do a two-fold approach to prevent disease: culture and sprays.

Culture

One must monitor a raft of conditions to prevent disease. Horizontal ventilation, humidity and temperature control, no overhead irrigation, and morning and daytime watering are all areas where one element out of control can devastate a crop. Handling a diseased plant without sanitation of hands and tools afterward is a great way to inoculate a crop. Be aware!

Scouting

Scouting for problems is the responsibility of all. No grower can be everywhere at every time,

so it is beneficial to train all who pass through the threshold of the greenhouse to be aware of disease (and insect) damage. A poster of disease pictures in the breakroom can be a constant reminder along with training. Viruses are more difficult to pinpoint but can be verified by using Agdia Immunostrip test kits for on-site plant viral analysis. These can determine the presence of tospoviruses like impatiens necrotic spot virus (INSV). Check out-Agdia.com for more information.

Monitoring

Blue sticky cards can help determine the presence of thrips — the principal vector of INSV, a hugely non-discriminate virus.

Treatment

Once a disease is confirmed, it's time to find the best preventative — timing, rate, and time of application and reentry are important. Always use a cycle of two to three active chemicals to prevent resistance. Here are some examples of how Terra Nova Nurseries treats its top two.

Botrytis and Rust (Puccinea) Control:

- 1. Pageant: Mode of Action (MOA) group 7 to 11, preventive spray application at time of sticking cuttings, rate 15 grams/3 gallons
- 2. Palladium: MOA group 9 to 12, spray application at first sign



Chuck Pavlich, Director of New Product
Development at Terra Nova Nurseries, checks a blue
sticky card for the presence of thrips.
Photos by Terra Nova Nurseries.



Some genera like Pulmonaria used to show an 85% infection rate amongst the hybrid seedlings, after five years of breeding, this is down to 5%. Pictured is *Pulmonaria* 'High Contrast,' a Terra Nova variety bred to be resistant to powdery mildew.

Varieties | Perennials

The Echinacea Kismet series at Terra Nova is bred to be resistant to foliar disease and Aster Yellows.

of botrytis sporulation, rate 6 ounces/100 gallons

3. Orkestra: MOA group 7 to 11, spray application, botrytis rotation, rust preventative, 8 ounces/100 gallons



Spring and fall application is most effective for Rust control. This rotation has proved to be effective for both Botrytis and Rust control. The fungicides are applied by spray and work by tissue contact.

Powdery Mildew Spray Rotation:

- 1. MOA 7 to 11 (Pageant, Orkestra, Mural,) Heritage (MOA 11)
- 2. Rotate MOA 7 to 11 with MOA 9 to 12 (Palladium)

For more detailed information on prevention/control of disease, as well as how INSV can be prevented through thrips control, refer to the chart in the online version of this article on **GreenhouseGrower.com**

Save Yourself the Hassle, Start With Disease-Resistant Genera

It's better to start with a plant that has been bred to be disease resistant, which results in plants that are successful for the grower and ultimately, the consumer. In our trials, thousands of hybrids are observed. Many times plants are inoculated by spraying them with a water spray deflected off a mildewed specimen. If disease pops up, our ruthless breeders yell, "Off with its head!" and the plant is removed. Some genera like Pulmonaria used to show an 85% infection rate amongst the hybrid seedlings. In five years of breeding, this was down to 5%. Remember: Disease-resistant plants save time, money, and labor.

Disclaimer: It is always the pesticide applicator's responsibility, by law, to read and follow current label directions for the specific pesticide being used. The authors, Terra Nova Nurseries, assume no liability resulting from the use of any listed information for educational, governmental, or commercial use of pesticides mentioned. Please rely on pest control suggestions from your local county Extension office, Department of Agriculture, or land-grant university, as pesticide uses vary between states, municipalities, and countries.



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