

Digger

MARCH 2025

Perennials Issue

Boundless *Echinacea*

PAGE 24

**Shifting production
seasons**

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Measuring for success

PAGE 33

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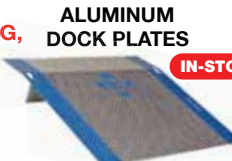
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Perennials Issue

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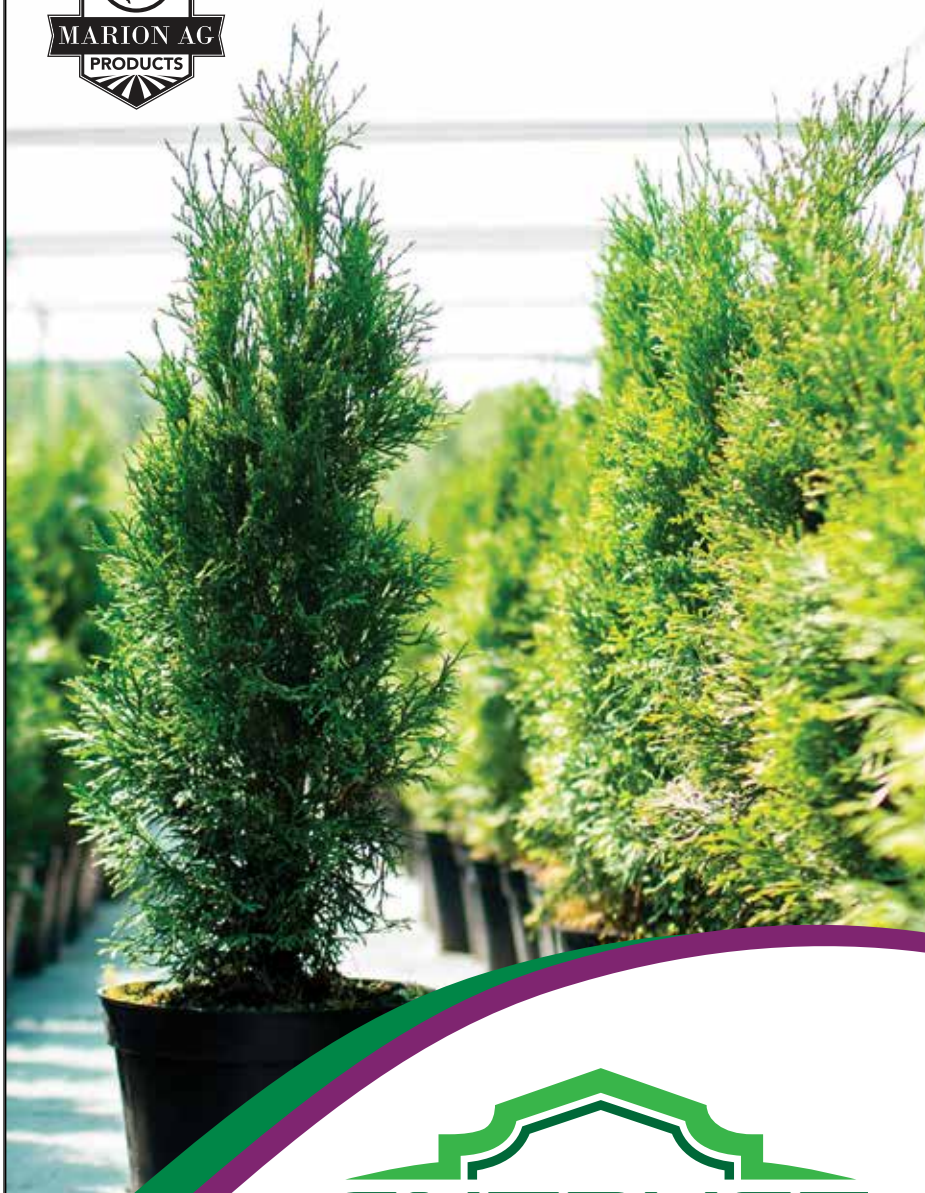


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Watch and learn

I always like to begin this column the same way, by acknowledging that while it can be challenging to pull myself away from my day-to-day nursery operations, every time I visit another nursery, I come back with new ideas and fresh energy. I'd like to dedicate this column to sharing some of those ideas and introduce you to the people who inspired them.

This trip takes me just around the corner to **Sevenoaks Native Nursery LLC**. It's less than a mile from my nursery as the crow flies. I'm greeted by co-owner Scott Anderson, who in turn introduces me to Rene Riano Sanchez, who I've come to meet. Rene has been with Sevenoaks for 20 years, working his way up to crew leader. He is a warm person who immediately strikes you as a capable and humble leader.

Rene is eager to show me one of the improvements that he is currently working on. He points to a square digger flat, filled neatly with sawdust and holding several rows of freshly stuck *Ribes sanguineum* — or red flowering currant, to the uninitiated bedding plant growers like myself.

Several years ago, Sevenoaks was seeing demand from their customers carry into the summer, just when they were running out of the potted gallon material that began as bare-root plants months before. It was around that time that Rene was working in another area of the nursery, and noticed some red flowering currant rooting out from the wood into some sawdust they were temporarily healed over in.

Rene tells me you just need to "Pay attention," and you'll be surprised by the opportunities that present themselves.

He immediately took some cuttings and filled a few 72-cell plug trays, tucking them away in a greenhouse. That year they rooted out successfully, allowing his



Ben Verhoeven meets with Rene Riano Sanchez at Sevenoaks Native Nursery. He says you just need to "Pay attention," and you'll be surprised by the opportunities that present themselves. PHOTO BY SCOTT ANDERSON

team to plant a few more gallons for the late-season demand.

Not satisfied with stopping there, Rene experimented with sawdust diggers and some rooting hormone he picked up at the Farwest Show. Fast forward two years, and he and his team have tripled their successful cutting production of red flowering currant.

Unlike the bare-root production, these cuttings are a very dense crop until the moment they are needed. This allows Sevenoaks to prepare for summer demand without using too much of their valuable space.

It's a good reminder that space matters and customer demand matters, but you cannot utilize space or respond to customer demand without folks like Rene. He took the time to observe, he started with a small trial, he saw further room for improvement, and he seized the opportunity.

Rene leaves me with this thought: "Discover something. Try it out." Words to live by.



Calendar

Get the word out about your event! Email details to Calendar@OAN.org by the 10th day of the month to be included in the next issue of *Digger*.

VARIOUS DATES

FIRST AID/CPR CLASSES AT OAN

Need a first aid and CPR certification renewal for yourself or one of your employees? For the first time, the Oregon Association of Nurseries is proud to offer first aid/CPR training to members at no charge through OAN's partnership with the State Accident & Insurance Fund (SAIF). The certification is valid for two years and participants receive hands-on first aid and CPR training in small class sizes. The classes are offered in English and Spanish from 8 a.m.–12:30 p.m. The sessions in English are offered March 19, June 17, July 16, September 17, October 15, November 19, December 17. Sessions in Spanish will be March 20, June 18, July 17, September 18, October 16, November 20 and December 18. Classes are held at the OAN office, 29751 S.W. Town Center Loop West, Wilsonville, Oregon. Register at OAN.org/Page/CPRclass. Download the English and Spanish First Aid/CPR breakroom flyer at OAN.org/2025CPRFlyer.

VARIOUS DATES

SAIF'S AGRICULTURAL SAFETY SEMINARS

There are only two remaining safety seminars in the SAIF agricultural safety seminar series: Klamath Falls, March 10 and Mt. Angel, March 13. Anyone working in the agricultural industry is welcome. Small employers attending the seminar will meet one of the four requirements that exempt small agricultural operations from random OSHA inspections. The Oregon Landscape Contractors Board has approved the seminar for four hours of continuing education credits. Four producer credits will be available, pending approval from the Oregon Department of Consumer and Business Services. Seminars are held from 9:30 a.m.–2:30 p.m. and include lunch. SAIF is also offering webinars in English on March 17–18 and Spanish on March 19–20. For address of each seminar location, more information or to register, go to SAIF.com/AgSeminars or call 800-285-8525.

MARCH 16

PLANT NERD NIGHT

The Hardy Plant Society is again partnering with Mike Darcy to bring you this much-loved event. This is the 22nd year that Mike has been hosting Plant Nerd Night, which for many marks the start of the spring gardening season. Come hear regional nursery owners talk about the plants that excite them most. You'll also have the opportunity to win a door prize and do a bit of early season shopping. The free event is at the Lake Oswego High School Auditorium, 2501 S.W. Country Club Road, Lake Oswego, Oregon. The event is planned for the afternoon but the exact start time is yet to be announced. For more information, go to HardyPlantSociety.org/Plant-Nerd-Night.



PHOTO COURTESY OF AGFEST

APRIL 26-27

OREGON AG FEST

Explore the incredible world of Oregon agriculture in a fun-filled, festive environment for the entire family. The two-day event, aimed to help families better understand where their food, fiber and flora come from, is a unique learning experience, where hands-on exhibits make learning about Oregon's vast agricultural industry educational and entertaining. Tickets are \$15, free for kids 15 and under. Oregon Ag Fest is held at the Oregon State Fairgrounds, 2330 17th St. N.E. in Salem. For more information or to purchase tickets, go to ORAgFest.com. Make sure you stop by the Plant Something Oregon booth from the Oregon Association of Nurseries and pick a plant to pot and take home.

MARCH 26-29

CALIFORNIA SPRING TRIALS

Save the dates! The 2025 California Spring Trials will take place March 26–29. This year the National Garden Bureau is managing the long-standing event formerly known as Pack Trials, including the event's website, marketing, and registration. The goal of this change is to make registration quicker and easier through one central registration point. For information or to register, go to CASpringTrials.us.

MARCH 18

OAN OPEN HOUSE

We're hitting the road and heading to Salem, Oregon, for an Open House at Youngblood Nursery Inc., 3:30–5:30 p.m. Tuesday, March 18! Discover member benefits, learn about new leadership groups, and connect with fellow members. Beverages and light bites provided. Non-members are welcome — bring a guest! Youngblood is located at 8125 Windsor Island Road N. in Salem. RSVP at OAN.org/Events.

MARCH 31

USDA REAP GRANT APPLICATIONS

The deadline to apply for 2025 USDA Rural Energy for America Program (REAP) grants is March 31, 2025. REAP awarded \$772,656 in

October 2024 to agricultural businesses in rural Oregon as part of its grant program to help them make energy efficiency improvements. REAP funding can be used for all kinds of renewable energy systems, from solar panels to geothermal and biomass. It can also be used for energy efficiency upgrades like new refrigeration units or upgraded irrigation systems. For more information, reach out to the nearest USDA RD Oregon office or call the Business Program's hotline directly at 541-278-8049 ext. 129. For information and how to apply, go to TinyURL.com/USDAREAPapply.

APRIL 15

HORTICULTURAL SCHOLARSHIPS

Do you know a high school, college or graduate student who is considering a career as a nursery or landscape professional? If so, applications are being taken until April 15, 2025 for 20 scholarships ranging from \$1,000 to \$3,000 from the Oregon Nurseries Foundation. The scholarships are sponsored by individual OAN chapters, and its members. April 15 is the last day to apply. Go to OAN.org/ONF for more information, or contact OAN Director of Finance Stephanie Collins at 503-582-2001 or Scholarships@OAN.org. ☺



Northwest News

OAN members and chapters are encouraged to send in relevant news items, such as new hires, new products, acquisitions, honors received and past or upcoming events. Email News@OAN.org.



Firefly Petunia produces a steady, soft glow much like moonlight. PHOTO COURTESY OF LIGHT BIO

New luminescent petunia glows in the dark

Petunias can now do more than dazzle by day. Thanks to a bit of biotechnology, Light Bio in Ketchum, Idaho, can make them sparkle at night, too.

Firefly Petunia produces a steady, soft glow much like moonlight. Through meticulous genetic enhancement, the glow of naturally luminescent mushrooms has been harnessed for the plants, according to Light Bio.

The Firefly petunias can be grown in pots, baskets or in the ground, and attain up to 10 inches in size with abundant white flowers by day that softly glow at night. The fastest growing parts of the plant will glow most brightly. Light is emitted primarily by the flowers, with the youngest ones glowing the brightest.

Oregon nurseries offering Firefly petunia include **Bauman's Farm & Garden, Ashland Greenhouses, AI's Garden & Home, F & B Farms and Nursery and Fessler Nursery Co.**

For more information, go to Light.Bio.



In a new paper in the *Phytopathology* journal, researchers describe new tools for fast, in-field diagnosis of the plant pathogen *P. ramorum*. Pictured: an infected rhododendron leaf. PHOTO COURTESY OF USDA

RESEARCHERS INVENT QUICK FIELD TEST FOR PHYTOPHTHORA RAMORUM

There's a new field test for the dangerous plant pathogen *Phytophthora ramorum* that can deliver a result in as little as 15 minutes, thanks to the efforts of North Carolina State University plant pathologist Jean Ristaino and her graduate student, Amanda Mainello-Land.

The results were published in the journal *Phytopathology*. Up to now, assay lab tests for this pathogen have typically taken weeks to yield results.

The researchers focused on *P. ramorum* because it represents a major threat to forest trees and nursery plants such as rhododendrons, camellias and viburnums. It also impacts forest ecosystems and the commercial industries they support. The notorious pathogen causes sudden oak death, which has killed millions of trees in California and Oregon and spurred state and federal regulations and quarantines in the United States and abroad.

Ristaino holds a doctorate in plant pathology. She said the genetic tests her team developed will give those who manage and protect forests and nurseries the kind of information they need more rapidly to keep the disease from spreading.

Because the nursery plant trade can be a major route for movement of *P. ramorum* from areas in the western United States and a potential route for invasions into forests, nursery surveys are conducted routinely in many states to stop spread, track movement of the pathogen, and identify lineages.

PUBLIC WORKS MEGAPROJECT ON FARMLAND SUFFERS SETBACK

Some 250 affected nurseries won a victory in Oregon land use court over a proposed municipal water treatment facility they said would disrupt their operations enormously.

The state Land Use Board of Appeals (LUBA) overturned, on appeal, the county-level approval of the City of Portland's new water plant. The plant was sited on land that is outside the regional metropolitan boundary, and is zoned for exclusive farm use.

The Oregon Association of Nurseries (OAN) and other community and agricultural groups helped fund the appeal leading to the decision.

"We welcome this decision by LUBA," OAN Executive Director Jeff Stone said. "To site a water treatment plant requires proper planning process, which the Portland Water Bureau did not do. We support alternative options. More >>>



Construction at the site of the Portland Water Beaurau's filtration plant in East Multnomah County. PHOTO BY VIC PANICHKUL

than 250 nurseries were being harmed by building this costly project.”

“We’re pleased that LUBA recognized the true impacts of this project,” said nursery grower (and OAN board member) Jesse Nelson of **Hans Nelson & Son Nursery Inc.**, in Boring. “This water plant, if built, would be enormously disruptive to farming, both during construction and afterwards. County land use officials didn’t take that into consideration, so we’re glad that LUBA has.”

The *Capital Press* agricultural newspaper (Salem, Oregon) initially reported on the LUBA decision. “The hearings officer misconstrued the community use natural resources criterion and, based on that misinstruction, failed to adopt adequate findings supported by substantial evidence,” LUBA stated in its ruling.

Opponents of the facility are now asking the county to issue a “stop work order” because the project cannot proceed “without a valid land use approval.”

The City of Portland relies on mountain lake water from a protected watershed and historically has not been required to treat it. However, the federal government years ago finally imposed a treatment man-

date, prompting Portland’s effort to comply and build a treatment facility.

The project would be built on some of the highest quality and most productive agricultural land in the state of Oregon. It would remove and convert nearly 95 acres of rural, agricultural land to a facility that serves an urban metropolitan area. The operational characteristics of the proposed facility would also adversely impact farming operations in the larger agricultural region that surrounds the subject property.

ODA NOXIOUS WEED PROGRAM SEEKS FEEDBACK ON ROSE CAMPION

Rose campion (*Lychnis coronaria*) is a candidate to be added to the Oregon Department of Agriculture (ODA) Noxious Weed Program’s prohibited list. However, before that happens, officials are asking for feedback from the nursery industry since the plant does have some commercial value.

Lychnis coronaria has been determined to be a “B” category noxious weed as defined by the ODA Noxious Weed Policy and Classification System. This

determination was based on two independent risk assessments following a literature review, ODA said in a statement.

Lychnis coronaria is a showy biennial or perennial forb in the *Caryophyllaceae* family that was first collected from the wild in the United States no later than 1884. It has been a popular ornamental for many decades, and has invasive characteristics that have been known for nearly as long. However, concern about it as an invasive species is relatively recent, according to ODA.

Send feedback by March 31 to Program Manager Troy Abercrombie at Troy.Abercrombie@ODA.Oregon.gov. Read the ODA draft assessment at TinyURL.com/ODARoseCampion.

WASHINGTON CONSIDERS BANNING SALE OF ENGLISH AND ATLANTIC IVY

The Washington State Department of Agriculture is proposing to ban the sale or transport of English ivy and its cousin, Atlantic ivy, by adding the plants to the state’s list of quarantined species, reported KUOW, a Seattle, Washington news sta-

tion affiliated with National Public Radio.

The proposal originated in petitions from groups concerned about the impacts of invasive species and has been embraced by the state agency.

“English ivy is killing away our tree canopy, and it’s reducing biodiversity,” said Michael Feerer, head of the Whatcom Million Trees Project in Bellingham. “It’s so aggressive and dominant.”

Another state agency, the Washington Noxious Weed Control Board, listed three cultivated varieties of English ivy and one of Atlantic ivy as “Class C noxious weeds” in 2002. That designation carries no restrictions on growing or selling a plant. However, it does make it easier for landowners seeking help to combat a noxious weed and allows individual counties to ban it. “Even if just a few nurseries are still selling it, that continues to grow the problem,” Feerer said.

Oregon banned the sale of English ivy in 2010, the only state to do so.

EPA ANNOUNCES INTERIM DECISIONS ON THREE PESTICIDES

The U.S. Environmental Protection Agency has released interim decisions for three pesticides with wide-ranging fungal and antimicrobial properties and ornamental plants application: Chlorothalonil, Thiophanate-methyl, and Carbendazim.

Chlorothalonil: Several risks of concern were identified including acute and chronic risks from drinking water exposure, developmental defects in pregnant women from chronic exposure, respiratory irritation from inhalation exposure. EPA identified necessary mitigation measures including reduction in maximum annual application rates, buffers to all conserva-

tion and aquatic areas, and prohibiting application to soils that are saturated with water. To address dietary risks resulting from drinking water exposure via groundwater contamination, lower maximum application rates were identified for areas where soils are vulnerable to chlorothalonil leaching into groundwater. To address the risks of concern identified for the antimicrobial uses of chlorothalonil, EPA has determined that new personal protective equipment (PPE) and respirator fit-testing measures are necessary for occupational handlers.

Thiophanate-methyl (TM) and Carbendazim (MBC): For TM, dietary and aggregate cancer risks were identified. Non-cancer risks and cancer risks were also identified for occupational handlers of TM. For MBC, non-cancer dietary risks were not of concern after considering the effects of the mitigation measures and >>



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refinements for uses of TM. EPA also reevaluated the carcinogenic potential of MBC which included new information submitted to support a proposed mode of action for liver tumors in mice. To mitigate risks from dietary exposure to TM and MBC in water, EPA is restricting soil applications and reducing application rates of TM. To mitigate risks to occupational handlers of TM, EPA has determined that additional PPE is needed for some scenarios to reduce risk for mixers, loaders, and applicators of TM.

SHARE PEST-MANAGEMENT NEEDS WITH IR-4

The IR-4 Project, which helps specialty crop growers address pest concerns, is collecting industry input for its 2025 Environmental Horticulture Program Grower & Extension Survey.

The Grower & Extension Survey is the best way to inform IR-4 of pest problems that are difficult to manage due to insufficient tools. The resulting input helps shape discussions at the biennial IR-4 Environmental Horticulture Workshop and helps IR-4 understand the needs of growers in this vital sector. The survey responses also help IR-4 understand regional needs. This year, the survey utilizes more user-friendly Google form.

The deadline for submitting is August 29. Go to TinyURL.com/IR4GrowerSurvey to complete the survey.

FARWEST LAUNCHES EXHIBITOR REFERRAL INCENTIVE

Play a vital role in bringing new exhibitors to the 2025 Farwest Show, August 20–22 in Portland, Oregon while helping to grow the industry and earn a valuable reward in the process.

Show organizers are looking for grower exhibitors — nurseries of all sizes that specialize in plants, trees, shrubs, and other nursery products. Whether they're small, local growers or larger-scale operations, we want to connect with businesses that are passionate about showcasing their products



OAN's leadership met with Oregon Governor Tina Kotek to discuss OAN's 2025 legislative agenda. From left: Steve Shropshire and Marika Sitz (Jordan Ramis), Jim Simnitt (Simnitt Nursery LLC), Amanda Staehely (Columbia Nursery); Chris Robinson (Robinson Nursery Inc.), Patrick Newton (Powell's Nursery LLC), Governor Tina Kotek, Ben Verhoeven (Peoria Gardens Inc.), Darcy Ruef (Al's Garden & Home), Tyler Meskers (Oregon Flowers Inc.), Executive Director Jeff Stone and OAN contract lobbyist Bill Perry (Balance Point Strategies).

at the Farwest Show.

Here's how it works:

- Refer a new exhibitor. Talk to growers who would benefit from showcasing their plants at Farwest.
- Submit your referral by completing the referral form at FarwestShow.com/GrowersWanted.
- If your referral converts to a reserved booth, you'll receive four all-access seminar passes for the Farwest Show, a \$836 value.

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OAN LEADERSHIP AND GOVERNOR DISCUSS 2025 LEGISLATIVE AGENDA

OAN's top priority — fixing the agricultural overtime law — was front and center during a recent meeting between the Oregon Association of Nurseries' leaders and Oregon Governor Tina Kotek. A strong exchange of views was encouraging as the association's leadership made the case for freezing the overtime threshold to 48 hours, allow a 12-week peak season exemption to 55 hours, and returning almost \$64 million in grants and tax credits to the state to repurpose for other programs.

“The governor did not make commitments but applauded the association for setting out the strategy for a bipartisan solu-

tion to the 2022 overtime law,” Executive Director Jeff Stone said. “In addition, Gov. Kotek praised the association for its long-standing commitment on immigration and urged the association to work alongside her to protect all Oregonians — regardless of their immigration status. The OAN members were outstanding as advocates during the 90 minutes with the governor's team.”

Most of the meeting time was spent with Geoff Huntington, the governor's natural resource adviser, and Bob Livingston, the governor's legislative director. “Our time together included a deep dive into the four major OAN policy priorities,” Stone said.

Those include:

1. The before-mentioned ag overtime bill being introduced by State Rep. Ricki Ruiz, D-Gresham.
2. Water policy and in particular the need for a sensible law on water transfers — a bill being introduced by State Rep. Mark Owens, R-Crane,
3. Exemption of green goods from the commercial activities tax — House Bill 2118, introduced by State Rep. E. Werner Reschke, R-Klamath Falls.
4. Funding the eradication of Japanese beetle — Senate Bill 576, introduced by State Sen. Lew Frederick, D-Portland.

Other issues discussed were the upcoming major transportation package being deliberated by the state legislature and OAN's grave concerns over the Water Resources Department's 135% fee increase proposal.

Announcements

TERRA NOVA NURSERIES WINS AWARD AT CSU FLOWER TRIALS

Sedum 'Conga Line' from **Terra Nova Nurseries Inc.** received the Best of 2024 Perennial award at the Colorado State University (CSU) Flower Trial Gardens.

'Conga Line' has a short, compact growth habit that prevents it from opening over time. The plant prefers full sun and is a champion pollinator attractor as well as a low-water-usage plant. USDA Hardiness Zones for the plant are 4-9, and it performs exceptionally well



in the deep South. For more information, go to **TerraNovaNurseries.com**.

HORTI LINK TOURS OFFERS INDUSTRY TOUR OF NETHERLANDS

Paul Koole, a sales rep for Plant Products for Oregon and Washington, has started Horti Link Tours to offer guided horticultural trips to the Netherlands. The first will visit industry sites and greenhouses in Westland area (between The Hague and Rotterdam) and some tourist sites. It will include two days at Greentech, a European greenhouse technical trade show in Amsterdam.

Koole grew up in the greenhouse industry and has been to the Netherlands several times, has industry contacts there, and has a good command of the Dutch language.

The first trip is planned for June

8-13. For information, contact Paul Koole at 778-980-9789 or email **Paul@HortLinkTours.com**.

BAILEY APPOINTS TWO REGIONAL SALES MANAGERS

Carlton Davidson is the new western regional sales manager for **Bailey Nurseries**, and Nick Stevens is the new eastern regional sales manager, the company stated in an announcement. These strategic leadership additions come as Sales Manager Jimmy



Carlton Davidson



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Kuon prepares to retire in February.

Davidson joins the sales team with over 25 years of experience in nursery operations and management. He most recently serving as operations planning and scheduling manager at Bailey's West Coast Division based in Dayton, Oregon. In his new role, Davidson will lead a team in the region to strengthen relationships and drive growth.

Stevens started at Bailey seven years ago and brings a proven track record of success. As a territory sales representative, he collaborated with customers in Ohio and Michigan and later managed Bailey Licensees



Nick Stevens

nationwide. In his new role, Stevens will lead and mentor a team of sales representatives to ensure customers' needs and goals are met in the region.

In memoriam

GRACE VAN BELLE

Grace Van Belle, one of the founders of **Van Belle Nursery Inc.** in Abbotsford, B.C., Canada, passed away on February 4, 2025, the company announced on its LinkedIn page.

"Grace was inseparable from the heart, soul and values of Van Belle Nursery, helping build the



Grace Van Belle

foundation of our success through her life-long dedication to the nursery, our treasured team members and partners."

The company described her as an owner who watched over finances closely and worked tirelessly for the people around her, including preparing and serving lunch for every monthly staff meeting, and a hearty supper for the team on busy spring days.

"Her selflessness and belief in caring for and respecting others was evident in everything she did. We honor her memory and her relentless pursuit of excellence that helped shape the path we follow today," the company said.

Bill and Grace Van Belle started Van Belle Nursery in 1973 and the company celebrated its 50th anniversary in 2023. She was born March 25, 1946 in Zwartsluis, The Netherlands and emigrated with her family in 1951 to Canada and grew up in northern British Columbia. ©

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Flowers that entice hummingbirds



Salvia 'Amistad' is a longtime favorite with huge violet flowers that the hummingbirds just love. PHOTO BY ELAINE JERAULD

There is not much to dislike about hummingbirds in the garden, and many gardeners will select plants that specifically, when flowering, will attract them. Gardeners often refer to these plants as “hummingbird magnets,” because their flowers will reliably attract hummingbirds throughout the blooming season.

In the summer, there is a large diversity of plants to choose from. Many gardeners are familiar with some of the summer mainstream hummingbird magnet plants. A closer look at some of those options will clearly explain why they are so attractive to hummingbirds.

Hummingbirds are often active around hanging fuchsia baskets. The major assumption is that it is the flowers that attract them, probably because most fuchsias have brightly colored flowers. This assumption is correct, and they will seek nectar from a wide assortment of colored flowers.

It has also been noted that they only go after flowers with a tubular shape, and while this may be a preferred option, they have been seen on many flowers that are not tubular. Another tubular flower that they are extremely attracted to is *Cuphea*.

This is a great plant for growing in a pot in a sunny location. These plants will be covered with flowers and hummingbirds all summer.

The various potted plants on our deck encourage hummingbirds. It is a delight to watch them dart from flower to flower in search of nectar. It is also amusing to watch how they carefully guard their territory and will suddenly appear, almost as if out of nowhere, if another bird enters their space. They make it very clear that they are guarding their territory, and it is private property!

The many cultivars of *Salvia* have long been a favorite of hummingbirds. Two of my favorites are *Salvia guaranitica* ‘Black and Blue’ and *S.* ‘Amistad’. The flowers on ‘Amistad’ are more purple as compared to ‘Black and Blue’, which as the name would indicate has both black (dark purple) and blue flowers.

Both of these *Salvia* selections begin blooming in early spring and continue well into the fall. Here in the Willamette Valley, they often overwinter and reappear the following spring. Those plants that do overwinter tend to bloom later in the spring and I always select some blooming plants



Mike Darcy

Head “plant nerd,” longtime speaker, host of gardening shows on radio and TV, and author of the *In the Garden* email newsletter.

You can reach Mike, or subscribe to his newsletter, at ITGMikeDarcy@Comcast.net.

and mix them in with those that have overwinter in order to provide instant color and food. There are many non-traditional hummingbird attractant perennials as well as some trees and shrubs that we may not often consider. Probably the most well-known shrub for hummingbirds is our own native Oregon grape, (*Mahonia aquifolium*), and its many cultivars.

The cultivar ‘Arthur Menzies’



What I'm Hearing

is well known, a prolific bloomer and readily available. With clusters of bright yellow flowers during the late fall and early winter months, *Mahonia* provide a much-needed food source when there may not be much to choose from. The many available cultivars offer gardeners varying choices to select a height appropriate for their gardening space.

While hostas are not known for their hummingbird attractant abilities, they are a nectar source when the hostas are blooming. For those gardens that are shaded, hostas in flower would be an ideal plant for attracting hummingbirds.

Another native plant that is a good early-season food source for hummingbirds is *Ribes sanguineum*, aka red flowering currant. Its native range includes the coastal mountains in California, Oregon, Washington and British Columbia.

This multi-stemmed shrub can thrive



The flowers of seven-son or *Heptacodium miconioides* attract hummingbirds and appear in the late summer and early fall, providing food late in the season. PHOTO BY ELAINE JERAULD

with some shade especially in the summer. It is primarily known for having red flowers but there are also pink and white forms. The flowers appear as drooping clusters and are followed by blue-black fruit which are a food source for other

birds later in the season.

We do not often think of trees as providing a source of nectar for hummingbirds but *Heptacodium miconioides*, called seven-son flower even though it is a tree or large shrub, is an exception to the rule. Not only are the creamy white flowers attractive to hummingbirds, but the flowers appear in late summer and early fall and provide food late in the season.

This deciduous tree has not been widely known but is becoming increasingly popular. The flowers are not only a good source of nectar for hummingbirds but for other insect pollinators in the fall.

We are fortunate to have such a variety of plants that provide a food source for attracting these tiny birds. Whether your space is limited to a deck, or patio, or a large garden, there are plants to accommodate hummingbirds.

If your plants are in containers, it is nice to have some of them placed where they are visible through a window. Many garden centers have special sections to showcase selected plants that will attract not only hummingbirds but also butterflies and other beneficial insects. More garden centers should take advantage of this opportunity to not only suggest great plants, but to also provide sustenance for hummingbirds.

The listing of plants mentioned here is only small sampling of hummingbird magnet plants and the garden centers could certainly capitalize by stocking many more. What a great way to help gardeners, the industry and the avian community. ©



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Guidance on immigration enforcement actions



Steve Shropshire

Steve Shropshire serves as legal counsel to the OAN and is a shareholder at Jordan Ramis PC and a member of its Dirt Law® team, representing the nursery industry and other agri-businesses as outside general counsel and on water rights, real estate and land use matters. He can be reached at 503-598-5583 or Steve.Shropshire@JordanRamis.com

ADOBE STOCK

On January 26, 2025, at the direction of President Donald Trump, the U.S. Department of Homeland Security's Immigration and Customs Enforcement ("ICE") agency began carrying out raids and arrests targeting undocumented immigrants in major U.S. cities.

In light of this development, it is important for nursery businesses to make sure that they are prepared for an ICE enforcement action.

ICE agents are most likely to come to your business for one of two reasons. The first is to conduct an inspection of your I-9 Employment Authorization Verification records. The second is to conduct an immigration enforcement raid to find and detain undocumented workers.

You cannot prevent ICE enforcement actions at your business. However, you and your employees can be prepared in case such an action occurs.

General guidance

Here is some general guidance regarding all ICE activities at your place of business.

Understand that you are protected by your constitutional rights. Try to remain calm and professional in your interactions with ICE agents or other federal officers.

You are entitled to federal constitutional protections against unreasonable searches and seizures. ICE is required to follow procedures designed to protect those rights, including the use of warrants and subpoenas before accessing any records or any portion of your business premises. Make sure your front-line employees know that they must not give permission to ICE agents to access any portion of the property. They should instead immediately notify a manager who should ask whether the agents have a warrant or subpoena.

If you are served with a warrant or a subpoena, ask for identification (a business card) from the agent presenting the warrant or subpoena. Ask whether the purpose of the visit is a raid (requiring a warrant) or an I-9 document audit. Ask to review any warrant or subpoena and take your time to understand it. Call your attorney immediately and get him or her a copy of any document(s) presented.

Review warrants carefully. If the agents present a search warrant, examine it carefully. It should identify the agency or officers conducting the search, the location to be searched, the specific items or individuals to be seized (if known), and an expiration date if it is a court order. There are two types of warrants:

An administrative warrant is issued by employees of a federal agency and is not self-enforcing. Administrative warrants will be issued by the agency seeking to search the premises such as "Department of Homeland Security, U.S. Immigration and Customs Enforcement." You can refuse admission to agents presenting an administrative warrant. They must then get a court order to enforce their right to search.

A judicial order is self-enforcing and gives the agents permission to search company property. Judicial warrants are issued by a court such as "The United States District Court for the District of Oregon." Resisting a judicial warrant may result in contempt of court charges.

Warrant-based seizures. With a judicial warrant, ICE may confiscate phones, laptops, etc. Ask ICE to "image" the technology without taking devices. Likewise, with any documents ICE confiscates, you should make copies before the documents leave the premises.

If the purpose of the visit is an I-9 audit and the agent does not have a warrant, you are legally entitled to three ➤

days' advance notice before the inspection may commence. This is true even if the agent has a subpoena. Agents are required by law to notify an employer of the right to a three-day notice prior to review. You should exercise this legal right and decline immediate review. Then, contact legal counsel immediately.

Understand that an ICE inspection is often the first step in a criminal investigation. Once ICE agents appear on your premises, you should inform your managers and human resources staff of the investigation and remind them of their rights and obligations. All of your employees have a right to legal counsel and may assert that right at any time as a basis to decline an interview or other questioning by ICE agents. None of the company's management should consent to an interview without first speaking to the company's legal counsel. Statements made by any managerial staff may be treated as admissions against your business in subsequent proceedings.

Follow all verbal instructions given by ICE or other law enforcement personnel, even if the instructions appear to conflict with the advice of your attorney.

Don't attempt to interfere with the process or you may be subject to criminal charges. Do not take any steps to notify non-management personnel or help employees hide or leave the premises. Do not make general announcements of the raid over company radios, send runners into the fields to announce the activity, or take any other action that will tip off employees.

Observe the investigation process. Company management may (and should) accompany ICE agents during the search. If there is more than one agent conducting the search, assign a manager to each officer. Take notes as to what occurs (what documents are inspected, who is contacted by the agent(s), whether the agents seem to be badgering or singling out any specific employees or class of employees). You may film or record those actions, provided that you do not interfere in any manner.

Advise legal counsel if the agents seek to expand the investigation beyond the scope of the warrant or subpoena. ICE

Disclaimer

This guidance document is intended to inform the reader of general legal principles applicable to the subject area. It is not intended to provide legal advice regarding specific problems or circumstances. Readers should consult with competent counsel with regard to specific situations.

or U.S. Department of Labor agents are limited by the scope of a warrant or subpoena. They may not expand the search beyond what is in the four corners of the document. If you observe that occurring, you should contact legal counsel immediately.

Remember — no subpoena is required for a routine I-9 document audit, provided that the three-day notice period is observed. However, in that case, you are only required to produce the I-9 forms for inspection.

In the worst-case scenario, members of your organization may be arrested. Should that happen, you should instruct your employees to immediately invoke their right to speak to an attorney. Under no circumstances should the person respond to any questions after invoking the right to speak to an attorney. If possible, find out where the person will be taken.

Recognize that your employees may be traumatized — including those whose work authorization status is not in question. You should prepare a message to your employees in advance of an ICE enforcement action rather than waiting until it happens. You should also provide employees with an opportunity to ask questions and be prepared to direct them to outside resources that may help inform

them as to their rights. If you have an employee assistance program (EAP), you should notify your EAP provider about the ICE action so they are prepared for phone calls from your employees. Remind your employees about the EAP benefit available to them and provide them with the phone number.

Be prepared. The best way to get through an ICE enforcement action is to be prepared. You should develop an ICE enforcement response plan and train your management staff on how to implement the plan. The plan should set forth the roles, responsibilities, and procedures for different types of ICE actions. In addition, the plan should include a list of important contact information, including local ICE detention centers, foreign consulates, and immigration attorneys. If your management staff is prepared, they will understand how to handle unannounced government visits in a professional and appropriate manner.

I-9 recordkeeping and inspections

Here is some guidance regarding I-9 recordkeeping and ICE I-9 inspections:

Recordkeeping practices. Ensure you have meticulous I-9 compliance by confirming proper verification, document storage, and destruction practices at all sites. Make sure you stay current with form updates. I-9 records should be kept separate from personnel files.

Conduct a self-audit of your I-9 records. The best thing a business can do to be prepared for an ICE I-9 records inspection is to conduct a self-audit of those documents and the company's procedures. The purpose of a self-audit is to identify deficiencies in I-9 processes and paperwork and then take legal steps to correct them. A self-audit not only helps with compliance, but a self-audit is also considered part of an employer's good faith defense in the event I-9 violations are found by ICE. Learn more about how to perform an I-9 self-audit at [TinyURL.com/JDI9Audit](https://www.tinyurl.com/JDI9Audit). We recommend contacting legal counsel or a knowledgeable human resources consultant with I-9 audit experience to assist you in the process.



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guidance
from Jordan
Ramis.

ICE I-9 inspections. If ICE agents arrive at your business to conduct an I-9 document inspection, there are several things that you should know and do.

Contact legal counsel immediately.

An I-9 document inspection does not require a warrant. However, ICE agents may present a subpoena in conjunction with an inspection, suggesting that you need to comply with it immediately. However, you are entitled to three days advanced notice of an inspection, and ICE cannot use a subpoena to shortcut that advance notice requirement.

The U.S. Department of Labor is also authorized to perform I-9 audits, so it is important to understand which agency is seeking to review your records and under what circumstances.

Only allow investigators to see the records they are legally entitled to see. During an I-9 audit, you are technically required to produce only the I-9 forms for inspection. If ICE wants to see anything else, you can require the agent to get a valid warrant or subpoena. You are not required to keep or produce photocopies of the documents employees presented to establish identity and/or employment eligibility.

Don't allow documents to be removed from your property without making copies. Don't turn over more documents than the law requires. Nothing in the law requires you to give ICE original I-9 forms or to make photocopies of the I-9 forms.

Treatment of employees by government agents

Subject to an individual's right to legal counsel, an ICE officer can interrogate any alien, or person believed to be an alien, as to his or her right to remain in the United States. Agents may also question witnesses regarding their knowledge of business policies relating to:

- The hire of undocumented workers.
- The identity of individuals suspected of undocumented status.
- The terms and conditions of employment of such persons.
- The duration of their employment.
- The knowledge of supervisors regarding the undocumented sta-

tus of such persons.

- Business acquaintances of undocumented workers.

An ICE agent or other officer may not restrain the freedom of an individual who is not under arrest, unless the agent or officer has a fact-based reasonable suspicion that the person being questioned is, or is attempting to be, engaged in an offense against the United States, or is an alien illegally in the United States. Where such reasonable suspicion exists, the agent or officer may briefly detain the individual for questioning.

Generally, an arrest should only be made when a designated immigration officer has a warrant for the arrest of a particular individual, unless the officer has



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a reason to believe that a person is likely to escape before a warrant can be obtained.

When someone is arrested and charged with a criminal violation of the laws of the United States, the arresting officer must advise the person of the appropriate rights required by law at the time of arrest, or as soon thereafter as practical. It is the duty of the officer to assure that the warnings are given in a language that the subject understands and that the subject acknowledges that

the warnings are understood.

ICE agents' actions

Unlike Department of Labor agents, ICE agents are frequently armed. To the extent an ICE agent determines that force is necessary, he or she may use the mini-»

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Legal Access

minimum nondeadly force necessary to accomplish the agent's mission and may escalate to a higher level of nondeadly force only when a higher level of force is warranted.

Deadly force may be used only when a designated immigration officer has reasonable grounds to believe that such force is necessary to protect the officer or innocent persons from imminent danger, death, or serious physical injury.

Steps to take following an enforcement action

After an I-9 inspection or immigration raid, the Department of Homeland Security will provide a list of employees whose work authorization cannot be established. That list places you on notice that you may be employing undocumented aliens.

You must inform each employee on the list that they have been identified as not having proper work authorization. You should then give the listed employees three days to produce proper identification and documentation.

Any new identification produced by the listed employees will be verified through the Department of Homeland Security system. If the Department of Homeland Security does not authenticate the new identification, the employee must be terminated.

You must keep a list of all employees by name and Social Security Number identified by the Department of Homeland Security as being undocumented. Anyone on that list who applies for work in the future may not be hired until their work eligibility status is resolved and verified.

Each business is unique, so this guidance document is not intended to be comprehensive or tailored to your situation. But if you follow this guidance, create your own ICE enforcement response plan, and train your employees regarding their rights and responsibilities, you will have taken an important step toward protecting your business. ©

Shifting seasons

Nurseries adjust perennial plant production cycles to save costs, meet market demand



At Van Belle Nursery, a wholesale grower in Abbotsford, B.C., Canada, the nursery essentially breaks down its production schedule into three units: one designed for early-spring sales, one for mid-spring, and one for late-spring sales. PHOTO COURTESY OF VAN BELLE NURSERY

BY MITCH LIES

Five years ago, **Everde Growers** — a wholesale nursery based in Texas but with farms in Forest Grove, Oregon, California, Texas and Florida — was starting 80% of its perennial production in the fall and 20% in late-winter, early-spring.

Today, according to Randy Nelson, general manager of Everde Growers' farm in Forest Grove, Oregon, that schedule has flip-flopped.

Conversely, Lorne Blackman of **Walla Walla Nursery Co. Inc.**, a wholesale nursery on the Washington-Oregon border, has spread out his production lately by shifting some production from the spring to the fall to reduce labor costs.

"It's easier on labor and eases production bottlenecks," he said. "There is more risk with winter damage and that sort of thing, but if we can produce it in the fall instead of adding to our spring bottleneck

where we're already overwhelmed, it makes a lot of sense to do that."

Perennial plant production schedules at Northwest nurseries today run the gamut, starting anywhere from summer through early spring, as growers adjust to changes in labor laws, labor shortages, plant varietal advancements and market factors.

Many, like Grace Dinsdale, owner of wholesale grower **Blooming Nursery Inc.** in Cornelius, Oregon, have stayed with the more traditional fall production schedule. "We're not really changing the way we're doing it here," she said.

Others are finding advantages to a less traditional spring production, something that has become more feasible in recent years with the introduction of faster-growing hybrids and increased availability of vernalized plugs.

Everde Growers has turned to the spring for the bulk of its perennial plant production to help minimize overwinter-

ing losses and reduce plant care costs. The schedule has also helped defer plant production costs from the fall to winter months, Nelson said.

"If I can push off all those input costs, the container, the labor, the soil, everything that you're going to be putting up front in that September-October planting, until January, February or March and still start selling it in April, May and into June, then I can be using those funds for something else," Nelson said.

"Anytime you have a plant on the ground taking up square footage, there is a residency cost," Nelson added. "And you've got other costs going on for water, spraying, winter protection. So there is that added cost that you are saving, as well."

Nelson noted that the only plants Everde Growers is producing in the fall these days are those like peonies that need more establishment time.

"There is a handful that we do in >>

Shifting seasons



Fall production eases the workload in the busy spring season, and because Van Belle's greenhouses are not overutilized in the fall, there is plenty of available space for plant production. And plant performance can sometimes be improved with fall production, said Director of Operations Pablo Costa. PHOTO COURTESY OF VAN BELLE NURSERY

the fall," he said, "but most of what we do now is in the spring." He added that he spaces perennials outdoors to acclimate them after spring production to help ensure plants are well adapted to environmental conditions.

Winterization

At Blooming Nursery, Dinsdale prefers fall production in large part because she likes to winterize perennials before moving plants to the retail sector. Without that, she said, plants can go downhill when exposed to the elements. "They will kind of stall out a bit when the weather hits them, because they're not used to it," she said.

"Anything that comes right out of the greenhouse has to acclimate itself to the outdoor weather, and that's generally being done either in the box store or on the bench at a retail nursery or in somebody's garden. Whereas, when you have plants that are grown in the traditional way, that are grown under cool conditions

for a longer period, they don't go downhill when they first hit the market shelf," Dinsdale said. "They hold up and they continue growing. And then when you plant them, they don't go through that climate setback that plants that are grown in the greenhouse sometimes do."

Dinsdale added that Blooming Nursery "is heavy into production all the way from June through October," and has some spring production, specifically with newer hybrids that bloom in their first year. But even in those cases, she finishes plants outdoors.

"We do try to finish most everything up outside," she said. "We're not selling much out of the greenhouse. Usually it's getting moved out once it's rooting and then we finish it outside."

Selling patterns

At the finished plants division of **Van Belle Nursery**, a wholesale grower in Abbotsford, B.C., Canada, changes in selling patterns have pushed the business more

into fall production in recent years, according to Pablo Costa, director of operations and growing for the Canadian nursery.

"Through the years, we've been shipping earlier and earlier in the season," Costa said.

The nursery essentially breaks down its production schedule into three units, Costa said, one designed for early-spring sales, one for mid-spring, and one for late-spring sales. "And then I have summer perennials," he added.

Costa said he will start moving plugs into two-gallon pots in the fall and continue doing so into January and February for later-season sales. In the past, he noted, the nursery started most of its production in the winter.

Fall production, he said, eases the workload in the busy spring season, and because the nursery's greenhouses are not overutilized in the fall, there is plenty of available space for plant production. And plant performance can sometimes be improved with fall production, he said.



Walla Walla Nursery Co. Inc., a wholesale nursery on the Washington-Oregon border, has spread out its production lately by shifting some production from the spring to the fall to reduce labor costs. There's more risk with winter damage but if the nursery can produce it in the fall, it alleviates some of the spring bottleneck. PHOTO COURTESY OF WALLA WALLA NURSERY CO. INC.

“We have the space in the greenhouse where I can hold my perennials, winterize them basically, and I develop a better, more established plant,” he said.

The cost difference between the fall and spring production schedules are relatively minor, Costa said, in part because he minimizes heating costs by only heating greenhouses when temperatures dip below freezing.

Costa said the nursery now is exploring the potential to offer sales of all-season perennials in the fall.

The labor effect

At Walla Walla Nursery, Blackman said that he has shifted away from producing in the busy spring season in large part to reduce overtime labor costs, a goal that increased in importance after Washington's ag overtime law reached the 40-hour threshold in 2024. “The more production we move into the spring, the more overtime we have to pay,” Blackman said.

He added that today he is producing nearly year-round, other than a break in November and December, and that

February, March, April and August are his heaviest potting months.

In addition to minimizing the overtime he is paying, by spreading out production and doing more of it in the fall, Blackman said he can capture more value out of his container lots. “We’ve got all this space in the late summer and fall, so my feeling is, let’s use it to capture all that energy. I kind of look at container lots as giant solar panels, and the fuller they are, the more value we’re producing, the more value we are capturing from the sun.”

Also, Blackman said, in some cases, fall production can help produce a better-quality plant. “It’s a mix,” he said. “A fresh-potted plant grown in the spring from a nice liner that may be vernalized can yield a very nice plant, but there is definitely quality improvements for some of the more hardy plants, such as creeping *Phlox* or hardy *Dianthus*, that require vernalization.

“For creeping *Phlox*, it takes a little time to build a full crown,” he added. “That isn’t the case so much with the *Dianthus*, but you do get a better plant with fall production.”

All that said, Blackman acknowledged that there are some drawbacks to late-summer and fall production, including more plant loss to winter conditions and the need to send out crews to cover plants when a freeze hits.

“I always hope it will be a mild winter, and we won’t have to bring out the sandbags and the fabric,” he said.

Invariably a freeze hits, he said, and he needs to send out his crew. Still, the crew can cover the whole nursery in two days.

“So, there is actually very little cost if you spread it out on a per unit basis,” he said. And, he said, with most of his production destined for colder, inland mountain regions where tender greenhouse-grown material will be set back by spring frosts, overwintering plants can be a key production step. ☺

Mitch Lies is a freelance writer covering agricultural issues based in Salem Oregon. He can be reached at MitchLies@comcast.net.



Echinacea



explosion

From left: Monrovia's Double Scoop™ Raspberry Deluxe, Terra Nova's 'Sweet Sandia' and Terra Nova's 'CARA MIA™ Seashell'. PHOTOS COURTESY OF MONROVIA NURSERY AND TERRA NOVA NURSERIES INC.

Breeders respond to rising demand with a dazzling array of new varieties

BY ERICA BROWNE GRIVAS

Echinaceas' popularity seems boundless. The iconic native plant with star appeal has become the emblem of the pollinator gardening movement, and the cultivars just keep coming, with expanding colors, habit and forms. Which are worth adding to your roster?

A bumpy road to success

There are many reasons to grow *Echinacea*, aka purple coneflowers. With direct sun and well-drained soil, they'll offer large summer blooms with nectar for bees and butterflies and cones that persist

into winter — if the goldfinches don't get them first.

It's not surprising, then, that decades ago, breeders saw the possibilities in this showy prairie plant boasting a trademark cone at the center of an outsized, sometimes fragrant, daisy-type flower and a long bloom period. The two marketplace stalwarts of purple coneflower were *E. purpurea* 'Magnus,' a lilac-leaning pink, and 'White Swan.'

'Magnus' was named Perennial Plant of the Year in 1998.

"If you go back 25-30 years ago, there were essentially two *Echinacea* available, and they were both *purpurea*," said Dan Heims, co-owner of **Terra Nova Nurseries Inc.**, a wholesale nursery in Canby, Oregon that is a leader in *Echinacea* breeding. "They were offered in a gallon pot typi- ➤

Echinacea explosion



Facing page top to bottom: Terra Nova's 'FRESCO'™ Apricot' and 'DARK SHADOWS'™ 'Wicked'. PHOTOS COURTESY OF TERRA NOVA NURSERIES INC.

cally growing 3–4 feet tall and had 3–5 flowers per plant. That was it.”

Times have certainly changed. Responding to rising demand, breeders have created a dazzling array of double-flowered, dwarf, and bi-color varieties in red, yellow, orange, raspberry, white, green and combinations thereof.

The echinacea explosion was kicked off in the early aughts with 'Razzmatazz', a double-flowered selection from the Netherlands in 2003 and *Echinacea* 'Art's Pride' Orange Meadowbrite™ the first orange -rayed coneflower, introduced by Dr. James Ault through the Chicago Botanic Garden's breeding program in 2004.

Grace Dinsdale, founder of **Blooming Nursery** in Cornelius, Oregon, said of 'Art's Pride', "It was a huge uproar across the horticultural community; it was a great color breakthrough. Then the breeding took off — everybody started working on them," she said. "There's been an amazing proliferation of colors, heights and types. It's been wonderful to watch. At this point the competition is intense."

Although *Echinacea* is one of Blooming's top-selling genera, keeping them in stock is difficult — it can only fit two crops in within a short window.

"We overwinter a crop, we can sell through week 20 and do a spring crop after that and need to plant that fall crop within seven weeks of the week 20," said Dinsdale. Supply issues are also not uncommon.

In fact, Dinsdale said "We've discontinued more than we are growing." Since 2004, Blooming has grown and/or trialed about 157 varieties, Dinsdale said, with 55 active varieties as of December 2024.

However, not all varieties performed alike, especially in the early years of breeding. Many gardeners were disappointed with some of the first new echinaceas. Heims said they rushed to try these exciting new colors, often paying "crazy prices" to find they failed to overwinter due to weak necks or basal growth, or they succumbed to highly contagious "aster yellows." Soon growers and gardeners became leery of experimenting with the latest new *Echinacea*. How have breeders mastered this hurdle? >>

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Echinacea explosion





Above: 'DELIGHTFUL Gold' from Terra Nova. Facing page from top: Monrovia Double Scoop™ Watermelon Deluxe and Sunseekers™ Golden Sun. PHOTOS COURTESY OF TERRA NOVA NURSERIES INC. AND MONROVIA NURSERY

Modern-day *Echinacea* varieties

Thinking of the first rounds of breeding, “The plants were frankly horrible compared to what they are today,” said Heims.

Going beyond relying on *purpurea* to introduce a mix of *Echinacea* species (there are nine in all) into the breeding helped create stronger, longer-blooming, more resilient and disease-resistant plants, Heims said.

Some gave resistance to aster yellows, others improved the habit or flower power, like *Echinacea tennessensis*, which enabled the first cultivars to produce sprays rather than single stalks, Heims said.

Terra Nova’s 12-person breeding committee is continually trialing new varieties. “By using different species, we can give a range for all different purposes. We have dwarf types for the front of the border, virtually a blooming groundcover, to upright mid-landscape, and tall ones some that even function as a cut flower at 36 inches tall.”

Fun fact: while some echinacea flowers naturally reflex or droop their petals, Heims’s researchers select for a 15-degree angle, which he said looks cheerful and is optimal for visibility.

Among newer cultivars, Heims said, “We’ve had 100 flowers on a plant, and we’ve extended bloom until frost rather than just three weeks to a month. Now the

plants are better through breeding for having more shoots, which translates to more flowers and better winter resistance.”

With the rise of double-flowered *Echinacea* varieties, concern rose that the fluffy blooms would fail to support pollinators. “They were sterile,” he said, “which meant they bloom like crazy and continue to bloom but have no pollen or nectar or seeds for goldfinches.”

In response, Terra Nova released ‘FRESCO Apricot,’ a double flower which retains a full cone.

Georgia Clay is the plant selections manager at **Monrovia Nursery**, a California wholesale nursery with its largest farm in Dayton, Oregon. She’s seen changes in what consumers want from *Echinacea*.

“Consumers are looking for showy flowers with longer bloom periods, bright bold colors, and interesting new forms,” she said. “They are also looking for plants that are going to perform well in the garden. They want plants that do not flop or need to be staked, stay compact, and have increased resistance to diseases like leaf spot and powdery mildew.”

In just the last few years, Clay said, “We are seeing a color explosion with brighter and bolder flowers that are fading less throughout the season, flowers that change color throughout the lifecycle of the bloom, even the cones are adding color with bright oranges and greens. »

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Echinacea explosion



Facing page top to bottom: Monrovia's SunSeekers™ 'White Perfection' and Panama™ Red. PHOTOS COURTESY OF MONROVIA NURSERY

Not only are the flowers getting more colorful, but they are also getting much more plentiful. We are seeing a huge amount of flowers at once as well as plants beginning to flower earlier and continuing to flower later into the fall."

Even with those improvements, Clay added, "The biggest breakthrough in breeding we have seen in the last year or two is in the overall structure of the plants. We are seeing branching from the base of the plant, giving us significantly sturdier plants with strong stems and compact, rounded habits. *Echinacea* can get leggy and tall and the new breeding coming out is making huge leaps to remedy that issue."

Hot, hot hot — new and old favorites

At **Moana Nursery** in Canby, Oregon, which grows *Echinacea* mainly for its garden centers in Nevada, Joe Dula said demand remains steady, with hot colors being the most popular. In the 'Kismet' series, Moana is planning to offer the red, yellow and orange for 2025 as well as 'Pow Wow Wildberry,' a consistent top seller.

Some of Dinsdale's favorites include 'Flame Thrower,' 'Hot Papaya,' 'Tangerine Dream,' the Sombrero® series, the newer SunSeekers™ series, and 'Meadow Mama' varieties. Don't discount classics 'Magnus' and 'White Swan,' either, she noted. "Those still sell like crazy," she said, partially because they can market them in smaller pots.

Georgia Clay said Monrovia is excited to offer the Sunmagic Vintage series and the SunSeekers™ series in 2025. "Every year we trial hundreds of *Echinacea* and these two collections really stood out. The Sunmagic series stood out for their outstanding habits — well branched and rounded even without pinching — and the flower power. They produced a large number of flowers at once and kept the show going throughout the whole summer and into the fall. The Sunseekers series stands out due to their amazing flower power and semi-double flower forms that are unlike anything else currently being offered." >>

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Echinacea explosion

Heims called out 'CARA MIA™ Seashell', which he said can put out 60 flowers from a single plug, 'DARK SHADOWS™ Wicked' for vivid pink flowers against dark stems, 'Sweet Sandia' a pink/green bicolor, the reliable KISMET® series, and compact 'DELIGHTFUL Gold' for containers, while holding a soft spot for 'FRESCO™ Apricot's unique form and color.

The latest trial

The Chicago Botanic Garden, which has been trialing coneflowers since 1993, recently released a new report based on a 52-taxa trial conducted from 2019–2023. While summer irrigated and mulched, the plants were not winter mulched, dead-headed or fertilized. The ratings (with a new four-star maximum, a change from previous studies' five) evaluated five specimens of each taxa for flower production and floral display quality, foliage and habit quality, plant health and vigor, winter survivability, and plant persistence or longevity. Pollinator-attraction was not assessed.

Interestingly, while *E. purpurea* is known to live as few as two or three years, these modern cultivars with complex breeding seem to have more staying power. "Our results showed that nearly 50% of coneflowers had good survival for at least the five-year span of the trial," the study stated. "14 taxa had complete survival of the five plants to fall 2023."

Also, of the ones that failed to overwinter, "the preponderance" lacked robust basal growth, reinforcing the importance of strong crowns going into winter.

Cultivars receiving the highest rating were: 'Cheyenne Spirit', 'Glowing Dream', KISMET® Raspberry, KISMET® White, 'Mellow Yellows', 'Sensation Pink', SOMBRERO® Blanco, SOMBRERO® Flamenco Orange, and SOMBRERO® Tres Amigos. ©

Erica Browne Grivas is an award-winning journalist and gardener pushing zone boundaries in Seattle, Washington. She can be reached at EBGrivas@gmail.com.



The benefits of benchmarking

Carmelo Luna enters data into one of the tracking apps at John Holmlund Nursery LLC in Boring, Oregon. PHOTO BY VIC PANICHKUL

Nurseries that closely track their processes enjoy efficiencies, benefits and bottom-line boosts

BY JON BELL

Since the 1960s, **John Holmlund Nursery LLC**, a wholesale tree nursery backdropped with an unbelievable view of Mount Hood in Boring, Oregon, has been growing bare-root trees for a range of different markets. Today, the nursery sprawls out over roughly 600 acres and produces more than a million trees every year, 80% of which get shipped east of the Mississippi River.

Yet while John Holmlund Nursery has figured out how to thrive and survive for nearly six decades, one thing's been mostly missing from its recipe for success: benchmarking. And not in the purely business sense of the practice, which finds companies measuring their own quality, performance and growth by comparing themselves to their competitors, but more in terms of

measuring a company's own processes, establishing a baseline and then improving — and continuing to measure — from there.

But in recent years, the nursery has made a conscious effort to start measuring what it does, so that it can make improvements and do it all even better.

"I'm an Army guy, and you've got to measure things. You can't manage it if you don't measure it," said Vladimir Lomen, a former U.S. Army captain and general manager at John Holmlund Nursery for 22 years. "We know what we are doing, but can we do it better? To do that, we need to see where we currently are, so in the past couple years, we've starting to measure everything that we do."



"I'm an Army guy, and you've got to measure things. You can't manage it if you don't measure it."

— **Vladimir Lomen**
GENERAL MANAGER
John Holmlund
Nursery LLC

That's included everything from tracking how long it takes workers to count new plantings to the number of trees that can be harvested, planted, graded or tied in a day. It also includes recording weather, soil conditions, varying topography and other factors. With that valuable information in hand, the nursery can then implement changes to help things run more efficiently and effectively, thus benefitting the business and the bottom line.

It's a practice that more and more nurseries are implementing to up their game.

"Any company's strength is decided by wins and losses," said John Lewis, president and fourth-generation owner of **JLPN Inc.**, a seedling operation in

Salem, Oregon. "Knowing your numbers, knowing the seven wastes of LEAN and having the right people on your team >>

Measuring up



Workers grade bare-root trees at John Holmlund Nursery LLC in Boring, Oregon. The nursery benchmarked the process last year and made changes, moving the trees and sorting benches and other tasks closer together so that workers don't have to walk as far, making the process more efficient. PHOTO BY VIC PANICHKUL

is critical to being successful with benchmarking at a higher level.”

Measuring for change

Elizabeth and Rick Peters run **The Peters Company**, a consultancy well-known to the Oregon nursery industry that helps nurseries adopt LEAN principles and practices. They look at the term benchmarking in the more traditional sense — i.e., businesses comparing themselves to other businesses — but they are big proponents of measuring, establishing baselines and making subsequent improvements.

In a presentation they give called “Measuring for Change,” they emphasize that measuring drives behavior, shows progress toward goals and provides employees with immediate and relevant feedback.

“If you’ve never measured much before, you have no idea where the business is,” Rick Peters said. “There are a number of ways to reduce costs, increase production and decrease downtime and make a real difference, but you have to start with a baseline. If you never started doing that, you won’t have a very clear



Kraemer’s has looked at its entire value stream, from sales through getting trucks loaded and on the road, for ways to improve. “We have gained a lot of efficiency.”

— **Tristan Wampole**
LOGISTICS MANAGER
Kraemer’s Nursery Inc.

idea of where you need to go.”

The Peters also talk about two different kinds of measures: results measures and driver measures. Results measures are

big-picture metrics, like external reporting and internal financial reporting, that tend to look backward by quarter or year.

Driver measures, on the other hand, are at the process level and used every day, even every hour, to achieve company goals and drive continuous improvement.

The focus areas of company goals usually encompass things like safety, quality, costs and on-time delivery. Process-level measures should directly relate to company goals, focus on process, not people, and be simple for everyone to understand and act upon.

“Your workers need to know the expectations and what they need to do to make the metrics you’re asking them to make,” Rick Peters said.

A lot to process

At **Kraemer’s Nursery Inc.**, a wholesale nursery in Mt. Angel, Oregon, logistics manager Tristan Wampole said the nursery has always looked at big-picture data — i.e. results measures — but in the past few years, it’s started to pay closer attention to its processes.

One primary area of focus has been shipping. Wampole said Kraemer's has looked at its entire value stream, from sales through getting trucks loaded and on the road, for ways to improve. That has included tracking every order that gets pulled — the plant mix, location of the plants at the nursery, how long it takes the team to pull the order and other factors — and making adjustments to labor allocation and other factors to improve.

"We've taken all that and redone our entire fulfillment timeline," Wampole said, noting that changes have included eliminating most deliveries on Fridays, which box stores try to avoid due to the weekend rush. "We have gained a lot of efficiency."

Lewis, from JLPN, said his nursery tracks everything with an associated cost that goes into a product's production, from the labor to the cost of seed and materials, as well fuel and insurance.

"Everything that we do in a nursery process has a cost associated to it, so we track everything and assign it to the production cost," he said. "A lot of this has to be done with labor tracking as we go from crop to crop. It takes a lot of effort, but that's how you truly know if you are profitable or not."

Lewis said JLPN's biggest benchmarking success came about three years ago, with the hiring of Sean Offield as new product and business development manager. Offield led an effort to create a profit and loss document that revealed, to the fractional penny, what JLPN's profit margin was on every single product. The three-month task was a big one — made somewhat easier because JLPN had already been tracking labor and production hours for years — but it's had a big payout.

"The impact of doing this was that we now knew exactly what we made on every product and why we were or were not making



"If you've never measured much before, you have no idea where the business is."

— **Rick Peters**
PRESIDENT
The Peters Company

money on them," Lewis said. "We use our profit and loss as a guide for what we grow and what we won't grow. We don't believe in loss leaders, so if it's not profitable, we don't do it."

Tech tracking

As in most fields these days, technology is making it easier and more efficient for nurseries to track and measure their processes. What may have started as handwritten paper records shifted to Excel spreadsheets and has now evolved for many into customized apps that crew leaders, workers and others can use from tablets and phones in

the field.

"It's so much easier for crew leaders," Lomen said. "They just hit a drop-down menu on their app and get to work versus spending three hours doing paperwork."

Crew leaders at John Holmlund Nursery use apps on tablets to track how many people are working and for how long, as well as how many trees are graded or harvested. They even drill down to see how many trees each person on the team is tending to per day. Managers can then take that data and compare it between teams. If one is performing better than another, it's easy to take action.

"If we see in the data that one crew is doing better or getting better results, we can compare and see what the reasons are," Lomen said. "Is it a matter of topography? Are they working a different way? Then we can write SOPs [standard operating procedures] to make sure that we are all working together in the same way to get the best results."

Kraemer's Nursery even hired its own in-house software developer to build custom applications that team members can use on their phones. The nursery can track labor, and teams can do simple scans while pulling orders to help track all the various processes that Kraemer's is measuring. ➤



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Peoria Gardens Inc. benchmarks itself against its competitors. The nursery visits nearby retail locations monthly and sizes up its plants against its competitors and tracks how they're doing, making recommendations as needed. PHOTO COURTESY OF PEORIA GARDENS INC.

Beyond benchmarking

While most benchmarking at nurseries involves measuring their internal processes, some do employ the kind of benchmarking that sizes up a business against its competitors.

Zac Burke-Wolf is the sales manager for **Peoria Gardens Inc.**, a garden plant grower in Albany, Oregon. He said the nursery has recently made a more focused effort to conduct monthly benchmarking by sizing up its plants — annuals, vegetables, perennials and hanging baskets — in nearby retail environments compared to the competition.

For Peoria, that entails sending someone out to a location and visually inspecting how Peoria's offerings level up to other plants. They'll look to see if other growers' plants are healthier, have larger blooms or just look cleaner than Peoria's. They document with photos and



"We are constantly looking at our products and processes to discover key data points that keep us at a strong margin."

— **John Lewis**
PRESIDENT AND OWNER
JLPN Inc.

notes, all of which gets compiled in spreadsheets so they can track how they're doing — and make recommendations as needed.

"For example, say we go to a nursery and our pansies are looking nice, but there are some others that look nicer," Burke-Wolf said. "Maybe they went a little heavier on fertilizer, so maybe we need to look at our feeding rates and be a little more aggressive."

If another nursery has a certain plant out earlier than Peoria, that could lead to some changes as well.

"What's really nice about that is you're getting the feedback right there and seeing it live," Burke-Wolfe said.

He added that Peoria hopes to expand its benchmarking practices into other areas, including their deliveries and the ordering and purchasing process.

In fact, most nurseries who have made measuring and benchmarking a

part of their business see only additional benefits to bringing even more of their processes into the fold. Wampole said Kraemer's would like to expand its benchmarking to include more production areas, including pruning and propagation, while also tracking and allocating labor more efficiently, especially as overtime laws continue to evolve and add constraints.

And at JLPN, Lewis said more automation will ultimately require another layer of benchmarking, which he sees as only beneficial to the long-term health of his 25-year-old nursery.

"We are constantly looking at our products and processes to discover key data points that keep us at a strong margin," he said. "It's all about the numbers in the end. If you don't know what you are spending, then how do you know what you're making? It's like driving with a blindfold on with no brakes at your feet. That's a care-less way to do business and it has a shelf-life when times get tough."

Jon Bell is an Oregon freelance journalist who writes about everything from Mt. Hood and craft beer to real estate and the great outdoors. His website is JBellInk.com.

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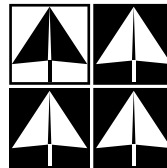


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Series content is coordinated by Dr. Lloyd Nackley, associate professor of nursery production and greenhouse management at Oregon State University in Corvallis, Oregon.



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Thrip threat

New research shows a promising path to managing this agricultural pest

Thrips are a ubiquitous pest in many systems including the strawberry, raspberry and nursery industries of the Pacific Northwest. PHOTO COURTESY OF OREGON STATE UNIVERSITY

BY MAN-YEON CHOI

Thrips represent a global agricultural pest problem. Thrips are tiny, barely visible insects that have cryptic habits and are among the stealthiest insect invaders.

Frequently, thrips are intercepted from insect quarantine in the border areas of United States.

They are increasing now due to more global trade of agricultural products and regional diversity.

Once established, thrips are found on leaves, blossoms, buds, and leaf sheaths of plants almost everywhere such as greenhouses, gardens and fields. Thrips are a ubiquitous pest in many systems includ-

ing the strawberry, raspberry and nursery industries of the Pacific Northwest.

Small bug; big threat

Western flower thrips (WFT), *Frankliniella occidentalis*, are one of the most economically significant pests, causing severe damage to agricultural and horticultural crops worldwide. In addition to direct damage from feeding on leaves, flowers and fruits, they also transmit economically impactful plant viruses.

Due to their small size and wide host range, detecting and preventing the spread of WFT is extremely difficult. Thrips are consistently listed as a top priority insect pest, producing damage to nursery crops, which are the most valuable agricultural

commodity in Oregon at nearly \$1.2 billion.

Current control for WFT primarily relies on conventional chemical insecticides. However, WFT commonly develops resistance to insecticides and thus biological control, improved monitoring and more specific insecticides are needed to prevent insecticide resistance.

Our team at the USDA Agricultural Research Service station in Oregon initiated the development of novel biopesticides for thrips using advanced molecular physiological tools, proteomics, genomics, and transcriptomics. A brief overview of the following topics recently published on WFT offers a new approach to developing thrips control. »

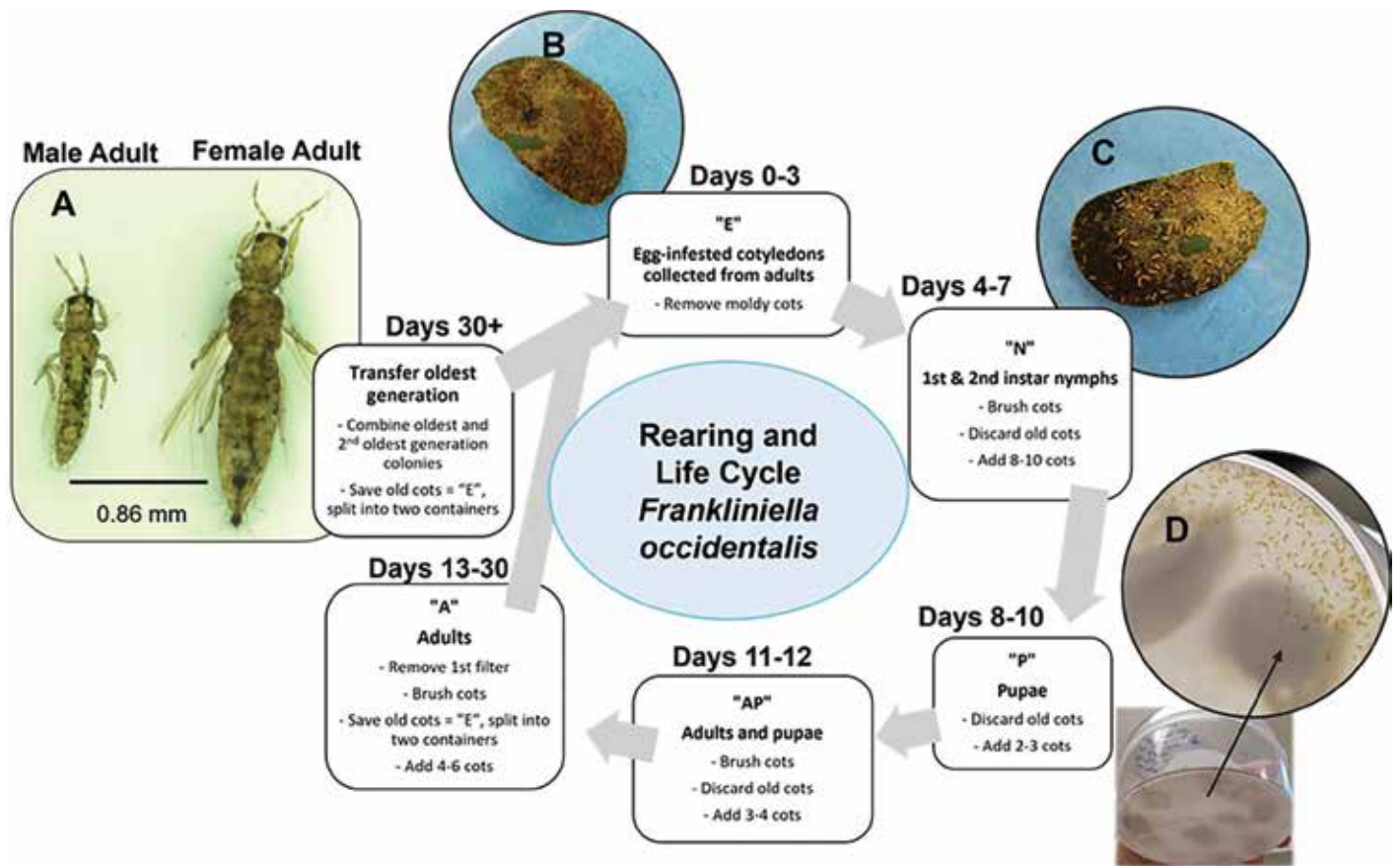


Figure 1: The new system sustains large thrips populations that can be then be used for various physiological experiments. DIAGRAM COURTESY OF OREGON STATE UNIVERSITY

A sustainable mass-rearing method

A new sustainable mass-rearing system is simple and cost-effective in the laboratory (Fig. 1, above) and has improved rearing methods as compared to other systems used previously. The new system sustains large thrips populations that can be then be used for various physiological experiments; for example, nano-injection or feeding of potential biological targets to live thrips and observing any physiological or behavioral changes.

We have introduced a compact and easy method with optimized rearing techniques that institute a timeline to maintain the quality of host plants in the laboratory and greenhouse, including minimization of mite and mold infestation. These factors are essential to the success of WFT colonies.

Molecular identification method for thrips

DNA, or deoxyribonucleic acid, is the instruction manual for all living things, including thrips. Genes are specific sections of DNA that determine traits like

size, color, or in this case, species identity. To identify thrips at the DNA level, we used a gene called *ITS2* as a marker.

The process started by extracting DNA from individual thrips. Since thrips are tiny, we use a special solution that breaks open their cells, releasing the DNA. Once we had the DNA, we used a technique called polymerase chain reaction (PCR) to make many copies of the *ITS2* gene, a process like photocopying a specific page from a book so it's easier to read. We did this using short DNA sequences called primers, which act like bookmarks to find and copy only the part of the DNA we needed.

After PCR, the DNA was either inserted into a cloning vector for further study or sequenced directly using a method called Sanger sequencing. Finally, we compared our DNA sequences to a known *ITS2* sequence from western flower thrips (WFT) in a public database (GenBank). Our results showed a 99.79% match, confirming the identity of our thrips.

Developed nano-injection method for thrips

Injections are essential in entomological research as they allow for direct delivery of biological compounds into the hemocoel of specimens to find the physiological impact on the insect.

Despite its prevalent use amongst embryonic, larval, and adult stages of insects, most current micro-injections for live insects are restricted to insects over 4 mm in size. Most micro-injection methods (injection volume, μ L level) use forcibly immobilized insects, which can affect the fitness and physiology of the insect.

This alteration can lead to inconclusive interpretation of phenotypic responses post-injection. In addition, nano-injection (nL level, 10^{-9} liter) with micro-insects (body size < 3 mm) is challenging, particularly when injecting into the insect without sedation.

We developed a novel nano-volume injection technique for micro-insects (< 3 mm) using WFT, as a model insect. By constructing and using a costum-made

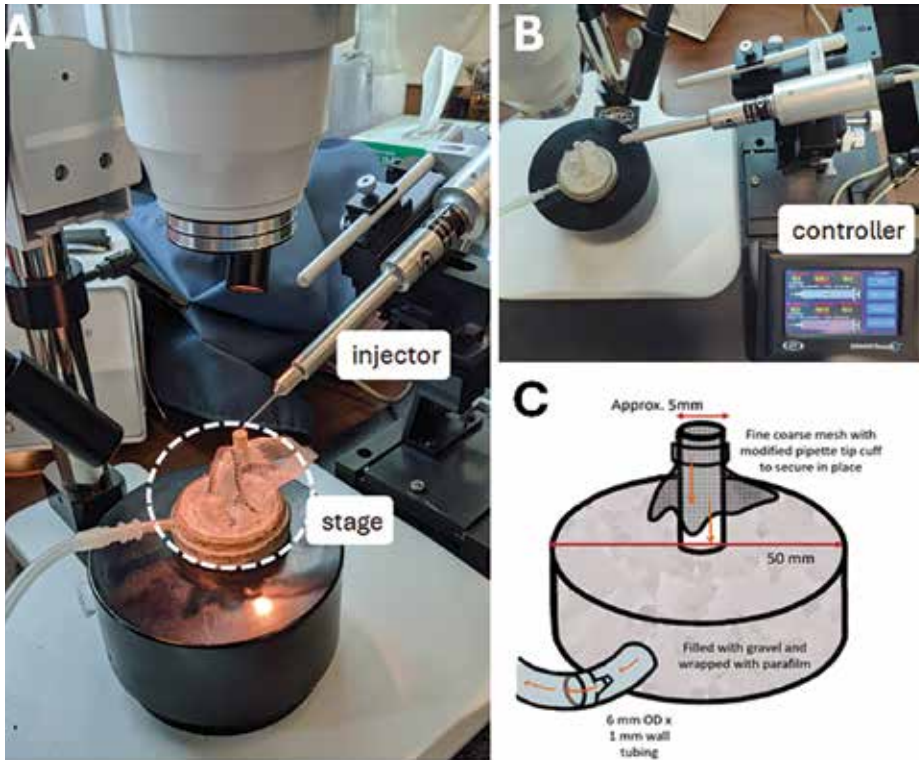


Figure 2: By constructing and using a custom-made vacuum stage connected to a vacuum controlled tube and a nanoinjector under microscope, injections were performed on live thrips, without sedation and physical injury. DIAGRAM COURTESY OF OREGON STATE UNIVERSITY

vacuum stage connected to a vacuum controlled tube and a nanoinjector under microscope (Fig. 2 left), injections were performed on live thrips, without sedation and physical injury (Fig. 3, Page 44). The nano-injection can be injected up to 10 nL of liquid into the thorax area of the thrips and we confirmed that injected thrips survived without damage compared to uninjected thrips.

A simple survivorship assay in which the thrips were injected with 10 nL water into the thorax or abdomen demonstrated that thoracic injections yield similar survival rates to control thrips that were not injected, while abdominal injections severely limited survivorship. The integrative injection method customizes the vacuum volume, and other specifications for live micro-insects (< 3 mm). This technique will facilitate injection of biological



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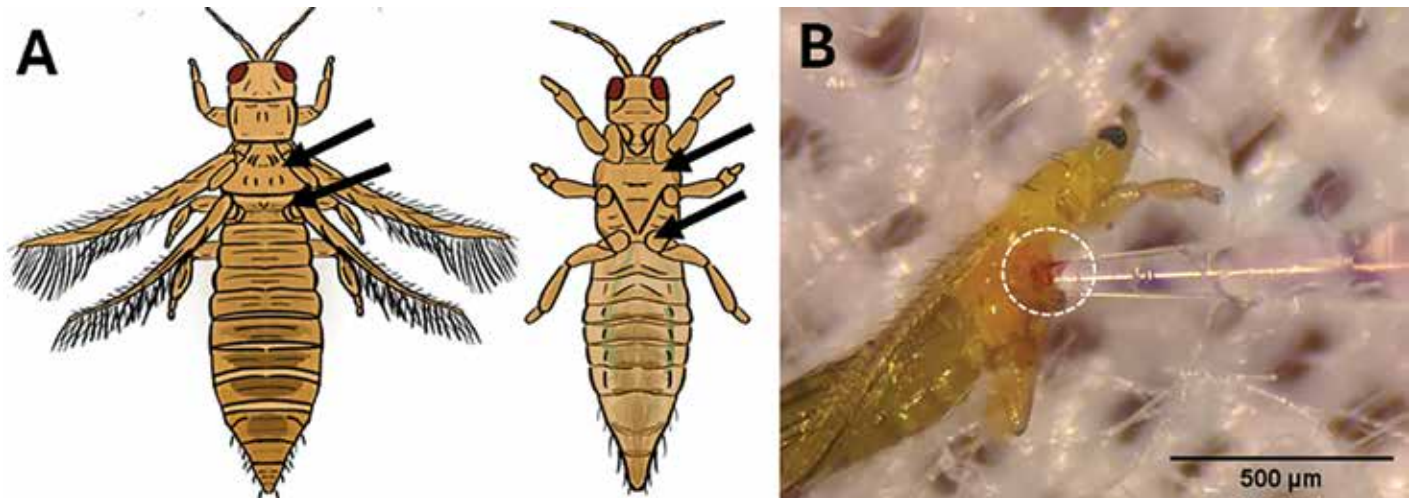


Figure 3: The nano-injection can be injected up to 10 nL of liquid into the thorax area of the thrips and we confirmed that injected thrips survived without damage compared to uninjected thrips. DIAGRAM COURTESY OF OREGON STATE UNIVERSITY

compounds into live micro-insects without any harmful immobilization tools.

Identification and characterization of neuropeptides from WFT

Insect neuropeptides (NPs) are small protein molecules produced in nerve tissues such as the brain. They represent the largest group in the insect hormone system that regulate almost all physiological functions, including feeding, molting, diapause, digestion, diuresis, mating, pheromone production, and many behaviors during developmental and adult stages. These NPs need to be bound to their corresponding receptors to initiate the specific biological processes, which is critical for insect survival.

NPs and their receptors therefore offer biological targets for the development of a new generation of insecticides, particularly biopesticides. We have identified new members of the neuropeptide group, called CAPA and pyrokinin (PK) peptides, that are associated with various physiological functions, including feeding, diuresis, muscle contraction, and pheromone biosynthesis. The fundamental research will assist in the investigation of biological processes at the molecular level, thereby enabling the identification of biological targets that can be employed for the management of thrips.

We studied two specific genes in western flower thrips (*capa* and *pk*) to understand their structure, genetic differences, and how they function in different tissues and life stages. These genes help control important processes in the insect's body.

To see how the proteins made by these genes interact, we tested their binding abilities using receptors from another insect, the brown marmorated stink bug. Think of receptors like locks and proteins like keys—we wanted to see which proteins could “unlock” the receptors.

Since thrips are tiny, collecting enough nerve tissue to study directly is difficult. Instead, we used a special system that allows insect cells to produce these proteins for us, like using a factory to make test samples instead of harvesting them by hand.

Finally, we mapped the nerve cells (neurons) that produce

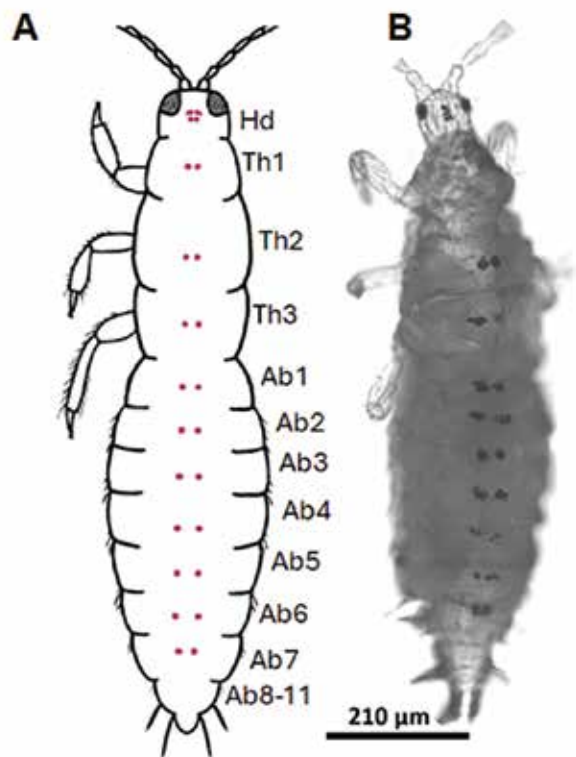


Figure 4: A diagram shows the thorax and abdominal areas of a thrip. DIAGRAM COURTESY OF OREGON STATE UNIVERSITY

these proteins in the thrips' bodies (Fig. 4, above). Our results showed that these nerve cells are arranged differently than in other insects, giving us new insights into how thrips control their bodily functions.

Receptor-interference technology

The discovery of new insecticides can improve integrated pest management (IPM), but it is a long iterative process with low chance of success and high risk. An efficient screening process

using a large volume of chemical libraries including natural products is needed.

For decades, insect NPs and their G protein-coupled receptors (GPCRs), have been offered as biological targets for the development of new insecticides, because they are involved in many key biological processes in insects. Disruption of a specific function will lead to novel pest management.

We developed a novel concept and technology that was successfully approved for a GPCR model using insect cell-based expression and phage display peptide libraries. This technology identifies bioactive peptides — small protein molecules — that interfere with a specific physiological function by binding strongly to the target receptor. The technology is called Receptor interference (Receptor-i), and can be applied to any animal pest using a species-specific target GPCR. Receptor-i is distinct from the underlying RNAi technology. ©

Man-yeon Choi holds a doctorate in entomology and is a research entomologist with the USDA ARS Horticultural Crops Disease and Pest Management Research Unit in Corvallis, Oregon. He can be contacted at Man-yeon.Choi@USDA.gov

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The cost of a trade war

Agriculture groups have warned for months that President Donald Trump's tariff plans could put U.S. farmers in the crosshairs of retaliatory tariffs.

In February, when the president announced his intent to levy 25% tariffs on the nation's top three trading partners (Canada, Mexico and China), there was uneasiness about the impact on the nursery and greenhouse industry. More fundamentally, it appears that the president is attempting to completely rewrite the source code of international economic relations.

Does this impact the industry?

Yes. Trade is about sales, relationships and the ability to provide much needed materials. In our case, we provide finished green goods from Oregon, and to do that, we import needed raw materials.

We have seen demand grow for field-grown trees and shrubs, but there have been mounting concerns over rising input costs. The cost of moving goods across the United States keeps going up. When we introduce uncertainty with our trading partners, it launches our industry into unfamiliar territory.

How tariffs work

Tariffs are a tax typically paid by importers, but non-agricultural companies can pass that cost on to consumers in the form of higher prices.

While the administration claims that tariffs will not have inflationary consequences, a number of economists believe they will add to the costs of goods. A lot of the tariffed items aren't discretionary. They're not things people can just do without, such as food, energy, clothing and auto parts.

The theory behind higher tariffs is that more manufacturing will happen at home, creating more jobs for Americans.

In practice, however, that's hard to accomplish. In the end, manufacturers need raw materials from other countries and the costs of those inputs would rise in a trade war.

Time is up

In February, President Trump issued a 30-day delay in implementing the tariffs on Canada and Mexico. The clock is up this month. The tariffs, as originally contemplated, would have had an estimated \$232.7 billion national impact, per economic research firm Trade Partnership Worldwide.

The impact would hit some states harder than others. The estimated economic impact on businesses in Texas (\$47.1 billion), California (\$32.6 billion) and Michigan (\$27.8 billion) is not inconsequential.

Businesses, ag stakeholders and economists all expect tariffs to hurt growth and raise prices. It is estimated that Oregon alone has \$3.5 billion in trade exposure between Canada, Mexico and China. This is a source of concern.

According to Axios, Canada is a major source of fertilizer material imported by the U.S. This means farmers will be immediately impacted by Trump's plans, as well as by any retaliatory tariffs the Canadian government imposes. New tariffs on Canada and Mexico could raise gasoline and home heating costs in places, even though 10% Canadian energy tariffs are lower than the 25% applied to other goods. Canada is by far the largest source of crude oil and natural gas imported by the U.S.

While much of my attention over the past month has been to the Canadian and Mexican markets, one country that is a month in on their growing trade war is China. Beijing will adopt 15% tariffs on U.S. coal and liquefied natural gas as well as a 10% tariff on crude oil, agricultural machinery, and certain cars and pickup trucks, according to the Ministry of Finance. Plows, seeders, planters, tractors and combines are among the machinery targeted.

Oregon is an export state

I have directly spoken to Oregon Department of Agriculture Director Lisa Charpillot Hanson about the potential impacts of retaliatory tariffs.

In general, Oregon agriculture is primarily an exporting industry. Our primary concern isn't just the tariffs being imposed, but the retaliatory tariffs from



Jeff Stone
OAN EXECUTIVE DIRECTOR

affected countries, which could significantly impact Oregon's agricultural exports.

Canada, in particular, is deeply embedded in our supply chain, and trade uncertainty leads to disruptions. Many Oregon-grown commodities, such as onions and potatoes, move through Canada for processing before returning to the U.S. Changes in trade policies can cause significant ripple effects across these industries.

Agricultural businesses operate on thin margins, and when our products become less competitive due to tariffs, the loss of market diversity can have long-term consequences for Oregon's growers, processors, and rural communities.

What is OAN doing?

The good news is that despite the political football happening on trade, relationships remain cordial with our partners in Canada and on the national level.

My good friend, Victor Santacruz, executive director of the Canadian Nursery Landscape Association (CNLA), wants to work with Oregon and the United States to maintain a strong and productive relationship.

The AmericanHort advocacy team have been our boots on the ground engaging the Trump Administration in Washington, D.C. Here at home, I spend time engaging with our congressional delegation, who wish to see our industry prosper in the future.

OAN leadership will be in D.C. in March, and trade will be a priority for us. Relationships and trust will get us through challenging economic times and disruptions over trade. ☺

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