

Growing Together >>>> 4Q | 2016

# thrive<sup>®</sup>

SPECIAL  
SECTION

FOCUS ON  
WOMEN



## Generation NEXT

**Nurturing a Legacy  
of Women Ag Leaders**

GROWERS SHARE THEIR  
STORIES WITH HELP FROM  
SUSTAINABLE SOLUTIONS

ROOT HEALTH IS KEY FOR  
CONSISTENTLY HIGH YIELDS

syngenta<sup>®</sup>

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ON THE COVER Grower Kevin Capistran and his daughter, Ella, look at a shaft of wheat on the family's farm in Crookston, Minnesota. Photo: Britta Trygstad

THIS PAGE The wheat harvest is underway at grower Kevin Capistran's farm in Crookston, Minnesota. Photo: Britta Trygstad

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**thrive**   

Even if you love your print edition of *Thrive*, you'll still want to check out the magazine's website. You'll find more content and links to important resources to help you succeed in today's marketplace. The online version also makes it easy to share specific articles with others.



Scan this QR code to take the fast track to the *Thrive* website, or go to [www.syngentathrive.com](http://www.syngentathrive.com).

**We welcome your story suggestions and comments about *Thrive*.**

Please send them to [thrive@syngenta.com](mailto:thrive@syngenta.com). For more information, visit the Syngenta U.S. website at [www.syngenta-us.com](http://www.syngenta-us.com), or call the Syngenta Customer Center at 1-866-SYNGENT(A) (796-4368).

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*Thrive* is produced quarterly for a nationwide agricultural audience. Its purposes are to update readers on Syngenta products, research, services and solutions, and to provide them with the information they need to succeed in today's complex marketplace.



# Rising to the Top

The landscape of American agriculture is a kaleidoscope of colors interwoven on a canvas that stretches across the country. Like the crops they nurture, the people of our industry are a broad mix of varied experiences, yet they're all working toward a common goal—to produce more food, fuel and fiber with greater efficiency and success.

At Syngenta, we understand that reaching this goal will require bringing the best minds and most practical problem-solvers to the table. But their physical presence alone isn't enough. We also must create an environment where these thinkers and doers can freely exchange new ideas and different perspectives.

Many of our customers and partners in the field are at the forefront of creating such an environment by encouraging diversity of thought from men—and women. Today, more female voices are not just contributing, but also leading critical conversations about crop productivity and best management practices. The mothers, wives and daughters who have always helped feed their families on the farm are now playing primary roles in feeding the world.

Syngenta proudly celebrates them through our sponsorship of the new television series “FarmHer on RFD-TV” and this commemorative issue of *Thrive*. On the pages that follow, you'll meet some of the women who are driving our industry forward by managing farms, building agribusinesses and mentoring the next generation of leaders. You'll also learn about some of the complex issues—on their land and in the marketplace—that they, along with others, are working hard to resolve.

With a new year on the horizon, we can't foresee all the challenges that you'll encounter, but we can help you devise the most effective strategies to overcome them. The nearly \$4 million that Syngenta invests globally in research and development every day will help deliver industry-leading seed, seed treatment and crop-applied technologies to you and the growers you serve.

Admittedly, that's only part of the solution. We also promise that we'll continue using mutual respect and earned trust to fortify our relationship with you. After all, the Syngenta customer-first philosophy permeates everything we do and everything we are. From the products we develop to the people we employ, you deserve nothing less than our brightest and our best. 🌱

**“Today, more female voices are not just contributing, but also leading critical conversations about crop productivity and best management practices.”**



TERESA MCNEAL

## About Teresa McNeal

When Teresa McNeal started her career at a Syngenta legacy company more than 18 years ago, she was the only female sales representative in Illinois. She later became one of the first female Syngenta district managers in the U.S. Today, in addition to being head of U.S. seeds customer marketing, McNeal is a leader in the company's diversity and inclusion initiative and mentor to several young talents in sales and marketing.

A handwritten signature in black ink that reads "Teresa McNeal".

**TERESA MCNEAL**

Head, U.S. Seeds Customer Marketing  
Syngenta



**WATCH NEW VIDEO** For an in-depth interview with Teresa McNeal, check out the new video posted to the *Thrive* website ([www.syngentathrive.com](http://www.syngentathrive.com)).



# What's in Store

Discover the latest news, events and product developments, including new winter wheat varieties and a new fungicide in the development pipeline.

## NEW TECHNOLOGIES

### > New Winter Wheat Varieties

For the 2016-2017 season, Syngenta has introduced seven new AgriPro® brand winter wheat varieties, each designed to address specific regional needs. They are listed below by category, along with the geographies where each will perform best.

#### Soft red winter varieties:

- > SY 100 has an excellent combination of high performance, high yield, and superior milling and baking qualities. (Upper Corn Belt and Mid-Atlantic regions)
- > SY Viper has a medium-early maturity, broad adaptability and a strong disease package. (Midsouth and East Coast regions)

#### Soft white winter varieties

- > SY 944 delivers grain with excellent milling and baking



AgriPro hard red winter wheat grows on Lobmeyer Seed Farm in Garden City, Kansas.



qualities due to its test weight and high grain yield. (Michigan and New York)

- > SY Assure has good straw strength and a strong disease-tolerance package. (High-rainfall and irrigated production areas in Idaho, Washington and Oregon)

#### Hard red winter varieties

- > SY Flint has high-end yield potential, good disease tolerance, and excellent test weight and straw strength. (Dryland and irrigated acres in Kansas, Oklahoma and Texas)
- > SY Sunrise has excellent test weight and good winter hardiness and disease tolerance to cereal rust. (Western High Plains)
- > SY Touchstone has shown good winter hardiness and snow mold tolerance. (High-rainfall or irrigated production areas in Idaho, Washington and Oregon)

For more information, visit [www.agriprowheat.com](http://www.agriprowheat.com).



#### >> Online Root Health Educational Tools

As part of its ongoing commitment to provide customers with technologies and educational resources, Syngenta Seedcare recently launched two new online tools: the Vibrance Learning Module and the Vibrance Interactive Infographic. Both will help educate users about the impact of soilborne pathogens on root health and crop productivity in corn, soybeans and wheat.

The learning module takes participants through a series of sections, including an in-depth look at the importance of root health, disease protection and the benefits of Vibrance® brand seed treatment fungicide. The interactive infographic visually demonstrates the impact of *Rhizoctonia* and the Rooting-Power benefits of Vibrance in young corn, soybean and wheat crops.

To complete the Vibrance Learning Module, visit [www.syngenta-us.com/seed-treatment/vibrance-learning-module](http://www.syngenta-us.com/seed-treatment/vibrance-learning-module). Participants are eligible to receive one CEU credit upon completion. Also, check out the Vibrance Interactive Infographic at [www.syngenta-us.com/seed-treatment/vibrance-infographic](http://www.syngenta-us.com/seed-treatment/vibrance-infographic).



Treated with Vibrance

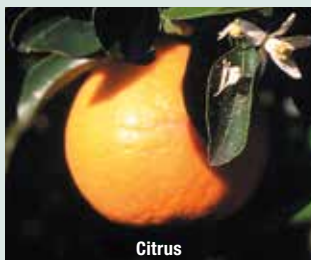


Untreated





Pistachios



Citrus



Squash



Potatoes



Pears (pome fruit)



Peaches (stone fruit)



Onions



Cotton

**PIPELINE**

**Preview of New Insecticide**

With registration anticipated in time for the 2017 use season, Minecto™ Pro insecticide will allow tree nut, citrus, vegetable, potato, pome fruit, stone fruit, onion and cotton growers to control numerous troublesome insect pests. Unlike standalone products, this premix formulation of cyantraniliprole and abamectin offers broad-spectrum control of a wide range of lepidopteran pests, as well as mites, thrips and difficult-to-control sucking insects. The insecticide's dual translaminar modes of action create a reservoir of these two complementary active ingredients, offering extended residual control of pests.

Upon registration, Minecto Pro will offer growers a new tool to control damaging pests and reduce resistance development to other chemistries. For more information, visit [www.syngentacropprotection.com/minecto-pro](http://www.syngentacropprotection.com/minecto-pro).



**PRODUCT UPDATES**

**> Orondis Opti Fungicide Premix**

Now available in a convenient premix formulation, Orondis® Opti fungicide combines the active ingredients of two products, Orondis and Bravo® fungicides, to help growers manage downy mildew and late blight. This game-changer against oomycete diseases protects the crop when it's most actively growing to maximize marketable yields—even under heavy disease pressure. For more information, visit [www.syngentacropprotection.com/orondis](http://www.syngentacropprotection.com/orondis).



**UPCOMING TRADE SHOWS AND CONFERENCES**

Fall is the perfect time to start checking out what new products and services will be available next year, while reflecting on which technologies worked well this season. Stop by the Syngenta booth at the events listed below to see what we have lined up for you and your farm or business.

**OCTOBER 2016**

19–22 National FFA Convention  
Indianapolis, Indiana

**NOVEMBER 2016**

7–11 ASFMRA AgroNomics, Vision for the Future  
Indian Wells, California

9–11 NAFB (National Association of Farm Broadcasters)  
Kansas City, Missouri

29–Dec. 1 ARA Conference & Expo  
Orlando, Florida

**DECEMBER 2016**

5–8 NAAA Annual Convention  
Long Beach, California

5–9 ASTA CSS & Seed Expo  
Chicago, Illinois

**JANUARY 2017**

4–6 Potato Expo  
San Francisco, California

10–13 National No-Tillage Conference  
St. Louis, Missouri

# A GROWING LEGACY

Syngenta salutes the generations of women who are making strong contributions to agriculture in this special section of *Thrive*.

## Find the FarmHers in *Thrive*

"FarmHer on RFD-TV" is a new television series that celebrates the talented, hardworking women of agriculture. As the presenting sponsor of the series, Syngenta is proud to feature in *Thrive* several of the women whose stories will be shared with viewers throughout the show's inaugural season. Below is a listing of where you can discover more about these women in this issue:

- > **Connie Banks**, "No Boundaries," page 6
- > **Ashley Bandoni**, "No Boundaries," page 6
- > **Nicole Forsberg**, "No Boundaries," page 6
- > **Courtney Hampton**, "No Boundaries," page 6
- > **Sonna Hoke**, "No Boundaries," page 6
- > **Liz Hunt**, "May the Source Be With You," page 18
- > **Darcy Maulsby**, "The Open Door," page 12
- > **Megan Moll**, "The Open Door," page 12
- > **Melissa Neuendorf**, "Bountiful Outlook," page 10
- > **Kelsey Vance**, "Bountiful Outlook," page 10
- > **Jill Wheeler**, "May the Source Be With You," page 18
- > **Lisa Zannoni**, "Agribusiness 101," page 28

To find out where "FarmHer on RFD-TV" is airing in your area, go to [www.rfdtv.com](http://www.rfdtv.com).

The FarmHer website features Kaytlin O'Dell, who works at San Diego's Mellano & Company, the largest cut flower operation in the U.S.

# NO Boundaries

The new “FarmHer” TV series spotlights the legacy of women in American agriculture and their growing role on the nation’s farms.

By Matt Lail

**It’s** no surprise that Connie Banks has made agriculture her life’s work. Growing up on a farm in Iowa, she remembers driving her father’s tractor as soon as her feet could reach the pedals. When it came time for college in 1975, Banks knew she wanted a career in agriculture, even though a number of her friends and relatives advised her to become a teacher—a more traditional career path for a woman at the time.

But Banks was not dissuaded. In fact, her father encouraged her to pursue a career in the industry he also loved.

“Men who work in agriculture are very accepting of women in the industry, because they are used to seeing females in farm roles,” says Banks, an integrated account lead for Syngenta in Amarillo, Texas. “After all, their mothers probably worked on the farm and so do their wives.”

## Lights, Camera, Action!

Despite the prevalence and history of women on farms, most people have generally perceived ag as an industry led by men and supported by women. Banks, who has a bachelor’s degree in animal science and ag journalism from Iowa State University, recalls being the only woman on the university’s livestock judging team and in her college ag classes.

But times are gradually changing. According to the most recent U.S. Census of Agriculture (2012), women are the principal operators of 14 percent of U.S. farms, up from 5 percent in 1978. With the census showing women accounting for more than 60 percent of second and third operators, researchers expect additional gains as an older generation of male principal operators retire and more women take charge.

To recognize the growing influence women have on agriculture, RFD-TV has launched a new television series. The brainchild of photographer Marji Guyler-Alaniz, “FarmHer on RFD-TV” puts the spotlight on a small sampling of the many remarkable women in agriculture across America. (See “The Story Behind FarmHer,” page 9.)

“People still think of the farm wife as that person who wears an apron and makes dinner for the hardworking guys,” says Guyler-Alaniz. “Many women do that, but then they hop back on the tractor and get back to work.”

“Men who work in agriculture are very accepting of women in the industry, because they are used to seeing females in farm roles.”

—CONNIE BANKS





Connie Banks, integrated account lead for Syngenta, pauses for a moment during a busy day in Hereford, Texas.

SEE MORE PHOTOS.  
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## FOCUS ON WOMEN



SEE MORE PHOTOS.  
[www.syngentathrive.com/community](http://www.syngentathrive.com/community).

### Proud Sponsor

As the presenting sponsor of “FarmHer on RFD-TV,” Syngenta has an opportunity to show its support for a crucial segment of the American agricultural community. “Syngenta is so proud and excited to support ‘FarmHer on RFD-TV’ and its ability to tell the incredible stories of women in agriculture,” says Dan Burdett, head of crop protection customer marketing at Syngenta. “Whether they’re working as an agronomist, chemist or retailer, or helping to manage the family farm as their mothers and grandmothers did before them, these women deserve to be recognized for their contributions.”

“FarmHer on RFD-TV” brings to American homes 26 episodes highlighting women in ag from almost every region of the country. One of the 52 women whose stories will air in feature-length 10-minute segments is Ashley Bandoni, a Syngenta retail sales representative and almond grower from Atwater, California.

“I’m so grateful to work for a company that not only embraces women in agriculture, but is also so willing to encourage them,” says Bandoni. “What Syngenta and

From left to right: Nicole Forsberg, Golden Harvest Seed Advisor, confers with growers Sonna Hoke and Courtney Hampton on their farm in Clinton, Illinois.

## BY THE NUMBERS

**1 million**  
female farmers are in the U.S., accounting for nearly one-third of all the nation’s farmers

**44** percent of nonprincipal operators on 2,000-acre-or-more farms are women.

**78,480**  
more women were principal farm operators in 2012 than in 1997.

**62** percent of growers who could take the place of retiring principal operators are women.

According to the USDA 2012 Census of Agriculture

RFD-TV are doing is a huge step forward in recognizing the contributions women make to our industry every day. I'm hoping other industries will follow in ag's footsteps."

### In the Spotlight

In addition to two feature-length segments, each "FarmHer on RFD-TV" episode also includes a "#RootedInAg Spotlight," a 30-second vignette that takes viewers on a photographic journey of select women whose agricultural roots run deep. Banks is among the 26 women featured in these spotlights, and so are three women—Sonna Hoke, Courtney Hampton and Nicole Forsberg—whose unique working relationship is helping one farm in Clinton, Illinois, prosper.

Hoke and her husband, Ed, have been married for 53 years, but they have farmed together since they were in high school. These days, they manage an 850-acre farm where they grow corn, soybeans, alfalfa and wheat. They are now looking toward retirement and passing on the family farm to their grandson, Andrew, and his wife, Courtney Hampton. Like Hoke, Hampton plans on working side by side with her husband, as they transition to the role of principal operators.

"To be honest, I couldn't think of anything I'd like to do more than farming," she says.

Forsberg, a Golden Harvest® Seed Advisor who runs her own ag seed supply and services company, is a frequent visitor to the Hoke farm. She helps advise the Hokes on which hybrids and varieties to plant, so they can receive the greatest return on their seed investment.

"Building relationships with farmers like Sonna and Courtney is the most rewarding part of my job," says Forsberg. "They are strong, hardworking women whose friendship and support are making a real difference in my life and the lives of their families."

The feeling is mutual. "It doesn't take long for a farmer to talk to somebody and decide if they know what they're talking about," says Hoke. "Nicole wins everybody over immediately, because she knows exactly what she's talking about."

Inspiring the next generation of female leaders is one of the top priorities for Syngenta and the creators of the "FarmHer on RFD-TV" series. "I would love for this show to be a springboard for young women," says Guyler-Alaniz. "I want to show women of all ages that if agriculture is their true passion, they can find the right path and follow it."

To find out where "FarmHer on RFD-TV" is airing in your area, go to [www.rfdtv.com](http://www.rfdtv.com). 🌱

## The Story Behind FarmHer

Marji Guyler-Alaniz realized in early 2013 that she needed a change in her life. The Iowa native, who studied graphic design in college, sought a career that combined her love of imagery and her deep appreciation for agriculture, which dated back to her days working for a crop insurance company. But she wasn't sure what that looked like—until that year's Super Bowl, when she watched the famous "God Made a Farmer" commercial, narrated by the radio broadcaster Paul Harvey.

"That commercial had all these beautiful pictures of farmers and ranchers in the U.S.," she says. "I loved it and teared up when I saw it."

But a few weeks later, she read an article that pointed out, while the commercial was heartwarming, its coverage of women in agriculture was limited to only three images.

"I had a pretty big aha moment," Guyler-Alaniz says. "I had spent 11 years working in corporate ag, and I even began my career in marketing, where I created things that should have had women in them. But it never once struck me until that moment."

In response, Guyler-Alaniz created FarmHer, an online and social community that showcases women working in a variety of jobs across

agriculture through photos, videos and stories. To date, FarmHer boasts more than 23,000 Facebook likes, almost 3,200 Twitter followers and more than 6,300 followers on Instagram.

RFD-TV realized that the next logical step was to take compelling stories like the ones Guyler-Alaniz has captured and broadcast them to a larger audience, with the help of Syngenta, the presenting sponsor of the series.

"Women play a very powerful role in the future of agriculture," says Raquel Gottsch, executive vice president of RFD-TV. "When I met Marji, I knew she shared this same vision."

The inaugural, 12-month season of "FarmHer on RFD-TV" kicked off in September. The show's stars are the women whose stories Guyler-Alaniz and Gottsch are helping to tell.

"These women are crushing stereotypes right and left," Guyler-Alaniz says. "While they are still taking care of their families, they are operating high-tech

equipment and overseeing diverse farming operations. There are no boundaries anymore."

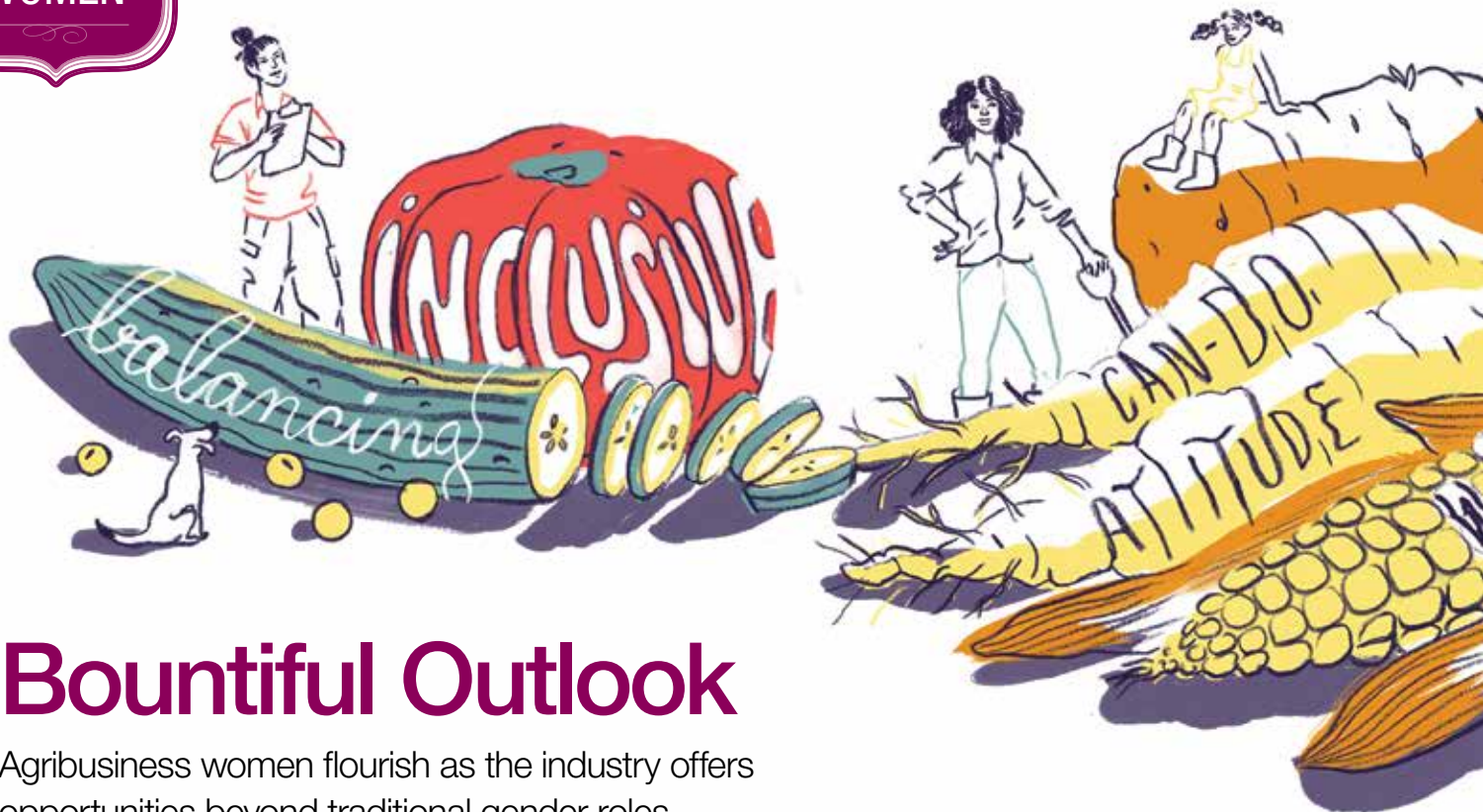
To learn more about FarmHer, visit [www.farmher.com](http://www.farmher.com).

Angelique Hakuzimana (left) with Global Greens Farm in West Des Moines, Iowa, washes vegetables, while cameraman Rick Fuller with Iowa Public Television shoots footage for a FarmHer documentary.

"People still think of the farm wife as that person who wears an apron and makes dinner for the hardworking guys. Many women do that, but then they hop back on the tractor and get back to work."

—MARJI GUYLER-ALANIZ





# Bountiful Outlook

Agribusiness women flourish as the industry offers opportunities beyond traditional gender roles.

In 1989, Ubly, Michigan, native Annette Puvaloski responded to a newspaper ad for a part-time secretarial position at the local co-op. At the time, there weren't many women working in the agribusiness industry. Now, Puvaloski is the branch manager of Wilbur-Ellis Company in nearby Marlette.

"Over the years, I've learned different facets of the business and have had supportive managers encouraging me to progress," she says. "I took on challenges and gained knowledge and experience. It's gratifying to work in agriculture."

## Endless Opportunities

Since Puvaloski joined the industry, traditional gender roles have shifted, and women are more involved in management positions. In addition to the nearly 1 million female growers serving as principal or secondary operators\*, more women are filling off-farm agricultural roles, including sales and agronomy positions.

Growing up on her family's farm, Kelsey Vance, a Syngenta sales representative in Illinois, always knew she wanted to stay in agriculture. "We're all working toward the same goal: to grow the best crop possible and feed an ever-growing population," she says. "There are so many different roles in agriculture. We need to look beyond the stereotypical image of what a career in agriculture means."

The opportunities aren't limited to former farm kids, either. Melissa Neuendorf, a product lead in the technology arm of

John Deere in Des Moines, Iowa, was an information technology professional who had never worked in agriculture, but she finds the industry to be rewarding and compelling.

"Working in an industry that fundamentally impacts feeding the world is exciting," Neuendorf says. "I love looking at a problem and identifying a software solution that will help growers and agronomists improve productivity."

## Excellent Performance

Vance's mentor, Teresa McNeal, who was first a district manager and is now the U.S. head of customer marketing for seeds at Syngenta, taught her that females in a male-dominated industry are in a unique position to leave a lasting impression.

"If you don't know what you're talking about, people will remember that," Vance says. "But on the other hand, we have an opportunity to share our insight, and that gives us a chance to shine. I may have to work harder, but I can also make a positive impact."

Kelley Washburn, a crop consultant and the only female sales representative with Crop Production Services (CPS) in its MidSouth Region, knows the importance of a strong first impression.

"Just like the guys, I put on my boots in the morning and head to the field," says Washburn, who lives in Kennett, Missouri. "I have great relationships with the farmers in my area, and they and my coworkers treat me as an equal."

\*According to the USDA 2012 Census of Agriculture.



Washburn's can-do attitude is paying off. During her 8-year career with CPS, she helped start the location in Bernie, Missouri, which has grown into one of the four largest retailers in the area. She's also been part of the Dream Team, made up of the top 10 CPS salespeople in the region.

### A Tough Balancing Act

Despite the advancements of women in agriculture, balancing work and family is still tough. "In a male-dominated industry, if a man is committed to his career and puts in long hours of work, he earns the respect of his peers," Puvaloski says. "But if a woman with a family were to work the same hours, she may be perceived as a bad mom. Even today, the expectations are that a woman's primary role is to take care of her family."

Washburn has also felt this pressure. "It's not an 8-to-5 job," she says. "Growers call day and night, so you do miss out on a few things in family life. But on the other hand, to us, farmers are family, not customers."

Finding the right balance is not the same for everyone, Puvaloski notes. "Between your work life and your personal life, you have to find your own balance," she says. "In agriculture, it's common to dedicate long hours for weeks at a time. It's important to prioritize and devote quality time to your family and your career—and to do each without feeling guilty."

### Diverse Workforce

Many ag companies are emphasizing the importance of a diverse workforce, which includes women. For example, Syngenta is committed to maintaining a workforce that reflects the diversity of its customers and the communities it serves. In fact, Syngenta launched a Global Diversity and Inclusion (D&I) policy in 2014.

McNeal, one of the first female district managers at Syngenta, is a D&I champion. She meets monthly with other champions from across the company to look for ways to accelerate diversity and inclusion.

"It's not just about diversity in hiring, but diversity of thought," McNeal says. "One of my primary roles as a D&I champion is to help identify ways to bring groups together to advance employee enthusiasm, professional development and community engagement. In my 18-plus years with the company, I've never been prouder to work for Syngenta." (See "Rising to the Top" page 1.)

Puvaloski notes that Wilbur-Ellis has a group specifically for women, called the Women of Wilbur or WOW. It meets several times per year and offers participants support and advice.

"Any time you can bring multiple perspectives to an industry, you're going to find advantages," Neuendorf says. "Whether those perspectives result from differences in gender, age or cultural backgrounds, the result is going to be more ideas and better solutions." ■ STORY BY MIRIAM PAULSON

# The Open Door

FFA and 4-H are helping to attract more young women to careers in agriculture, fostering diversity across the industry.

**T**he door to previously male-dominated ag careers is wide open, and young women have stepped through. In fact, the shift to women has grown so much that the number of female students in Midwestern ag colleges is equal to or greater than the number of male students.

"There's been more movement over the decades to make sure women have more access to careers that were male-dominated, so they now have the green light and are really encouraged to follow through," says Marcos Fernandez, Ph.D., associate dean and director of academic programs in the College of Agriculture at Purdue University.

For both female and male ag students, the jobs outlook is strong. Fernandez says there are 57,000 annual job openings in the U.S., and 60 percent of them are filled with students graduating from ag colleges. Purdue reports an impressive 95 percent placement rate for its ag students.

Students appear to gain an edge during college and in the job market when they're equipped with extra leadership skills honed through high school organizations like FFA and 4-H. "When these students show up on campus, you can tell the difference," Fernandez says.

High school groups like FFA have embraced young women. Female membership in FFA grew from 26 percent


in the 1992-93 academic year to 44 percent in the 2015-16 academic year. Plus, females have risen to top leadership roles; this year, young women hold five of the six national FFA offices.

## A Start in FFA

Megan Moll, a seed advisor manager at Syngenta, says FFA helped put her on a path to her agricultural career. As a young girl, she loved working on her family's farm in Michigan and joined FFA in high school. She became involved in her local chapter by holding different offices and participating in many activities, including the National FFA Convention and a leadership conference in Washington, D.C.

"I'm grateful for my FFA experience, because not only did it teach me organizational, team-building and public-speaking skills, but it also built my personal confidence to be able to talk in front of a large group of people," Moll says. "Everything I learned from FFA has helped me become what I am today."

Moll attended Michigan State University, where she studied agribusiness management and participated in several College of Agriculture organizations. "Being involved in campus organizations helped me develop essential skills



Megan Moll, a seed advisor manager at Syngenta, discusses the progress of a young cornfield with grower Nathan Baker on his farm in Waldron, Michigan.

“There is a saying, ‘You can’t be what you can’t see.’ The more we see the footprint that women in agriculture can have and the opportunities that are out there, the more it becomes a consideration for women.”

—NANCY TOUT

I use in my career today,” she says. “It showed companies that I am dedicated, hardworking and passionate, which helped me gain internships.”

Moll initially took a field sales internship with Syngenta and has successfully transitioned to her current position, in which she works with 17 Golden Harvest® Seed Advisors in northwest Ohio.

“For my generation, the [gender] barriers were gone, and I never thought that I couldn’t do this,” she says. She remembers having many female classmates in college and now is seeing more women enter jobs like hers at Syngenta.

### An Ag Teacher’s Influence

Darcy Maulsby, a frequent contributor to *Thrive*, started her journey toward an ag career in the late 1980s and early 1990s, before young women began embracing agriculture in larger numbers. “My generation was the product of the 1980s economic farm crisis,” she says. “The feeling I got from everybody was that there wasn’t a future in agriculture.”

During that crisis, many farmers experienced a combination of very difficult financial factors, including high debt, historically high interest rates and reduced government support.

As a young girl, Maulsby was involved with her family’s farm in Lake City, Iowa, and was active in 4-H. But she didn’t think about joining FFA until an ag teacher recruited her. Only a few girls were in FFA then, and her experiences proved to be life-changing. She remembers one horticulture competition where she had to pick up a phone and give a sales pitch to an FFA judge on the other end. “I look back and think, ‘They were really on top of it for giving us an opportunity to do that,’” she says.

“I am forever grateful to my ag teacher, Ed Ricks, who took the time to recruit me,” Maulsby continues. “FFA pushed me in new directions and really helped me grow with communication and leadership skills I have used my entire life.”

Maulsby attended Iowa State University, where she earned a degree in journalism with an ag emphasis and a degree in history. Agricultural communications is where she landed after graduation. In 2002, she started her own ag communications business and, in 2004, finished her MBA in marketing.



Today, Maulsby operates her ag writing and marketing business on the family farm, where she stays tightly connected to the farm business. She’s also very involved in Farm Bureau, Iowa Corn Growers and Iowa Soybean Association.

“Times have changed. We have more college-educated women,” she says. “There are a lot of smart women out there transforming agriculture, and it’s exciting to see that change. I definitely encourage young women to get involved in agriculture.”

### Supporting Women at Work

Seeing women in diverse roles within the sector is important for young women interested in ag careers. “There is a saying, ‘You can’t be what you can’t see,’ and that is especially true for young people,” says Nancy Tout, Ph.D., head of research and development at Syngenta, Canada. “The more we see the footprint that women in agriculture can have and the opportunities that are out there, the more it becomes a consideration for women.”

Jenny Heaton, head of talent management for Syngenta in North America, says Syngenta offers Employee Resource Groups to promote women’s networking and professional development.

“We also are sponsors of the “FarmHer on RFD-TV” series (see “No Boundaries,” page 6), designed to change the traditionally male image in agricultural media,” Heaton adds. “It’s great work and should provide young women with more confidence that the agricultural world is ready to accept them as equal partners in this quest to feed the world.”


STORY BY KAREN MCMAHON

Above: Iowa Public Television interviews Darcy Maulsby from her family’s Century Farm near Lake City, Iowa, for a segment of “Market to Market,” while her dog, Maggie, looks on.



# UNDER BATTLE





Though not easily detected above ground, soybean cyst nematodes pose a major threat to soybeans. Healthy roots are key to producing high yields.

# GROUND ZONE

Growers should take proactive measures to manage costly soybean cyst nematodes, which may be developing resistance to soybean varieties commonly used to control them.

*By Darcy Maulsby*

**C**all it the Rodney Dangerfield of U.S. soybean production. Soybean cyst nematode (SCN) gets no respect. But agronomists agree that nothing robs more yield—or poses a bigger threat—than SCN.

“We’re sitting on a powder keg,” says Greg Tylka, Ph.D., a professor of plant pathology and nematologist at Iowa State University. “Buildup on resistant varieties is reducing yield and could lead to disaster.”

Even though SCN is widespread, it’s easy to overlook. These microscopic parasitic worms can feed off soybean plant roots for some time before anyone notices above-ground crop damage. By then, the SCN population has grown more numerous and much stronger, becoming difficult to control and developing into a huge economic threat to soybean farmers.

Studies have shown that SCN can contribute to yield losses of 30 percent to 40 percent with no visual symptoms above ground. “I think the biggest problem with SCN is that producers don’t recognize the symptoms, so they don’t realize they have a problem,” says Kevin Spencer, a grower and Golden Harvest® Seed Advisor from Ottawa, Kansas.

Some farmers question yield-loss figures from SCN. “I ask growers, ‘Is SCN so bad that it wipes out yield in your entire county?’” says Dale Ireland, Ph.D., a technical product lead for Syngenta Seedcare. “No, but the truth is that SCN takes out small amounts of yield from millions of acres every year. It’s a very stealthy pest.”

It’s also true that resistance is becoming a major challenge, posing a serious risk to soybean yields. “SCN is an adaptable pathogen, and it’s becoming more aggressive,” says Jason Bond, Ph.D., a professor and plant pathologist at Southern Illinois University. “In the past 10 to 15 years, apathy about this problem has been one of the most devastating things for managing SCN.”

### Standing on the Edge of a Cliff

This apathy makes sense on one level. “Most growers think they are doing enough by planting an SCN-resistant variety,” Tylka says. “But this protection is slipping away fast.”

For more than 20 years, genetic resistance has come almost exclusively from a single source (PI88788), which is now found in more than 90 percent of SCN-resistant soybean varieties. It has been a vital tool to control SCN, which can reproduce three to six times in a growing season, depending on the geography.

## HOW COSTLY IS SCN?

By some estimates, soybean cyst nematode (SCN) is responsible for more than \$1 billion in U.S. soybean production losses and costs growers more than 128 million bushels annually.

“Estimates show that if you added together the total annual yield loss from the next five most-damaging soybean pathogens,

it would be less than the total annual damage caused by SCN,” says Dale Ireland, Ph.D., a technical product lead for Syngenta Seedcare.

Don’t get lulled into an out of sight, out of mind attitude with SCN. Many soybean farmers don’t realize their fields offer a buffet for SCN, despite the use of SCN-resistant



**TREATED**

As with herbicide resistance, however, reliance on a single SCN-management tool has reduced effectiveness. “When we deploy SCN-resistant varieties, a very small number of individuals within the population will be able to reproduce,” Bond says. “If we continually use the same source of resistance, these individuals will adapt.”

SCN resistance isn’t a new problem, but it’s reaching a tipping point. “Even though it has been subtle and slow, resistance will impact soybean production if nothing is done,” notes Terry Niblack, Ph.D., interim associate dean of the College of Food, Agricultural and Environmental Sciences at The Ohio State University.

If you’ve been planting an SCN-resistant variety for any length of time, there’s a strong chance you’ll have an SCN population that can overcome PI88788, notes Palle Pedersen, Ph.D., the head of Seedcare product marketing at Syngenta. “We’re standing at the edge of a cliff and can fall fast if we don’t start dealing with this challenge.”

### Fighting Back With Clariva Complete Beans

Once SCN infects a field, it’s impossible to fully eliminate it. However, there are ways to manage and reduce SCN populations, including:



**UNTREATED**

Young soybean roots grow stronger with Clariva Complete Beans seed treatment (left) when compared to the roots of untreated plants (right).

- > **SCN testing.** While soil sampling for SCN is site-specific, the numbers can offer a general sense of whether SCN populations are going up or down. Sample for SCN before every third soybean crop and monitor the trends, Tylka says.
- > **Nonhost crop rotation.** Consider introducing wheat or another nonhost crop, such as corn or alfalfa, into your rotation, Ireland says. “But watch out for some cover crops. They can be alternative hosts for SCN. Consult your local extension service about whether your cover crop may host SCN.” Also, try rotating SCN control sources in the varieties you plant. Niblack says, “While varieties other than PI88788 got a reputation early on for yield drag, I’m not sure this is justified anymore.”
- > **Weed control.** A number of weeds, including henbit and purple deadnettle, can serve as hosts for SCN. Make it a priority to control weeds, including winter annuals, with an effective herbicide, Ireland says. Flexstar® GT 3.5 herbicide is one solution.
- > **Seed treatment.** Seed treatments that offer effective protection against SCN can be another valuable tool, Niblack says. Clariva® Complete Beans, a combination of separately registered products, reduces SCN reproduction and selection pressure and manages damage from sudden death syndrome (SDS) and other SCN-related diseases. Syngenta added a nematicide to CruiserMaxx® Beans with Vibrance® seed treatment to develop Clariva Complete Beans.

Compared to an insecticide/fungicide seed treatment alone, Clariva Complete Beans also provides an average yield increase of 2.7 bushels per acre on top of Cruiser-Maxx Beans with Vibrance. In some fields, the seed treatment has helped boost yields by more than 10 bushels per acre. Michael East, a grower from Clarkdale, Arkansas, has struggled with SCN and SDS. “After we treated our soybeans with Clariva Complete Beans, we saw great benefits in the yield and protection from diseases,” he says. “Our yield was 20 to 30 bushels per acre higher in some cases.” Clariva is also a longtime investment, Pedersen says. “By using Clariva every time you plant soybeans, you help suppress SCN and reduce populations over time.”

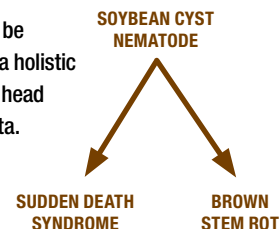
Driving down SCN populations is one of the keys to managing the underground battle zone. “With proper management, SCN is not a death sentence to soybean production,” Tylka says. “While it’s hard to drive high SCN numbers down, it’s fairly easy to keep low numbers low and protect soybean yield potential.”

## Beware of the Troublesome Trio

Not only is soybean cyst nematode (SCN) the single most destructive pathogen of soybeans in the U.S., but it’s also the gateway to more yield loss. Sudden death syndrome (SDS) and brown stem rot (BSR) are part of the troublesome trio associated with SCN, which also paves the way for other fungal root rots in soybeans.

“SCN often makes the symptoms of SDS and BSR show up sooner and/or make the symptoms more severe,” says Greg Tylka, Ph.D., a professor of plant pathology and nematologist at Iowa State University.

That’s one more reason why SCN must be managed appropriately. “You need to take a holistic approach,” says Palle Pedersen, Ph.D., the head of Seedcare product marketing for Syngenta. “The sooner growers take this issue seriously, the more we can help protect profitable soybean production.”



soybean varieties. “Of all the things I work on, the most challenging is SCN,” says Jason Bond, Ph.D., a professor and plant pathologist at Southern Illinois University, who noted that 85 percent to 90 percent of fields surveyed in Illinois are infested with SCN.

Management strategies that include a nematicide seed treatment can help control

SCN and offer a positive return on investment. Kevin Spencer, a grower and Golden Harvest Seed Advisor from Kansas, favors Clariva® Complete Beans seed treatment, a combination of separately registered products. “Clariva Complete Beans has been proven time and time again that it pays in the end. We feel like there’s really no other way to go.”

### ANNUAL LOSSES FROM SCN

MORE THAN  
**\$1B**  
IN U.S. SOYBEAN  
PRODUCTION

MORE THAN  
**128**  
MILLION  
BUSHELS





# May the Source Be With You

Syngenta Sustainable Solutions initiatives help growers tell the story of their farms in a meaningful way to downstream companies and consumers. | *By Lacy Gallagher, Illustrations by Kevin Davis*

**T**he most basic definition of sustainability is the capacity to continue something indefinitely. For Jill Wheeler, no industry carries a greater burden of living up to the meaning of this word than agriculture. As the head of Sustainable Productivity at Syngenta in North America, Wheeler understands that agriculture must continue to meet the food, fuel and fiber needs of a global population.

“At the same time, the industry is charged with improving the ability of future generations to meet their own needs,” says Wheeler. “That’s where sustainability, from an agricultural perspective, comes in. By 2050, the world’s population is projected to reach 9.6 billion people—more than 2 billion more people than we’re feeding today. We simply can’t afford to ignore the challenges that future generations will face. We must start implementing changes now that will pave the way for their success.”

#### **Good References**

To this end, Syngenta is working with farmers across the U.S. on a series of sustainability initiatives. In addition to coming up with practical solutions to produce more food using fewer

resources, these farmers are helping increase food industry awareness of sustainable agriculture practices already in place throughout the country. One of those farmers is Chad Rubbelke from Minot, North Dakota.

“One thing consumers don’t know about farmers is that we’re the most environmentally conscious people you’ll ever meet,” Rubbelke says. “We live on the land where we farm. It’s our home and our career, so we take all steps possible to treat it properly.”

Consumer-packaged-goods companies are joining Syngenta and farmers, including Rubbelke, to provide the transparency consumers are demanding about how their food is produced. Liz Hunt, Sustainable Solutions lead at Syngenta, helps connect these downstream companies to growers.

“These collaborations not only enable the food and beverage companies to satisfy the consumer requests for transparency, but they are also helping growers make their crops more marketable and sustain their farming businesses for generations to come,” she says.

### Measurable Results

As part of the sustainability initiatives, growers use data collected for farm management decisions and reporting within Land.db®, the cloud-based software that is part of



the AgriEdge Excelsior® program, a whole-farm management program from Syngenta. Collecting and analyzing this data on a per-field and regional basis help the growers better understand the impact of their farming choices when



## Finding Common Ground

Across the country, a group of female farmers is jumpstarting candid conversations about food with other women who buy their families’ meals from grocery stores, farmers markets and restaurants. CommonGround, which began in 2010 with support from the United Soybean Board and National Corn Growers Association, has more than 180 women growers across 19 states who volunteer to help consumers sort through common concerns about food and farming. They do this through blog posts, videos and one-on-one meetings.

“CommonGround is a great organization that realized early on that no one can tell the farmer’s story quite as well as the farmer,” says Jill Wheeler, head of Sustainable Productivity at Syngenta, North America. “Having real-world farmers at the table changes the entire conversation. It’s

important to remember those interactions can be local, casual and impromptu.”

A lot of misinformation surrounding food stems from a lack of understanding about farming. The women of CommonGround share insight from their personal experiences and from proven scientific research to answer consumers’ questions.

“I think the fact that CommonGround is run by female volunteers—and women typically handle the bulk of the grocery shopping—helps the consumer feel like the conversations are ‘mom-to-mom’ about their children’s food,” says Liz Hunt, Syngenta Sustainable Solutions lead.

For more information, go to [www.findourcommonground.com](http://www.findourcommonground.com).



conversations and storytelling among all parties involved, including downstream collaborators, the Syngenta technical support team and farmers. These groups also invite other local growers to learn about the initiative. Participants take deep dives into analyses from data that Land.db records. Some of the most recent findings include the following:

- > **A 21 percent increase in soil conservation** efficiency among Idaho reference farmers since they joined the initiative
- > **A savings of \$5 to \$7 per acre on cultivation costs** when North Dakota growers switched to no-till practices
- > **A decrease in energy use and GHG emissions**—the equivalent of 28 pounds of carbon dioxide per acre—when farmers in the Red River Valley used cover crops on 31 percent of their fields

### Global Impact

The Sustainable Solutions initiatives and their positive impact on both farming and nonfarming communities alike fit well into The Good Growth Plan. This Syngenta strategy for helping to address global food security contains six measurable commitments, one of which is to increase productivity of the world's major crops by 20 percent without using more land, water or inputs. The Sustainable Solutions farms will help Syngenta monitor its progress toward this commitment by 2020.

“Our network of farmers, who represent a variety of crops and regions, is working with our field experts to trial new solutions and raise productivity,” Wheeler says. “They are helping us tell their story of sustainable productivity with aggregated real-world, field-based information.”

Syngenta expects the number of farmers involved in Sustainable Solutions initiatives to continue to grow. In the U.S. alone, farms in three different regions—southeast Idaho, central North Dakota and the Red River Valley—participated in the initiatives two years ago. Farmers in these regions typically grow wheat, potatoes, barley, sugarbeets, canola, sunflowers, soybeans and corn. Today, additional U.S. farmers—representing corn in Wisconsin, wheat in Michigan, barley and sugarbeets in the Plains, and Syngenta Seed production in Nebraska, Iowa and Minnesota—are being recruited. Wheeler says this growth is not only good for measuring the success of The Good Growth Plan, but also good for sustainably producing crops—period.

“The true success of The Good Growth Plan happens at the grower level, where our Sustainable Solutions initiatives and AgriEdge Excelsior technology empower growers to get a more detailed look at their operations,” she says. “The information generated from these reference farms will help us map out strategies designed to overcome food security challenges—today and tomorrow.” 🌱

it comes to crop protection products, greenhouse gas (GHG) emissions, tillage, water usage and more.

“The growers are at an advantage because they develop a relationship with their customers downstream and set themselves up to be well-prepared as reporting becomes more of the norm,” Hunt says. Additionally, participating growers own and have access to their data collected through Land.db, which can help them pinpoint the practices and inputs that can make their crops more productive and profitable.

Stewart Opland, a farmer from Des Lacs, North Dakota, says one of the pivotal moments for him was when he understood how fertilizer impacts GHG emissions, after using Land.db. “We obviously need fertilizer to grow our crops and sustain our business,” he says. “But by understanding how applying it can impact the environment, we’ve been able to make sure we’re using it as efficiently as possible.”

### Yearly Check-Ins and Improvements

Syngenta is always looking for progressive growers to join its Sustainable Solutions initiatives, Hunt notes. “Getting the right folks to participate who are ready to tell their stories is important,” she says. “The growers who are most likely to do that are often the influential leaders in their communities. At annual grower meetings, I’ve heard these growers tell their peers, ‘We’ve held our stories too tight for too long, and that’s why we’re in the situation that we’ve been facing recently.’ The value chain partners want to team with growers who recognize the need to tell their farm stories.”

Held in each region where a Syngenta Sustainable Solutions initiative is underway, the meetings encourage open

# Know Your Roots

While underground root systems are out of sight, they should never be out of mind for growers whose yields depend on healthy roots.

**A**n estimated 80 percent of plant problems start underground. Soilborne pathogens, underground insects and nematodes all threaten healthy root structures. Hidden from the human eye, the effects of these pests and pathogens often go unnoticed until the end of the season, when damaged roots can result in significant crop damage and yield loss.

The advantages of having an uncompromised root system are many. Stronger, healthier roots take up water and nutrients more efficiently, leading to better crop development. More robust root systems also help produce stronger stems and foliage that can better withstand environmental stresses, especially in geographies where water is scarce and pests are many. Ultimately, healthier roots protect the genetic potential of the crop and lead to improved yield consistency.

“Yield starts and ends with a healthy root system,” says Dale Ireland, Ph.D., Seedcare technical product lead at Syngenta. “Protecting roots is crucial to reaching higher, more stable yields and overall performance.”

## The Rise of *Rhizoctonia*

Several of the biggest threats to crop quality and yield begin with root damage caused by underground diseases. Quickly establishing itself as one of the most prominent yield-robbing soilborne fungal pathogens, *Rhizoctonia* is capable of causing 20 percent to 40 percent yield loss and is a common soil disease in major U.S. crops, including cereals, soybeans and canola. It can also devastate yield potential in corn, cotton, potatoes and sugarbeets.

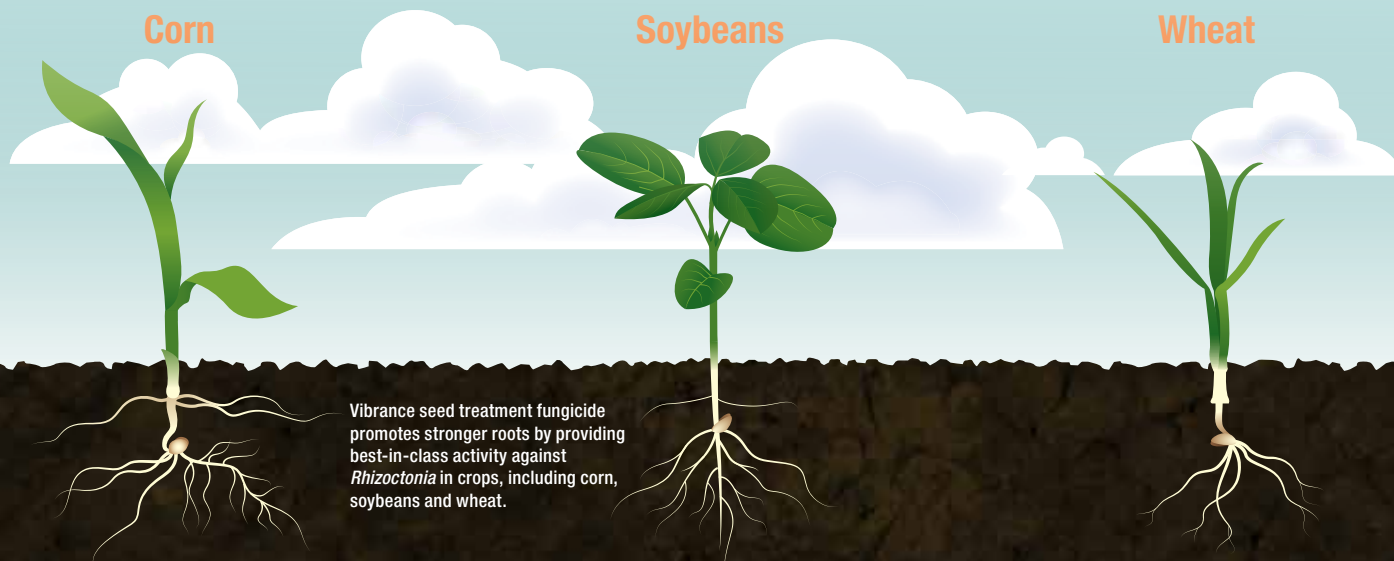
*Rhizoctonia* infects plants in early-development stages, attacking both seeds and seedlings. It weakens plants during pre-emergence and post-emergence by infecting the root system and reducing its efficiency, causing slowed growth and damping off. Damaged root hairs reduce the plant’s ability to absorb moisture and nutrients, manage stress, and achieve maximum yield. A plant may never regain its rooting potential as a result of the disease’s significant impact on early plant vigor and development.

The Pacific Northwest is particularly vulnerable to *Rhizoctonia* because of the region’s soil conditions, temperatures and tillage practices, which favor disease development. “Due to soil erosion and the need for improved soil structure and organic matter, growers in the Pacific Northwest often implement direct-seed and minimum-tillage practices,” says Don Drader, agronomy service representative in Washington. “Unfortunately, minimum tillage often creates a soil environment where *Rhizoctonia* thrives.”

## Protection From the Start

While completely managing *Rhizoctonia* once it infects a field may not be possible, growers can limit its impact. Rotating crops, using tolerant varieties and minimizing soil compaction are effective, noninvasive ways to manage the disease.

To further prevent the disease from infecting their crops, growers should consider using a top-performing seed treatment. “*Rhizoctonia* is a big threat in my area, but I have never had a major issue with the disease, believe it or not,” says Mike LaShaw,





**“Yield starts and ends with a healthy root system. Protecting roots is crucial to reaching higher, more stable yields and overall performance.”**

—DALE IRELAND

who grows several crops that are susceptible to *Rhizoctonia*, including wheat, peas, lentils, canola and barley, in Rockford, Washington. “By rotating my crops and applying a seed treatment to my seeds, I’m able to manage the yield-robbing disease plus other soilborne diseases.”

As genetics and traits continue to advance, seeds are becoming increasingly valuable. But from the moment a seed is planted, nematodes, insects and diseases threaten to eat away at a grower’s seed investment. The best way to protect this investment is to shield the plant early when it matters most.

“In addition to selecting varieties with built-in disease tolerance, choosing the right fungicide seed treatment is the key to preventing *Rhizoctonia*,” says Ireland. “The right seed treatment can help protect the plant when it is most susceptible to damage—during that three-to-four-week window after a crop is first planted.”

### Vibrance to the Rescue

A seed treatment solution from Syngenta is helping growers across multiple crops combat *Rhizoctonia* and improve root health. Vibrance® brand seed treatment fungicide delivers enhanced disease protection that leads to stronger root systems and improved crop performance. The proprietary fungicide, which offers excellent activity against *Rhizoctonia*, uses the active ingredient sedaxane, the first Syngenta molecule developed specifically for the seed treatment market.

“The disease protection in Vibrance helps shield the developing plant against reduced emergence and increase plant stand and vigor during the critical early stages of growth, when yield potential is determined,” says Kris Pauna, Seedcare product lead at Syngenta.

Belonging to the SDHI class of fungicides, Vibrance protects plants from threatening diseases like *Rhizoctonia*, while helping to promote yield consistency under a broad range of conditions. Vibrance is currently available on multiple crops, including corn, cotton, pulses, potatoes, soybeans, sugarbeets and wheat. It is also available in combination with other leading seed treatments to help crops generate healthier root systems.

“Protecting roots at the earliest stages of plant development is critical for above-ground growth throughout the season,” Pauna says. “Seed treatments are one of the best ways we have to offer that protection, so growers can produce better-yielding, higher-quality crops.”

To learn about easy-to-access tools that can help expand your knowledge of roots, go to “Online Root Health Educational Tools,” page 3. Visit [www.syngentacropprotection.com/vibrance](http://www.syngentacropprotection.com/vibrance) for more information on Vibrance. 🌱 STORY BY JENN PIOTROWSKI



# SHINING A SPOTLIGHT ON THE WOMEN OF AGRICULTURE.

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Visit [SyngentaThrive.com/Community](http://SyngentaThrive.com/Community) for weekly updates.

**syngenta®**

# Ag Confidential

The annual Voice of Customer survey helps Syngenta deliver exceptional programs and services to its reseller customers.

**Q. What is the Syngenta Voice of Customer survey?**

**A. Aaron Deardorff, head, marketing to settlement, Syngenta, North America:** First launched in 2006, the Voice of Customer survey, or more simply the VOC, is currently an annual survey sent to key crop protection and seed resellers. Its primary purpose is to seek customers' candid opinions on how Syngenta is doing so that we can continually improve. We always want to exceed customers' expectations when it comes to our service and value to them.

**Q. How has the survey changed over the years?**

**A.** This year marks the 10th anniversary of the VOC survey. Initially, its focus was to gather feedback from crop protection retailers to provide guidance on key Syngenta marketing touch points, including competitive comparisons of our customer service, the effectiveness of our advertising and promotional materials, and the quality of our web-based platforms. Another key objective of the early VOC surveys was to guide the development of our sales representatives' skill sets by taking into account the customer's perspective. After all, these men and women in the field are the primary conduits between resellers and our line of products and services, and we understand that helping them do their jobs better from the vantage point of the reseller is critical. Along the way, we also thought it was important to measure the effectiveness of our go-to-market strategy and our overall company performance.

While crop protection was the survey's original focus, we eventually incorporated questions that also gauged satisfaction with our customers on the seed side of the business. Over the last two years, the performance of our seed and crop protection marketing programs—as well as the merits of our redemption process from marketing to settlement—were focal points. While the survey has certainly evolved over time, the one constant has been our desire to accurately measure our customers' satisfaction with the people, products and services of Syngenta.

**Q. Why is participating in the survey worthwhile?**

**A.** Syngenta wants satisfied customers, and this survey is a vehicle through which customers can confidentially tell us

how we're doing, so we can make improvements as necessary. It's worth noting that customers have the option to identify themselves in conjunction with their feedback, which gives us the ability to work with them one on one to address any specific concerns they may have.

There's also a direct benefit to the next generation of leaders in ag. For every survey completed, Syngenta donates \$10 to the National FFA Organization on behalf of respondents. Since 2009, we've donated more than \$60,000 to FFA as a direct result of the VOC survey. These funds have helped pay for student educational programs at the national and local level.

**Q: What are some of the key findings, and how do you plan on addressing them?**

**A:** Over the last two to three years, our overall program effectiveness and our marketing-to-settlement process scores have improved. The survey shows that Syngenta is in line with competitors' programs, but our goal is to be superior. So that we can continue to move the customer satisfaction needle in a positive direction, we'll work even harder and strive to meet our customers' needs through improved timeliness, clarity and accuracy.

Our most recent survey shows that the Syngenta sales representative is critical to a customer's perception and understanding of what our programs are and how a specific program may impact the customer's business. Focusing on these results, we'll continue to deepen and enhance our internal training, so our sales reps will be better equipped to help customers understand and take advantage of all program incentives relative to their businesses.





“While the survey has certainly evolved over time, the one constant has been our desire to accurately measure our customers’ satisfaction with the people, products and services of Syngenta.”

**AARON DEARDORFF**  
Head, Marketing  
to Settlement  
Syngenta, North America



The survey also indicates that customers generally perceive competitors’ programs to be simpler than ours. But once again, the Syngenta sales rep can play a pivotal role. Customers whose reps are knowledgeable are more likely to take advantage of our program offerings—no matter how simple or complex. Moving forward, we’ll strive for simplicity where it’s warranted. That’s why training our sales reps so they can clearly communicate the details of our offers is a key action item.

Left to right: (from left) Mitch Lobeck, seed advisor manager at Syngenta; Roger Elmore, grower; and Brett Goecke, Golden Harvest Seed Advisor, examine soybean plants in Gladbrook, Iowa; bags of Golden Harvest and NK soybean seeds in the back of a pickup truck; Matt Dolch, Syngenta sales manager from Beaver Crossing, Nebraska; Aaron Deardorff.

**Q. What can customers expect moving into 2017 as a result of the VOC survey?**

**A.** We are committed to continually enhancing our customer experience. Our program development teams are already looking at incorporating some of the most actionable findings from the 2016 survey into 2017 program offers. Longer-term objectives, also based on customer feedback, include continuing to enhance clarity around incentive payments in crop protection and seeds, providing early, ongoing training for our field sales teams, and moving toward a common programs approach across geographies wherever possible. At the same time, we want to make sure we continue to reward customers who are agronomically diverse when it comes to the Syngenta brands they support, so that they, in turn, can help meet the needs of growers in their areas better.

We realize our customers are inundated with surveys from multiple companies each year. On behalf of everyone at Syngenta, we greatly appreciate the time they take to provide us with their valuable insight and thoughtful perspectives. 🌱 INTERVIEW BY SUSAN FISHER



# Ripple Effect

Syngenta receives an honor for workplace diversity and educates teachers about ag. The company also celebrates the finalists of this year's #RootedinAgContest and its new Seedcare Institute facility.

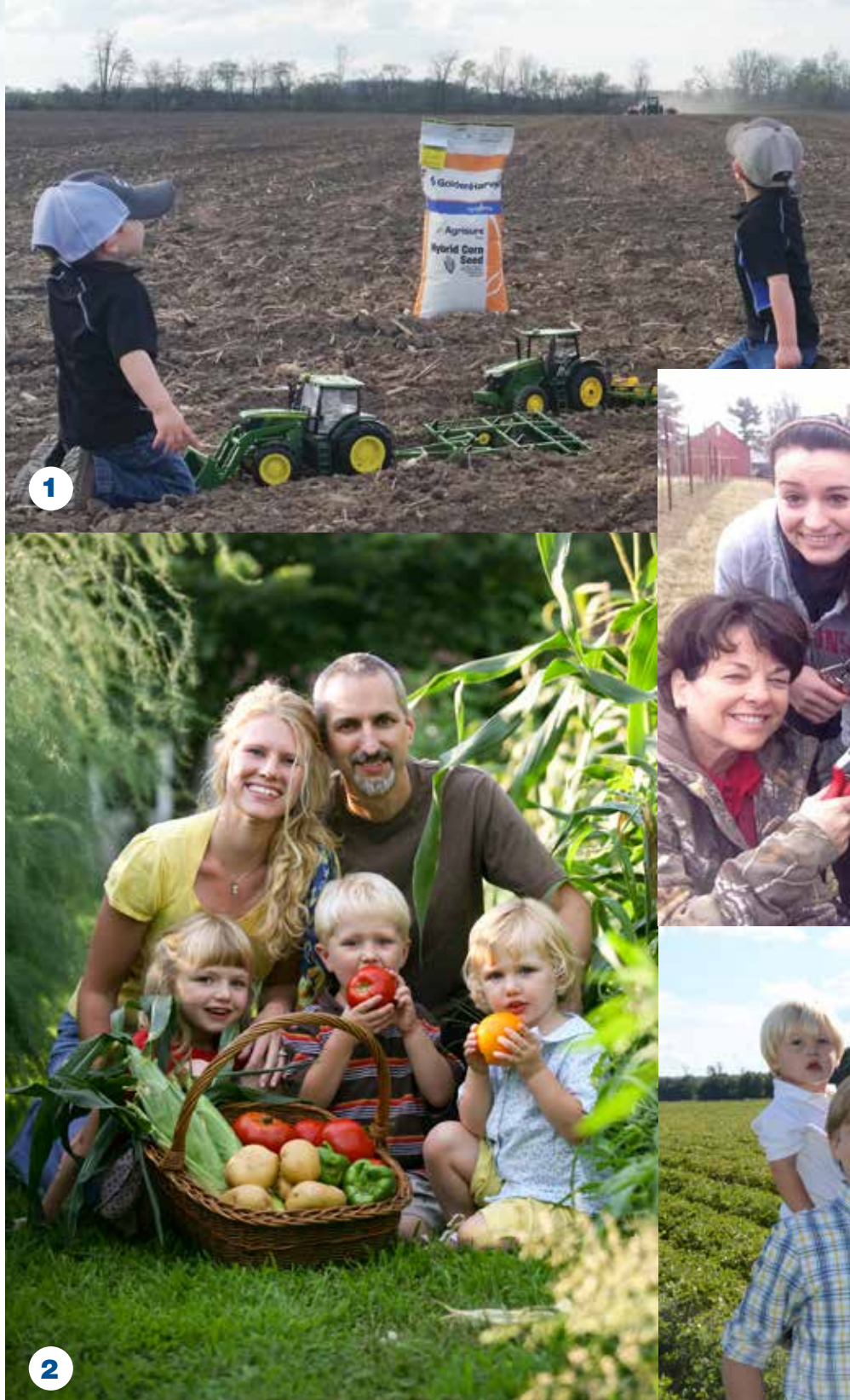
## CONTEST

### > Winner Selected in #RootedinAg Contest

Judges' scores and your online votes have determined the grand prizewinner of the 2016 #RootedinAg Contest. The road to victory began in April when *Thrive* asked its readers to describe how their agricultural roots help them, their families and their communities thrive. Three months later, a panel of judges named five finalists based on the quality of their entries, each of which consisted of a 200-word essay and supporting photograph or video. The finalists received mini touch-screen tablets and the chance to compete for the grand prize—a \$500 gift card and \$1,000 donation to his or her favorite local charity or civic organization.

To find out which one of the following finalists has reached the 2016 #RootedinAg winner's circle, go to [www.syngentathrive.com](http://www.syngentathrive.com):

1. **Cale Plowman** from Douds, Iowa
2. **Doug Rohrer** from Palmyra, Pennsylvania
3. **Michelle Miller** from Monona, Iowa
4. **Shelby Watson Hampton** from Brandywine, Maryland
5. **William Tabb** from Eupora, Mississippi





## NEW FACILITY

### > North America Seedcare Institute Celebrates its Grand Opening

Syngenta Seedcare recently celebrated the opening of the North America Seedcare Institute's new facility. The 38,000-square-foot expansion melds seed treatment equipment technology, customer training and technical support into one modern location in Stanton, Minnesota.

Guests attending the grand opening toured new laboratories, a state-of-the-art treating equipment performance area, training areas, a planter testing lab and more. Now almost five times larger than the original space, the facility will help Syngenta Seedcare better accommodate the educational and training needs of its customers and help develop its extensive pipeline.

"The completion of the North America Seedcare Institute further cements the commitment we have made to give our customers the most innovative products, application support and in-season service they need to properly produce high-quality treated seed," says Ravi Ramachandran, Ph.D., head of the Seedcare Institute in Stanton. "The new facility enhances our ability to give them the best possible customer experience in the industry."

Syngenta currently operates a dozen Seedcare Institutes throughout the world, with locations in North America, South America, Europe, Africa and Asia. To learn more, visit [www.syngentaseedcare.com](http://www.syngentaseedcare.com).



## Syngenta Honored for Creating Workplace Diversity

Women in Agribusiness (WIA) has recognized Syngenta as its company of the year for workplace diversity. WIA also has named Stefanie Jill Fogel, partner at DLA Piper, as its leader of the year, and Laura Daniels, founder of Dairy Girl Network, as its innovator of the year. Each honoree has received the WIA Demeter Award, which acknowledges the outstanding achievements of individuals and businesses that are creating positive results in retaining, recruiting and promoting women in the ag sector.



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# Agribusiness 101

High school teachers gain real-world experience they can share in the classroom through the Syngenta Summer Fellowship Program.

**J**ust as plant stems provide a framework for leaves, flowers and seeds, STEM education (science, technology, engineering and math) provides a framework for teaching technical concepts and preparing students for future careers. Syngenta, as part of its support of STEM education, established the Summer Fellowship Program in 2012. This program gives high school teachers an opportunity to spend a week at Syngenta facilities to learn more about agriculture and biotechnology.

The Summer Fellows begin their week by working in laboratories alongside Syngenta researchers in Research Triangle Park, North Carolina. Then the teachers travel to Minnetonka, Minnesota, to see seed products in field trials. Their last visit is to Washington, D.C., where they gain insights into the regulatory process. These locations give participants a well-rounded view of agriculture they can share with their students.

Here's how three Summer Fellowship Program alumni are bringing what they learned from Syngenta to their classrooms:


> **Heather McPherson**, who teaches biology and other sciences at West Columbus High School in Cerro Gordo, North Carolina, says, "Getting to see the whole process from the initial idea to the final product was beneficial."

Following her experience as a Summer Fellow, McPherson devised a lesson plan that required students to find possible solutions to a crop production problem. They created a theoretical genetically modified product containing a trait to help their crop survive and produce higher yields. Then the students put together a marketing plan for their new product. McPherson also tasked them with analyzing data and addressing the problem of feeding the world's growing population with limited land available for food production. "They saw that this is a real issue needing solutions," McPherson says.

> **Mariel Sellers**, who teaches at East Columbus High School in Lake Waccamaw, North Carolina, says that working alongside Syngenta scientists helped her better understand "the huge role that biotechnology plays in agriculture and medicine."

The fellowship program opened her eyes to every step involved in bringing a biotech product to market. While most of her students have strong connections to agriculture, many don't know about the important role of biotechnology and agribusiness in the world, she says.

> **Christi Rogerson**, who teaches at the Northeast Regional School of Biotechnology and Agriscience in Jamesville, North Carolina, was surprised to learn how many agriculture-related careers there are within Syngenta itself—from on-site nurses to publicists to lawyers and more. She's now sharing these insights with her students.

"Our industry is steeped in science and technology," says Lisa Zannoni, global head of regulatory and stewardship for seeds at Syngenta. She is also the driving force behind the company's efforts to support STEM education. "Syngenta is proud to support our Summer Fellows, who are teaching the next generation about the boundless opportunities available in ag."  STORY BY LYNN GROOMS



(Left) The Summer Fellows undertake a protein analysis with Syngenta Scientist Michelle Yarnall (far left, in blue lab coat) at a Syngenta lab in Research Triangle Park, North Carolina. Participants included (left to right) Terry Howerton, Connie Smith, Rebecca Stanley and Claire McLaughlin.

High school teacher Mariel Sellers participates in a Summer Fellowship Program discussion at Syngenta in Research Triangle Park, North Carolina.





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