

NEWS

February 2022 / Volume 45 Number 2

for the commercial vegetable, potato and berry grower



PVGA Board of Directors (front row left to right) Second Vice President Tina Forry, First Vice President Peter Flynn, President Rita Resick, Secretary-Treasurer Bill Reynolds, Past President Brian Campbell, Executive Director Bill Troxell, (second row) Art King, Amy Metrick, Rob Shenot, Jeff Stoltzfus, Joel Weaver, Boots Hetherington, (back row) Mark Troyer, Jon Strite, Alan Kemmerer, Mike Orzolek and Chris Harner. Not shown Chris Powell and John Shenk.

Resick Elected PVGA President

Rita Resick was elected PVGA President by the Board of Directors on February 2 following the Annual Meeting – the first woman to be elected to that position. Second Vice President Peter Flynn replaces Resick as First Vice President and Tina Forry was elected the new Second Vice President. Retiring President Brian Campbell assumed the office of Past President and as such will remain on the Executive Committee with the other officers and also chair the Leadership and Recognition Committee. Bill Reynolds was re-elected as Secretary-Treasurer. The officers are elected to one-year terms by the Board of Directors. The President and Vice Presidents traditionally are elected to their positions for two one-year terms before moving up to the next highest office so that the person elected as Second Vice President begins a eight-year cycle of serving in the four executive offices.

Resick is one of the four owners of 560-acre Laurel Vista Farms in Somerset County. Laurel Vista grows potatoes, green beans, sweet onions, and summer vegetables for sale to the fresh market through Pittsburgh region grocery stores and wholesale outlets under the label “Ken and Rick’s Wholesome Vegetables,” as well as grains and hay. Rita also developed a line of shelf stable jarred products made from Laurel Vista vegetables, which are

available in stores, specialty shops, local community events, and online. In her past career, Rita was President of Farr Communications, Inc., owner and operator of an AM/FM radio station in Charleroi PA. Prior to that, she was the Chief Financial Officer of Medrad, Inc., a medical device manufacturer headquartered in Warrendale PA, now a part of Bayer HealthCare. In addition to her work at Laurel Vista Farms, Rita provides professional consulting services for sustainable agricultural initiatives in Southwestern PA. She currently serves on the Board of Food 21 in Pittsburgh. She is a past director of the Foundation for California University of Pennsylvania, Pennsylvania Association for Sustainable Agriculture, Mon Valley United Way, and Society for Contemporary Craft. Rita has served on the PVGA Capacity Development/Strategic Planning Committee since 2016 and on the Board of Directors since 2017. She and her husband Rick Stafford divide their time between their farm home in Somerset and their city home in Pittsburgh.

At the Annual Meeting, former Past President Jon Strite announced that he, Rob Shenot, Bill Reynolds Tina Forry and Alan Kemmerer had been re-elected to three-year terms on the Board of Directors by the members of the Association in the mail-in balloting.

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NEWS



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Vegetable Growers
Association*

*An association of
commercial vegetable,
potato and berry growers.*

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Atglen

Jonathan Strite '25
Harrisburg

Mark Troyer '24
Waterford

Joel Weaver '23
Windber

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William Troxell
Richfield

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After the Annual Meeting, the Board elected Boots Hetherington to a three-year term on the Board. Following are brief biographies of the newly re-elected Directors:

Tina Forry along with her husband Greg and five children operate Risser Marvel Farm Market in Annville. They have operated the market the entire season since 2007 since the Marvel's retired but since 1991 they had operated it during the fall after the Marvel's closed. They have two high tunnels and grow about 25 acres of fresh market vegetables for their retail market that also features canned goods and local baked goods. In the spring they offer pick-your-own strawberries and in the fall a corn maze. They end the season with Christmas trees. Tina enjoys marketing and served as president of the Pennsylvania Retail Farm Market Association. She was elected to the PVGA Board in 2019.

Barron Hetherington and his wife Robin operate B & R Farms in northwestern Schuylkill County. Daughters Katie, Morgan, and Blair represent the seventh consecutive generation to live in the farm house on Strawberry Lane. Boots and Robin farm 400 acres grain, hay, and berries. Robin starts off the growing season with hanging baskets and bedding plants in her greenhouse range. The Hetheringtons are best known in their local area for their U-pick strawberry operation although have small plantings of asparagus, blueberries and raspberries. Boots served several years as a member of the Penn State Board of Trustees and made "Strawberry Surprises" all week at the PVGA Farm Show Food Booth for many years. Boots served on the PVGA Board for 24 years, including two years as President, before stepping down in 2011 to serve as a Special Advisor to Gov. Corbett for four years. At the Department of Agriculture he was in charge of the state grants to the local fairs across the state. He was re-elected to the PVGA Board in 2016. In April 2020 he was appointed as a Schuylkill County Commissioner.

Alan Kemmerer for the past 30 years has owned and operated Kemmerer Farms in Columbia County. They grow fresh market vegetables on approximately 250 acres for wholesale markets as well as produce vegetable transplants for other growers in Pennsylvania and New Jersey. Their crop mix currently consists of broccoli, cauliflower, cucumbers, bell pepper, eggplant, and tomatoes. Prior to this Alan worked as a loan officer for Northeastern Farm Credit for three years after college. He currently serves on the state Labor & Safety Committee for Pennsylvania Farm Bureau, the PVGA Government Affairs Committee and, for the last five years, the PVGA Board of Directors.

William Reynolds and his wife Lois formerly ran a 106 acre produce and grain farm located in Franklin Co. They grew mainly pumpkins, gourds, and some watermelons. Most of the produce was sold retail at their farm market and fall festival, with some being sold wholesale. During the months of Sept. and Oct., they had a fall festival which has pick-your-own pumpkins, hayrides to the pumpkin patch, a large play area, a corn maze and grass maze. Through the week, they scheduled school tours with an educational talk about their farm and growing pumpkins, as well as beekeeping. They had also attended the Gettysburg Farmer's Market and Bill was past president of Gettysburg Farmer's Market as well as being a member of the PVGA board for six terms. He has served on the PVGA convention planning committee, has helped manage the Farm Show Food Booth for several years and is the current Secretary/Treasurer of the Association.

Robert Shenot is a sixth generation grower from Wexford, Allegheny Co. Rob, along with his wife Leah and his father run a 100+ acre fruit and vegetable farm consisting of 20 acres of orchard (apple and peach), and a wide variety of vegetable crops. The Shenots market their produce through their own retail market located on the farm which is situated in the northern suburbs of Pittsburgh. Rob graduated from Penn State in 2001 with a B.S. in Horticulture and now lives on the farm. Rob is a current Director who has served five terms on the Board of Directors, is a former President of the Association and helps manage the Farm Show Food Booth.

Jonathan Strite is a 1998 graduate of Middletown Area High School and 2001 graduate of Pennsylvania State University with degrees in horticulture and ag-business. Upon graduation from college he returned to his family's farm full time. Strites' Orchard was established in 1914 and currently consists of 300 acres split equally between fruits and vegetables. Their main focus is the fresh market with 95% of their produce being sold through their on-site farm market that has been in operation since the 1950's and which now includes a CSA. They also operate several greenhouses where they grow bedding plants as well as all of the vegetable transplants that they use throughout the year. They also have added a high tunnel for early season tomato production. Jon's primary role on the farm has been production. He has served four terms on the Board of Directors, is Past President of the Association and helps manage the Farm Show Food Booth.

The **Pennsylvania Vegetable Growers News** is the official monthly publication of the
Pennsylvania Vegetable Growers Association, Inc.,
815 Middle Road, Richfield, PA 17086-9205

Phone and fax: 717-694-3596 • Email: pvga@pvga.org • Website: www.pvga.org

Our Mission:

The Pennsylvania Vegetable Growers Association serves Pennsylvania's commercial vegetable, potato and berry growers through education, research, advocacy and promotion.

Our Vision:

The Pennsylvania Vegetable Growers Association will be the driving force in ensuring the future viability of the commercial vegetable, potato and berry industries in Pennsylvania.

Inquiries about membership, this publication or advertising rates should be directed to William Troxell, Executive Director, at the above address.

NEWS



Dave Miller (center) with his children and grandchildren and PVGA President Brian Campbell (left) and PA Secretary of Agriculture Russell Redding (right).

David Miller Receives 2022 PVGA Annual Award and Life Membership

Each year, the Association recognizes an individual who had demonstrated a noteworthy record of service and dedication to either the state's vegetable, potato or berry growers and/or the Association over their career. It is the Association's highest honor. The year's award winner is David Miller of Miller Plant Farm in York. The award was presented by PVGA President Brian Campbell on February 1 at the Fruit and Vegetable Growers Banquet at the Mid-Atlantic Fruit and Vegetable Convention at the Hershey Lodge in Hershey.

Dave was born and raised on his family's farm and began working full-time in 1972, right after he graduated from Dallastown High School. As a 4th generation farmer, he oversees the planning, scheduling and growing of many of the farm's produce crops. He's been told he grows the sweetest corn you'll ever taste!

In 1974, Dave married his high school sweetheart and they started their own family right across the road from his childhood home. Together they raised three amazing kids: two of whom are working on the farm, and the other is an RN/nurse manager for Wellspan York Hospital. While the kids were young, they spent time at the beach in the summer and in Florida over the winter. Sadly, he lost his wife Diane to cancer in the summer of 2018. Since then, he and his kids, and some of her closest friends, have started a non-profit organization in her name. The organization raises and donates money for those struggling financially during their cancer treatments. To date, the organization has donated over \$100K.

Miller Plant Farm is a Pennsylvania Century Farm, founded in 1912. They grow 50 acres of vegetables and farm approximately 200 total acres. They raise about a dozen beef cattle annually. They recently built a beautiful new modern retail farm market with 2,500 sq. ft. of climate-controlled sales floor space and 11,500 sq. ft. of retail greenhouse space. The market and garden center are open March through December. The garden center offers annuals, perennials, houseplants, succulents, trees, shrubs and vegetable plants. During the holiday season, they grow a stunning poinsettia crop.

The farm's homegrown produce is also available in the farm

market. They have been offering a CSA since 2012, and membership has grown to over 700 annually. It runs for 21 weeks from mid-June through October. Besides their retail farm market and CSA, they operate a stand at York's New Eastern Market where they sell their plants and produce from March to December. The farm also sells fresh produce wholesale to several local supermarkets.

Beside the farm's production for retail sales, they are perhaps best known in the grower community for growing around one million seedlings/transplants for vegetable growers annually in their 70,000 sq. ft. of production greenhouse space. Not only are they known for quality transplants, but also for Dave's free advice about the best varieties and production methods.

If all this is not enough to keep him busy, Dave recently completed 18 years of service on the PVGA Board of Directors that included two years as president. He has joined the elite group of past PVGA presidents who help manage the Association's Farm Show booth besides enlisting his farm's staff to help out each year as well. He has also served for over 20 years on the Board of the Pennsylvania Vegetable Marketing and Research Program Board, including a long tenure as Chairman of that Board. He continues to be a valuable leader on that Board. He is also an active member of his childhood church and many other organizations in his community.

These days, his free time is spent hunting on the family farm and out west. In 2019, Dave and his brother bought a vacation home in Florida, and you'll find him there fishing several times a year! However, his favorite past time is spending time with his five grandchildren. He makes it a point to get to as many of their sporting events as he can – he's an amazing Pappy!

It should be abundantly clear why Dave Miller deserves this year's PVGA Annual Award and Life Membership. In truth, he would have received this award several years ago, but he also serves on the PVGA Leadership and Recognition Committee that nominates the recipients of this award and has insisted that it would not be proper for him to receive it. He missed the committee meeting this year!

NEWS



John Esslinger (center) with PVGA President Brian Campbell (to his right) with his wife Eve (right) and son Daniel and daughter Mary (left)

John Esslinger Receives PVGA Life Membership

The Pennsylvania Vegetable Growers Association periodically likes to recognize individuals who have demonstrated a long-standing record of service and dedication to either the vegetable, potato and/or berry growers of Pennsylvania or the Association with a Life Membership. The Board of Directors voted to grant this honor to John Esslinger in recognition of his 40 years of commitment to growers and the agricultural community. Brian Campbell, PVGA President, presented the Life Membership to Esslinger February 1 at the Fruit and Vegetable Growers Banquet at the 2022 Mid-Atlantic Fruit and Vegetable Convention at the Hershey Lodge in Hershey.

John has been a trusted resource for fruit and vegetable growers in the Northeast and Central Pennsylvania regions. Through the years, John has worked with many farmers in the agriculture communities of Pennsylvania. He was enthusiastic about his work, promoting the newest research and always looking for ways to be more effective. Along the way, he has gained friends, earned respect, and encountered a variety of unique pests such as jumping worms. John is known for turning any conversation into a lecture on composting or fertilizing.

John's interest started as a teenager working as a field laborer for a vegetable farm in southern New Jersey. His passion grew through his engagement with farmers and in higher education. He completed his first degree at Lubbock Christian University in Texas. He loved Texas so much that he moved to Pennsylvania to work at the Columbia County Crop Improvement Association in 1982. Dedicated to agriculture in all aspects of life, he married

a farmer's daughter and settled in the great town of Bloomsburg, Pennsylvania, where they still live. He strived to make his three children as enthusiastic about pulling weeds as he is, but he was unsuccessful.

John worked at Columbia County Crop Improvement Association until 1987, when he started at Furmano Foods as a field representative. He worked at Furmano Foods until March of 1995, when he began his role as an educator for Penn State Extension. He later completed his Masters in Agriculture through Penn State University. John promoted optimal growth and success for his farmers, providing support when new diseases or pests arose. John is known for his knowledge and accessibility, and his passion for agriculture showed through his time and dedication to his farmers, including working closely with the plain sect growers in his area of the state.

In addition, he served for several years on the Board of Directors of the Association and has been a regular volunteer at the Farm Show booth and formerly at the Ag Progress Days booth. He has been involved in helping to plan to the program here at the Mid-Atlantic Convention for many years and serves on the PVGA Administrative Committee. He was also active in the County Agricultural Agents Association.

John is nearly a year into retirement and has yet to slow down. He spends his time reading seed magazines, tending his garden, and playing "Manny" for his two granddaughters, who can anticipate learning a lot about tomato varieties, pests, and blight in the future.



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Jennifer Glenister Receives PVGA Young Grower Award



The Pennsylvania Vegetable Growers Association is pleased to award its 2022 Young Grower Award to Jennifer Glenister. The Young Grower Award is given to recognize PVGA members who are 35 years old or younger, who have been successfully growing vegetables, potatoes or small fruit for less than five years and who have contributed to advancing or promoting the Pennsylvania vegetable, potato or berry industries. The prize is free registration for the Mid-Atlantic Fruit and Vegetable Convention plus lodging at the Hershey Lodge.

Born in 1987, Jenni grew up on a grain/livestock family farm in central New York State. Her father, Rick Glenister, operates that farm while her mother, Carol Glenister, is owner/ founder of IPM Labs, a well known supplier of beneficial insects to growers. A bright, successful student, Jenni graduated from University of Vermont in 2009, and before graduation, applied to be an apprentice at New Morning Farm, owned by James Crawford, in Hustontown. She arrived straight from graduation and immediately jumped into working and learning. She was obviously astute, curious and highly energetic.

Over the next three years, Jenni held many different jobs on the farm. Already a skilled tractor and equipment operator, she became their pest control specialist early on, soon developing good expertise and success in the challenging methods of USDA certified-organic production.

Jenni also eagerly focused on other aspects of their diversified, direct-marketing operation, which consists of approximately thirty acres of forty or so different, certified-organic vegetable and berry crops. She quickly became known to the 12-person crew as a professional grower-leader and manager.

In 2012 Jim and his wife, Emeline, began considering retirement and the future of their farm, which they had established in 1972. Jenni expressed interest then in the idea of eventually becoming the next owner.

Over the next few years, Jenni methodically prepared herself for ownership. She continued to rotate through all the many specialized jobs, such as crew leading and recruiting, record keeping, greenhouse, fertility, tillage, weed control, and especially management of marketing. New Morning Farm attends farmers markets three days per week in the Washington, DC area.

In her tenth year Jenni became farm manager, while Jim moved more and more towards retirement. Jenni began seeking financing for the purchase, working with a bank and FSA. She did succeed in that, even though she had only the savings from her work at the farm as a down payment.

In June, 2021 Jenni became the owner of New Morning Farm with some significant debt which she is well prepared to work down over future years. Production has improved steadily since Jenni started managing, and the best financial years of the farm's fifty-year history were 2020 and 2021.

Jenni has, with steady effort and very hard work over twelve years, made herself into a successful professional, organic vegetable grower, one of the best in Pennsylvania. She has been active in both PVGA and PASA, by presenting numerous conference workshops, as well as serving at the Farm Show booth many years, and on the PVGA Convention Program Planning committee. PVGA is pleased to able to honor such an accomplished young grower with its 2022 Young Grower Award.

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NEWS

Three Receive PVGA Scholarships

The Pennsylvania Vegetable Growers Association is pleased to be able to offer Rudolph Grob Memorial Scholarships each year to students pursuing higher education. For 2021 three scholarships were given as follows:



Clayton Harner

Penn State University, \$1,300

Clayton is the son of Chris Harner and Tarrah Geszvain of State College. He is a freshman at Penn State University majoring in Agricultural Science with the goal of understanding what is necessary to successfully run a business in the agricultural field and possibly have a role in cooperative extension.



Wyatt Kosa

University of Northwest Ohio, \$1,000

Wyatt is the son of Joel and Darla Kosa of Ulysses. He is a student at the University of Northwestern Ohio majoring in Agricultural Equipment Tech and Medium/Heavy Diesel Technologies. He is working towards obtaining two associate degrees with a goal of becoming an agricultural mechanical technician in his home area of northern Pennsylvania.



Reagan Kelley

Mansfield University, \$1,300

Reagan is the daughter of Curtis and Tresa Kelley of Canton. She is a freshman at Mansfield University majoring in Environmental Science with the goal of working at a conservation district office working with farmers on conservation issues. She works on the family's orchard where they grow apples, pumpkins, potatoes, tomatoes, raspberries, and blackberries. They sell additional produce and plants and flowers at their farm market. She also hopes to expand her herd of dairy goats.

The Association gives the annual scholarships in memory of Rudolph Grob of Millersville who served the Association for 50 years as a Director, 20 years as Secretary Treasurer and for over 20 years as manager of the Association's Farm Show Booth. Mr. Grob was a horticulture graduate of Penn State University who was employed for many years at Funks Farm Market in Millersville. The funds for the scholarships are generated by the interest earned by the Association's Keystone Fund, an endowment-type fund created by the voluntary extra dues paid the Keystone Members of the Association.

The purpose of the scholarship is to assist students in obtaining a baccalaureate or associate degree that will enable them to pursue a career in the vegetable, potato or berry production or related industries or businesses. Children or grandchildren of an Association member who has been a member in good standing for one or more years and who are pursuing a degree in an agriculture-related field may also be considered.

Preference will be given first to children or grandchildren of Association members who are pursuing career in the vegetable, potato or berry production or related industries or businesses. Second preference will be given to non-member students who are pursuing a career in the vegetable, potato or berry production or related industries or businesses. Last preference will be given to children or grandchildren of members who are pursuing a degree in an agriculture-related field but not necessarily in the vegetable, potato or berry industries.

Applicants must be currently enrolled or be planning to enroll in a two-year associate or four-year baccalaureate degree program at an accredited institution and be in good academic standing.

About \$4,000 in scholarships will be available in 2022. Funds that are not awarded in any year are held over to be added to the amount available in subsequent years. The committee may award scholarships of up to \$2,000. Recipients may apply for a renewal although preference will be given to other qualified students over previous recipients. It is not a need-based scholarship.

The following items must be included with a completed application form:

- A copy of the most recent academic transcript.
- Two letters of reference from someone outside of the immediate family.
- A typed essay (approximately 500 words) on one of the following topics:
 - Describe the biggest issue that has faced the Vegetable/Potato/Berry Industry in Pennsylvania in the last five years or that the Industry will face in the next five years and how you plan to deal with this issue in your future career, or
 - Describe your previous experiences with the Vegetable/Potato/Berry Industry and the role you hope to play in the Pennsylvania Vegetable/Potato/Berry Industry upon graduation.
 - Describe your previous experiences in agriculture and the role you hope to play in agriculture upon graduation.

Applications must be received or postmarked by April 30, 2022, and are available by contacting PVGA at 717-694-3596 or pvga@pvga.org. The application is also available on the website at <https://www.pvga.org/wp-content/uploads/2022/02/PVGA-Scholarship-Application.pdf>. The scholarship committee may request to interview the applicant in person or by telephone as well as contact college or school advisors and/or references. If you have a child or grandchild in college who would be eligible, encourage them to apply for the scholarships.

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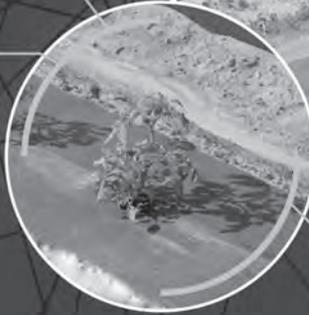
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NEWS

Members Adopt Policy Resolutions at Annual Meeting

Members approved a series of Policy Resolutions at the Association's Annual Meeting on February 2 at the Hershey Lodge during the Mid-Atlantic Fruit and Vegetable Convention. These Policy Resolutions determine the Association's official position on various current issues. The new Resolutions are as follows:

Federal Policy Resolutions

The Association is on record as:

- Opposing any further regulations of fertilizer for ag use.
- Supporting the appointment of Farm Service Agency State Committee members from nominations provided by state agricultural organizations with the terms staggered between presidential terms rather than a political patronage basis.
- Supporting federal legislation allowing vehicles with farm plate registrations to travel throughout the 48 contiguous states with no distance limitations.
- Supporting the exemption from regulation of privately owned bodies of water, used exclusively for farm use

State Policy Resolutions

The Association is on record as:

- Opposing the expansion of the closed dates of the Agricultural Deer Control Program (Red Tag).
- Supporting a requirement for certified nutrient management planners to receive direct notification of changes to Nutrient Management Program regulatory standards before they legally go into effect.
- Supporting requirements for federal agencies to coordinate with state agencies in the administration of data collection and reporting activities to ensure agricultural conservation practices are duly captured and credited in the Chesapeake Bay Model.
- Opposing requirements for the certification of persons authorized to apply commercial manufactured fertilizers and agricultural minerals for agricultural purposes.
- Supporting allowing parcels of less than 10 acres that are adjacent to preserved farmland be eligible for farmland preservation.
- Supporting the reduction of the minimum subdivision size for preserved farmland to 25 acres.
- Supporting a requirement that all expenses and legal fees incurred by an agricultural entity who brings a successful suit against a government entity for failure to comply with Right to Farm Law be reimbursed to the agricultural entity.
- Supporting a requirement that purchasers of real estate located next to active farms and Agricultural Security Areas be notified by the seller of protections for such farms.
- Supporting provisions that farmers be permitted to tow registration-exempt implements, trailers, and semitrailers with a personal (non-farm) truck.
- Supporting the exemption of farmers from IFTA and UCR regulations if they travel interstate less than 5,000 miles per year from the Pennsylvania borders.
- Supporting regulations that require PennDOT to return retention ponds built to slow water runoff along state roads to their originally engineered depths by removing sediment buildup.
- Supporting the exemption from stormwater management fees for preserved farms and farms with implemented conservation plans.

Other Business

Secretary-Treasurer Bill Reynolds reported that the General Fund income for 2021 was \$166,578 while expenses were \$227,330 for a deficit of \$60,752 leaving a year-end balance value of \$211,523. The 2022 budget adopted by the Directors anticipates income of \$386,900 (of which \$250,317 has already been received from Farm Show sales, membership dues and Convention registration) and expenses of \$432,900 for a deficit

of \$46,000. The Farm Show food booth was quite successful despite the light attendance at the event with sales coming in at \$172,700 or about 75% of the 2020 sales. Preliminary estimates of the profit were reported to be about \$35,000. Reynolds reported the year-end balance value in the Keystone Fund was \$230,271 although that value has dropped to \$222,381 with recent stock market declines. The Board recently designated all the interest from Keystone Fund (about \$4,000 annually) to be used for scholarships.

Leadership and Recognition Committee Chair Jon Strite announced that the Committee had selected Jennifer Glenister as the winner of the 2022 PVGA Young Grower Award and that the Scholarship Committee had given scholarships to Clayton Harner, Wyatt Kosa and Reagan Kelley.

Members received reports from the various committees on the activities of the Association and plans for 2022. The Berry Committee announced that the Board had voted to fund two berry research projects: Identifying Sources and Virulence of Anthracnose Strains Found on Weeds in Strawberry Fields by Leah Fronk, Sara May, Kathleen Demchak, Richard Marini and Mengjun Hu for \$4,739 and Comparing Media and Fertilizer Types for Strawberry Fruit and Plug Plant Production by Kathleen Demchak, Timothy Elkner and Krystal Snyder for \$5,987.

The meeting ended with a moment of silence to remember those friends and members of the Association who had passed away since the last annual meeting: Peter Ferretti, Richard Johnson, Boyd Mertz, Mildred Schantz, Joseph Shea, Mary Lou She-not, Jerry Shimmel, Jean Soergel, and David Sokoloski.

PVGA Farm Show Booth Quite Successful

Like many other events this year, the 2022 Farm Show was unlike any other Farm Show. Attendance as measured by parking revenue was reported to be down by about 40% - confirmed by the sparse crowds observed inside the complex as compared to normal years. However, PVGA food booth sales were about 75% of its record sales in 2020. The fact that PVGA increased the prices of most of its menu items in anticipation of increased costs helped boost the dollar sales figure. The number of servings of the different menu items varied as a percentage of 2020 sales. The number of blooming onions sold was 75% of 2020 number, broccoli cheese soup servings were 73% and corn nuggets servings were 65%. On the other hand, batter-dipped vegetables were only 54% and funnel cakes were only 48% of 2020 numbers. Strawberry Surprises, raspberry lemonade and infused water serving numbers were 49%, 61% and 38% of the 2020 numbers respectively.

The batter-dipped vegetables were by far the most popular menu item, with over 4,964 servings sold followed by the blooming onions at 3,761, Strawberry Surprises at 3,244, funnel cakes at 2,219 and raspberry lemonade at 2,188. This year's new menu item, corn dogs - hot dogs on a stick dipped in batter containing sweet corn - went over big with 1,716 being sold. Other menu item servings were: fried pickles - 1,493; infused water - 1,363; chicken corn soup - 1,167; corn nuggets - 921; broccoli cheese soup - 634, berry-battered Oreos - 496 and dill pickles - 426.

The total net profit for this year's booth was over \$31,300, about 43% of the 2020 profit. The Association did make some significant equipment investments this year, purchasing two additional slush machines and racks for the infused water cups at a cost of \$5,800. By purchasing the additional slush machines, the Association hopes to eliminate annual rental and electric fees

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NEWS

2022 Mid-Atlantic Convention Successfully Returns to In-Person



Dr. David Kohl from Virginia Tech makes a point during this Keynote presentation.

After last year's virtual Mid-Atlantic Fruit and Vegetable Convention, both growers and exhibitors as well as the convention organizers were eagerly looking forward to this year's return to an in-person format. While the Pennsylvania Farm Show reported an attendance drop of 40 to 50%, the Mid-Atlantic Convention attendance was about 75 to 80% of the 2020 attendance by preliminary counts. The pre-convention Farm Market Bus Tour sold out with two busloads of farm marketers – about 90 persons which is the usual number on the bus tour – visiting three markets and an equipment manufacturer.

Keynote speaker, Dr. David Kohl, discussed “Roller Coaster Economics and the Management Mindset” during his presentation on the opening day attended by about 400 Convention attendees. He pointed out that the economic environment is surrounded by uncertainty, but also opportunities for those with a high business IQ and financial management mindset. He reviewed macroeco-

nomics ranging from global economic trends to inflation, interest rates, supply chain disruptions, and consumer trends that will impact the financial bottom line. He then reviewed time-tested business and financial practices that will place the odds of success in a grower's favor. He gave practical tips, techniques, and tools that can be used in a grower's business, family and personal life based upon his decades of engagement with agricultural businesses, research and even business ownership.

While the Convention Joint Committee was looking forward to the return to in-person, it was not without some adjustments and accommodations. As the number of Covid cases peaked in January, some speakers were uncomfortable due to various personal circumstances with presenting in-person and opted to make their presentations virtually to the audience in attendance at the Hershey Lodge. And at the last minute, a couple speakers were prevented from traveling by the weather. The Convention Audio-Visual team headed by Daniel Weber, Tom Butzler, Rob Pollock and Don Seifert, all with Penn State Extension, scrambled to provide the necessary Zoom links to allow over 40 virtual presentations. The six to nine concurrent sessions over the three-day convention included over 250 presentations, so most were still presented in-person by speakers from various locations. The virtual technology successfully allowed the remote speakers to show and explain their slides essentially the same as if they were present in-person. They were even able to answer questions from the audience afterward.

The Annual Fruit and Vegetable Growers Banquet on the evening of the first day featured awards from the various sponsoring groups. The second day of the Convention concluded with a reception for apple growers at 5:00 p.m. following the PVGA-sponsored Old-Fashioned Ice Cream Social at 7:00 p.m. – generous bowls of vanilla ice cream with toppings of your choice and potato chips donated by Herr's Snacks and Ira A. Middlewarth and Son.

While attendance was lighter than usual, in general the 2022 Mid-Atlantic Convention was a start toward a return to “normal” – a new “normal” that will likely continue to include some virtual presentations. Plans for the 2023 Convention will begin in March so send us your ideas and suggestions for topics and speakers.

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NEWS

In Memory**Dr. Peter Ferretti, 79**

PVGA Life Member and former Penn State Extension Vegetable Specialist Dr. Peter Ferretti passed away December 24 at his home. For 37 years Pete worked in the Penn State Horticulture Department helping vegetable and small fruit growers across the state. He had a wealth of knowledge about vegetable varieties and conducted numerous variety trials. He was actively involved with PVGA in planning the Pennsylvania Vegetable Conference and later the combined fruit and vegetable meetings that have become the Mid-Atlantic Fruit and Vegetable Convention. He worked with the Association to plan many field days and farm field tours over the year. He also helped each year at the PVGA food booth at Ag Progress Days.

Peter was born on December 31, 1941, and raised in Nazareth, Pennsylvania, a son of the late Astolfo and Leah Ferretti. On May 20, 1972, he married Sandra K. Martin, who survives him at their home in Boalsburg, PA.

In addition to his wife, he is survived by three daughters, Christine and her husband Michael Spinks, Susan and her husband Nathan Gage, and Reenie and her husband Chris Snyder; three siblings; and four grandchildren.

Peter graduated from Nazareth Area High School, and he received his B.S. in Plant Breeding/Horticulture at Penn State University in 1962. He went on to receive his M.S. degree at the University of Connecticut in Cytology Cytogenetics/Botany in 1966 and his Ph.D. degree in Plant Nutrition/Plant Pathology in Horticulture at Penn State in 1969. He worked for Penn State University as professor of Cooperative Extension for 37 years until he retired in 2006.

He was involved in international issues by traveling and consulting in Swaziland, Jamaica, and Ukraine. He provided production, handling, storage and marketing ideas to farmers and taught farmers about pollination and proper harvesting techniques.

He also provided many years of volunteer work with the Lions Club, Our Lady of Victory Church, Columbus Chapel and Boal Mansion.

A very special "Thank you" to the Mount Nittany Health Center for Wound Care team for the excellent care and support provided to both Peter and Sandi over the last few years.

There will be a Celebration of Life scheduled for a future date.

Memorial donations can be made in his honor to Columbus Chapel and Boal Mansion, P.O. Box 116, Boalsburg, PA 16827-0116.

Adapted from the Centre Daily Times, December 26, 2021.

**David R. Sokoloski, 86**

David Richard Sokoloski, 86, of Beaver Falls went to see the Lord on Thursday, December 30, 2021 at Brighton Rehab & Wellness Center following an illness. Dave spent his working career as a highly skilled worker at the local steel mills but his passion was growing vegetables on the side which he sold at local farmer's markets. He and his long-time friend Pat Schry were faithful volunteers at the PVGA food booth for many years, usually staying

overnight to help over three or four days. Dave had an knack for seeing what needed to be done and going ahead to do it. He regularly attended the annual Convention and PVGA field days and tours, including the tours to Texas and California in the 1980's, always looking to learn something new.

Born May 31, 1935 in Ellwood City, he was the son of the late Albert "Red" and Mary Zak Sokoloski. David was a graduate of Lincoln High School. He served in the Army and was stationed in Panama. After his service in the Army, David worked at the Babcock and Wilcox steel mill until his retirement. He was a current member of St. Monica Church in Chippewa. David was a member of Beaver County Fruit and Vegetable Growers. He worked at the Pennsylvania Farm Show in Harrisburg for many years. David attended farmers markets in Beaver, Ambridge, and Beaver Falls. He loved farming and was famous for his potatoes, asparagus, and green onions. He was also known for helping friends and neighbors in need.

Survivors include four children, David, Lynn, Donald, and Doug; a sister and a brother as well as his long time and caring friend Pat Schry; many grandchildren, and great grandchildren. Thanks to his special nephew Joey Sokoloski who was always there for his uncle.

In lieu of flowers the family would like memorial contributions to be sent to the Pennsylvania Vegetable Growers or the organization of your choice.

Adapted from the Beaver County Times, January 1, 2022.

PVGA Farm Show Booth Quite Successful

continued from page 10

of over \$600 for a pre-freezing unit for the strawberry slush drinks that was problematic. This year the volume of Strawberry Surprises was low enough that the new slush machine was not used at the main Expo Hall Food Court booth although the other new unit was used to sell Strawberry Surprises at the auxiliary combined-commodity-group booth in the old Main Hall of the Farm Show Complex.

Original plans for 2022 included offering veggie burgers as another new menu item. However, given the uncertainty surrounding the 2022 Farm Show due to the pandemic, it was decided to delay the introduction of this new item until 2023. It was also decided to drop vegetable soup (the Association's first menu item when the Farm Show booth was started) and the broccoli-cauliflower salad from the menu for 2022 just to simply operations a bit.

Like every other year, the success of the Farm Show food booth depends on the volunteer help of hundreds of PVGA members and their family members, employees and friends. Given the pandemic situation we faced this year, we are especially grateful to those who were willing to come and fully recognize that given personal and family health considerations, some regular volunteers could not help this year.

The Association again worked with the Michaels' Family Concessions to operate the booth year. The family suffered the deaths of two family members in the past year that made it a particularly difficult year for them.

We are looking forward to a better year at the Farm Show in 2023. The profits from the Farm Show booth allow PVGA to continue to support vegetable and small fruit research each year. Plan now to volunteer in 2023.

NEWS

In Memory

Richard H. Johnson, 85



Richard Harry Johnson, age 85, of 64 Sunset Drive, Ridgway passed away on October 20, 2021 at Ridgmont Assisted Living following a brief illness. Rich was a long-time PVGA member and also a long-time Farm Show booth volunteer who could be counted on drive in from Ridgway to Harrisburg - usually preferring to help peel onions or cut vegetables.

On May 4, 1957 in the Evangelical Covenant Church he married Evelyn Egger who survives. Richard resided in Ridgway all of his life. He owned and operated Johnson Poultry Farm starting in 1956, later purchasing Casper Streich Poultry and building the farm up to 80 thousand laying hens/70 thousand eggs a day using the latest innovations at the time and delivering to a 200 mile radius.

After retiring from the farm in 1996, he then became an excellent cook for the County of Elk feeding the prisoners for 15 years. He also enjoyed running Rich's Farm Market, cooking for his church, friends and family, and having friends in for hunting season. Earlier in his life his great enjoyment was snowmobiling and fishing trips to Canada.

He was a member of the Trinity United Methodist Church, member and president of the Oakmont Cemetery board most of his life, Lions Club, Vegetable Growers Association, Elk County Farm Bureau and enjoyed going to camp and the Halton Church.

He is survived by his wife Evelyn M. Johnson of Ridgway; 3 children: Lester R. Johnson (Sue), Karen J. (Paul) Stilwell, and Eric J. Johnson all of Ridgway; 5 grandchildren, a sister and a brother. In addition to his parents he was preceded in death by a daughter Dorothy A. "Dottie" Johnson.

Adapted from the Ridgway Record, October 21 and 22, 2021.

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NEWS

In Memory

David N. Geise, 75



David Norman Geise, 75, of Milton, Pa., went home and joined his Lord and Savior Jesus Christ in Heaven on Feb. 3, 2022, in the presence of loved ones at the family farm. He served as a PVGA Director and member of the former Pennsylvania Vegetable Research Program Board.

Dave's adventure in life began on Jan. 5, 1947, in Northumberland, Pa., the son of the late Norman and Elnora (Furman) Geise. His childhood home was next door to his grandparent's

farm, the birthplace of Furmano Foods. In his 50 years of service at Furmano Foods, he focused on keeping the family unified in their vision to perpetuate the business to future generations and leading a culture reflective of Biblical principles. As the President and CEO of Furmano's for over 35 years, Dave led with servant leadership and a caring heart to help the members of the team. He navigated challenges with stick-to-it-iveness and optimism derived from his Faith that God would provide. He was certainly one to roll up his sleeves vs. throw up his hands. His leadership set the foundation for generations to come and facilitated the blessing of reaching our 100th Anniversary in 2021, which we celebrated with more than 350 members of the Furmano team and with almost 200 decedents of J.W. and Emma Furman this past summer at Barn Appétit on Dave's home farm.

Dave was a humble person, never one to do something for recognition, rather a desire to help. He served on the boards of numerous organizations - Furmano Foods, Child Evangelism Fellowship (CEF), Meadowbrook Christian School, the HandUp Foundation, Kreamer Feed, Consumer Brands Association, Penn State Ag Advisory Board, the local Boy Scouts of America and several others over the years.

With all Dave was involved in, he kept God first, family second and then everything else. He was blessed to start his own family when he married his love, Joyce (Jody) Moyer in 1968. They had three sons — Matt, Chad and Todd — and shared 53 wonderful years of life together. In addition to the numerous domestic trips he was a part of, he served on over 20 international mission trips to Guatemala, Haiti, Panama, Nicaragua and Swaziland. He and Jody sponsored several children they met during their mission trips to Guatemala. He was instrumental in the vision to create Furman family mission trips to connect family members from different generations and branches of the family tree. Over 100 family members have served on mission trips domestically and internationally as a result of that vision.

He was a positive person, who looked for the good in people and situations. He started each day singing "This is the day that the Lord has made." A close second on his praise list was the doxology, which starts with "Praise God from whom all blessings flow." Those who knew him, would say that he truly did praise God for his blessings, never complaining about his cancer diagnosis.

His joys in life were going on walks with Jody around farm, allowing them time to pray, worship and share together; traveling with Jody and taking the family on annual summer vacations to explore the United States; wood working, through which he gifted each of his three sons with priceless creations that resemble both craftsmanship and love; gardening with Emma and London; flying

powered parachutes with Todd and the Wing Nuts flying group; restoring his '39 Ford pickup truck to be able to take his grandchildren in parades; landscaping around the family farm; cheering for his alma mater at Penn State football games; hunting; fishing; water and snow skiing; sampling family members' dessert while they weren't looking; and being outside on his tractor.

Dave was a graduate of Northumberland High School in 1964 and earned his Bachelor's Degree in Horticulture from Penn State in 1968. His continued involvement and support of Penn State manifested in the receipt of the Alumni Fellow Award and Outstanding Alumni Award, the highest honor for the College of Agricultural Sciences.

In addition to Jody, his love of 53 years, he is survived by three sons: Matthew D. and Jenn Geise; Chad M. and Tabitha Geise and Todd Geise; two grandchildren, one sister and one brother.

A celebration of Dave's life will be held on Sunday, March 27, at Christ Wesleyan Church, 363 Stamm Rd, Milton at 3 p.m.

In lieu of flowers, Dave desired for donations to support the following Christ-serving organizations; CEF Good News Club, 53 Blue Hill Road, Northumberland (<https://gncnc.org/donate>); Central Pennsylvania Youth Ministries P.O. Box 189, 117 W. 11th Avenue, Shamokin Dam, PA 17876 (<https://www.centralpayouthministries.com/make-a-donation-payment>); Christ Wesleyan Church Missions Fund (<https://cwclife.churchcenter.com/giving>).

Adapted from The Daily Item, February 5, 2022.

W. Atlee Burpee, IV, 65

W. Atlee Burpee IV, sales manger for Sakata Seeds and long-time PVGA member, passed away unexpectedly on February 21, 2022, at the age of 65.

Atlee was born January 9, 1957, in Abington, PA to the late Charlotte (Bates) Burpee and the late W. "Bill" Atlee Burpee III. Atlee was the great grandson of the founder of the vegetable and flower seed company. He graduated from the University of California Davis in 1979 with a degree in Agricultural Economics and a specialization in horticulture.

After college Atlee returned to Pennsylvania and worked with the Burpee company, which was no longer family owned, eventually specializing in vegetable seeds. After his time at the Burpee company, he worked for two other seed companies before settling on Sakata Seed America, Inc. where he has been for the last 25 years, serving as the North America Sales Manager.

Atlee was a life member of the Plymouth Fire Company and active volunteer firefighter for many years. His hobbies evolved from rock climbing to cycling. Over the last eight years Atlee's sporting passion switched to ultra-marathons of 50 and 100 miles. His capstone feat was completing 242 miles in a six-day race.

Atlee was an active, committed member of Calvary Episcopal Church. He is survived by his wife of 35 years Deborah (Stets-er) Burpee, his son Lee Burpee, daughter Lisa (& Scott) Rafter, daughter Michelle Burpee (& Vince Orsini); his five sisters and his four grandchildren.

Memorial contributions may be made in Atlee's name to either: Plymouth Fire Company, 1323 Colwell Lane, Conshohocken, PA 19428 OR Montgomery County SPCA, 19 East Ridge Pike, Conshohocken, PA 19428

Adapted from The Intelligencer, Langhorne, PA February 24, 2022.

What Have We Learned From Two Decades of Onion Cultivar Research at Penn State?

Jennie Diehl Mazzone and Beth Gugino

Onions provide diversified vegetable growers in Pennsylvania with a niche crop and unique marketing opportunities.



Onion cultivars *Expression* (L) and *Spanish Medallion* (R) consistently produced large bulbs with low pungency, high sugar, and low center rot disease incidence. Photo: Jennie Mazzone, Penn State

Pennsylvania Onion Production

Many Pennsylvania onions are marketed through the PA Simply Sweet Onion Program, the state's only trademarked crop, established in 2002 by the Pennsylvania Vegetable Growers Association (PVGA) in collaboration with Dr. Mike Orzolek [and Michael Kotz] at Penn State. There are also an increasing number of non-program onions being grown for direct retail markets, including roadside stands, farmer's markets, or CSAs.

Onions marketed in the PA Simply Sweet program are intermediate day, Spanish-type onions that meet the following criteria:

- A minimum bulb size of 2.5 inches in diameter
- High sugar (at least 6% soluble solids)

The PA Simply Sweet program has approved cultivars that meet these criteria, but the predominant cultivar grown is currently Candy. The onion transplants are primarily sourced from producers in Arizona or Texas or locally from growers who start their seeds in greenhouses in December–January. In recent years, cv. Candy has become increasingly difficult to source from transplant producers, so growers are starting to shift to growing the cv. *Expression* as an alternative.

Onion Cultivar Evaluations

Fortunately, Penn State researchers have spent two decades evaluating over 70 alternative yellow, sweet Spanish cultivars for the PA Simply Sweet program, thanks to the efforts of Dr. Mike Orzolek. Of these cultivars, *Expression*, *Exacta*, *Spanish Medallion*, and *Aruba* consistently produced high yields, high sugars, and low pungency comparable to *Candy* (Table 1). Tom Butzler, Penn State Extension, collaborated with Orzolek in 2018

Continued on page 16

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VEGETABLE PRODUCTION

What Have We Learned continued from page 15

and 2019 and then continued the evaluation in 2020 with Dr. Tim Elkner, Penn State Extension, at the Russell E. Larson Agricultural Research Center (Rock Springs) in Centre County and a commercial grower field in Lancaster County, PA. The ten cultivars with the highest yields from the Lancaster County location are presented in Table 2, many of which produced higher yields than Candy.

Table 1. The average marketable yield, bulb weight, pungency, and % sugar of the top five onion cultivars evaluated by Orzolek at the Horticulture Research Farm at Rock Springs over the past 15 years.

Cultivar	Total MKT Yield (T/A)	Avg.bulb (wt.- oz)	Pungency	% Sugar
Candy	21.1	15	3.3	7.4
Expression	23.9	14	3	5.9
Exacta	23.3	14.4	3.2	5.5
Spanish Medallion	24.5	15.9	2.7	6.1
Aruba	19.6	12.6	2.8	7.2

Table 2. The average marketable yield, % jumbo and colossal-sized bulbs, pungency, and % sugar of the top 10 onion cultivars evaluated by Butzler and Elkner in 2020 in a commercial grower's field in Lancaster Co. and Rock Springs in Centre Co., PA.

Cultivar	Yield (Lancaster only)* Total MKT Yield (T/A)	Size (Lancaster only)* % Jumbo and Colossal sized bulbs	Pungency Centre	Pungency Lancaster	%Sugar Centre	%Sugar Lancaster
Expression	18.7	83	2.3	4.1	7.6	7.5
Great Western	17.1	81	3.3	4	7.3	7.6
Almagro	16.9	77	5.5	4.7	9	7.7
Highlander	16.8	72	5.3	5	8.9	8.3
Spanish Medallion	15.5	74	3.3	5.4	8.2	7.6
Carzilla Sweet	14.1	70	3.2	1.9	6.2	7.5
Ridgeline	13.9	69	3.6	6.6	8.9	9.8
Candy	13.8	66	4.9	5.1	8.6	8.6
Outlander	13.6	68	3	4.1	9.1	8.5
Yukon	13.3	71	2.7	5.7	8.6	8.7

* Yield and % jumbo and colossal sized bulb data not presented for Centre County due to poor planting conditions that resulted in significant losses.



Figure 1. Characteristic bleaching of interior onion leaves and individual scale necrosis caused by center rot. Photo: Jennie Mazzone, Penn State

Cultivar Susceptibility to Center Rot Evaluations

Another area of interest was onion cultivar disease tolerance or resistance. Penn State researchers Jennie Mazzone and Dr. Beth Gugino evaluated 13 onion cultivars in 2015 and 2016 for center rot disease susceptibility and selected horticultural characteristics. Center rot, caused by the pathogens *Pantoea ananatis* and *P. agglomerans*, is considered a significant bacterial disease of onion in PA and other onion growing regions in the U.S. (Figure 1).

Since cv. Candy is very susceptible to center rot, Mazzone and Gugino's two-year study aimed to identify cultivars less susceptible to center rot while still meeting the criteria of the PA Simply Sweet program. At harvest, cvs. Blush, Red Sky, Dulce Reina, Expression, Crockett, Spanish Medallion, and Sedona had lower disease incidence than Candy (Table 3). Of these cultivars, only Expression and Spanish Medallion had high yields, large bulbs (jumbo and colossal sized), low pungency, and high sugar, similar to Candy (Table 3). Cultivars Blush, Red Sky, Dulce Reina, and Crockett had considerably lower yields and bulb sizes than Candy. After three months of storage, no cultivar had a lower disease incidence than Candy, showing that the standard Candy remained competitive post-harvest compared to the others evaluated.

Going Off-Label Can Cost You Your Crop

Thomas Ford



Pendimethalin injury to direct-seeded pumpkins resulting from herbicide residues running off plastic into planting holes. Stubby and malformed roots were observed. Pendimethalin is not labeled for use around pumpkins. Photo: Tom Ford, Penn State

At 7:30 a.m., my cell phone rang from a grower who was alarmed that his newly planted vegetable crops were all dying. To narrow down the cause of the injury, I asked the grower if he had applied anything to the field that may have caused the symptoms he was observing. After a momentary pause, the grower told me that he had applied a herbicide cocktail (tank-mix) over the plastic. He indicated that he had used the same basic tank mix as he had in the past, except that he had added a third herbicide product to the mix this spring—hopefully, to get better grass control. The grower assumed that the herbicide cocktail he had applied over the plastic would wash off before planting. In this case, the last week's rain washed the remaining chemical residues on the plastic into the soils surrounding the new transplants causing plant injury/death.

Herbicides, like all pesticides, can cause plant injury/death if misapplied. In this case, the grower went “off-label” to keep weed pressure low in his row middles. He assumed that any chemical applied to the plastic would runoff. Still, he did not consider the full ramifications of his actions if the herbicides applied contacted the soils surrounding the transplants. Two of the three herbicides used in this “cocktail” were seedling growth inhibitors. The first product contained pendimethalin, the active ingredient in Prowl. Pendimethalin is considered a root inhibitor, and exposure to this herbicide can cause impacted plants to develop thickened and stubby roots.

The second herbicide is classified as a shoot inhibitor, and it contains the active ingredient metolachlor, which is found in the product, Dual. Broadleaf plants exposed to sub-lethal dosages of metolachlor will display cupped or crinkled leaf tissue. The third herbicide in this pre-plant cocktail was simazine, a photosynthetic inhibitor. Photosynthetic inhibitors have activity on both monocot and dicots. Plants exposed to photosynthetic inhibitors like simazine will develop interveinal chlorosis first before developing chlorotic leaf margins, then necrosis and plant death.

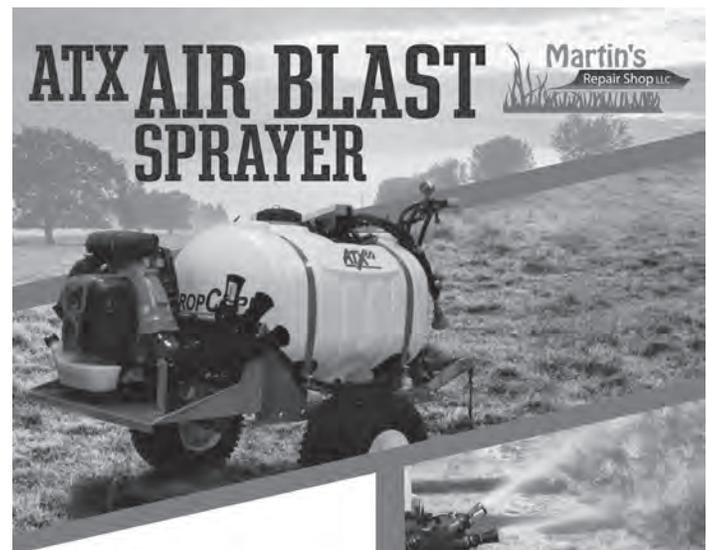
Simazine is prohibited from being used around most vegetable crops (except sweet corn). Its label states there is a 12-month rotational restriction between its application and the planting of vegetable crops because of injury concerns. This grower's off-la-

bel usage cost him his transplants, and if the grower follows the simazine label as required, he will not be able to re-plant anything else in these fields except sweet corn or field corn for at least another year.

Mr. Ford is with Penn State Extension in Cambria Co. From Penn State Extension, <https://extension.psu.edu/going-off-label-can-cost-you-your-crop-1?>, February 16, 2022.

Mid-Atlantic Commercial Vegetable Production Recommendations Now Available

The Mid-Atlantic Commercial Vegetable Production Recommendations, updated in February 2022, contain vegetable production information based on university, extension, and industry research, experience, and knowledge. Updated every two years, this guide is intended to help commercial vegetable growers in the Mid-Atlantic region make managerial decisions on general production, soil and nutrient management, irrigation management, pesticide safety, pest management, and specific commodity choices. The Guide is available for download at no cost at <https://extension.psu.edu/commercial-vegetable-production-recommendations?> or you can order a hard copy for \$25 plus shipping by calling 1-877-345-0691.



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VEGETABLE PRODUCTION

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Table 3. The average % center rot incidence at harvest and post-harvest (after three months in storage), marketable yield, % jumbo and colossal-sized bulbs, pungency, and % sugar of the 13 onion cultivars evaluated at Rock Springs (2015 and 2016) and Southeast Agricultural Research and Extension Center (Landisville) in Lancaster Co., PA (2016). Results are an average of the three trials unless otherwise stated.

Cultivar	% Incidence Center Rot Harvest	% Incidence Center Rot Post-harvest	Total MKT Yield (T/A)	% Jumbo and Colossal sized bulbs	Pungency	% Sugar
<i>Blush</i>	1.1	12.5	4.2	34	5.5	9.7
<i>Red Sky</i>	1.2	15.7	6.8	54.8	5.6	9.3
<i>Dulce Reina (2016 only)</i>	2	21.3	5.9	50.4	6.7	7.8
<i>Expression</i>	2.4	11.7	12.6	90.3	4.6	7.4
<i>Crockett (2016 only)</i>	3.1	14	3.9	33.6	5.6	9.6
<i>Spanish Medallion</i>	3.1	11.3	9.5	73.5	4.9	7.2
<i>Sedona (2015 only)</i>	4.1	11.3	4.4	32.5	3.5	8
<i>Candy</i>	4.5	6.6	10.8	84.1	4.9	8.3
<i>Lasso (2016 only)</i>	4.8	30.6	7.6	64.1	6.4	8.2
<i>BGS 280 (2015 only)</i>	4.9	19.5	7.6	57.2	2.9	7
<i>Ovation (2015 only)</i>	5.9	8.8	9.2	74.4	3.5	6.7
<i>Great Western</i>	6	11.3	11.7	84.9	5.4	7.6
<i>Aruba</i>	8.8	21.1	6.2	54.5	5.5	8.3

* Yield and % jumbo and colossal sized bulb data not presented for Centre County due to poor planting conditions that resulted in significant losses.

Gugino continued the center rot evaluation of cvs. Spanish Medallion and Candy in 2017 on two grower farms in Lancaster County, one farm in Centre County, and at Rock Springs. There was no significant difference in total marketable yield between Candy and Spanish Medallion at any of the grower farms, and center rot disease incidence was lower in cv. Spanish Medallion at two of the three grower farms (Table 4). Under high disease pressure due to toothpick inoculating the onions at Rock Springs, cv. Spanish Medallion yielded significantly higher than Candy and had substantially lower center rot at harvest.

Table 4. Comparison of average marketable yield (%) and center rot incidence between cvs. Candy and Spanish Medallion at three commercial farm locations in Lancaster and Centre counties and the Plant Pathology Research Farm at Rock Springs in Centre County, PA. Natural inoculum was relied upon at the grower farms while the Rock Springs trial was inoculated.

Field Location	Total MKT yield (%) Candy	Total MKT yield (%) Spanish Medallion	Center Rot (%) Candy	Center Rot (%) Spanish Medallion
<i>Lancaster 1</i>	90.5	89.2	5.6	5.9
<i>Lancaster 2</i>	77.8	72.4	3.9	0.6
<i>Centre 1</i>	94.3	91.7	3.5	2.7
<i>Rock Springs</i>	73.4	85.3	24.1	10.6

Alternative Cultivars to Candy

This research demonstrates that there are promising alternatives to the standard onion cv. Candy. Orzolek showed that Expression, Exacta, Spanish Medallion, and Aruba had desirable horticultural characteristics, including high yields, that met the requirements of the PA Simply Sweet program. Expression and Spanish Medallion continued to be competitive in Butzler and Elkner's 2020 trial, along with several other cultivars. Mazzone and Gugino found additional promise with Expression and Spanish Medallion maintaining desirable horticultural characteristics while having reduced center rot losses at harvest compared to cv. Candy. Candy also maintained its desirability with low post-harvest

disease, although a similar low post-harvest disease pressure was present in Spanish Medallion and Expression.

Although post-harvest losses for cv. Candy were limited in these trials, the losses at harvest, as seen in Mazzone and Gugino's center rot incidence at harvest data, ultimately negatively impacted the total marketable yield of cv. Candy. Relying on predominantly one cultivar is not sustainable, especially as cv. Candy transplants become more difficult to source. Across all the Penn State onion cultivar evaluations, cvs. Expression and Spanish Medallion consistently produced large bulbs with low pungency, high sugar, and low center rot disease incidence, making them a viable alternative for PA growers.

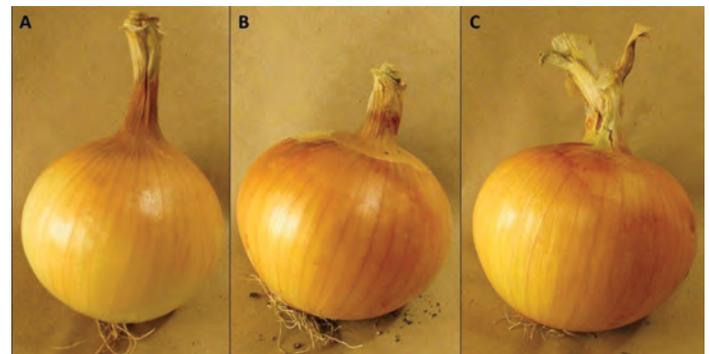


Figure 2. The representative appearance of onion cultivars Candy (A), Expression (B), and Spanish Medallion (C). Photo: Jennie Mazzone, Penn State

Acknowledgments

Research data contributions by Dr. Mike Orzolek, Tom Butzler, and Dr. Tim Elkner. Funding for these evaluations is provided by the Pennsylvania Vegetable Marketing and Research Program, Pennsylvania Vegetable Growers Association, and the Pennsylvania Department of Agriculture Specialty Crop Block Grant Program.

Ms. Mazzone and Dr. Gugino are with the Department of Plant Pathology and Environmental Microbiology at Penn State University. From Penn State Extension, <https://extension.psu.edu/what-have-we-learned-from-two-decades-of-onion-cultivar-research-at-penn-state/>, January 26, 2022.

Spring Cauliflower?

Emmalea Ernest

Cauliflower is typically a fall crop in Delaware with transplants started in mid-July going into the field in mid-August. Fall plantings are subject to less heat stress during head development and therefore less likely to develop heat-related physiological disorders like curd separation (ricing), fuzziness, leaf formation in the head and purpling (Figure 1). However, some newer varieties are more heat tolerant and less prone to developing physiological disorders. To see how spring cauliflower might work in Delaware I planted a trial in 2020 at UD's research farm in Georgetown, Delaware to test 18 white cauliflower varieties.



Figure 1. Cauliflower heads with curd separation, leafy heads and purple discoloration caused by heat stress

The transplants for the trial were seeded on March 4 and transplanted into bare ground on April 20. Some leftover transplants were used in a planting into white plastic mulch on May 1. Cauliflower matured and was harvested from June 15 to July 2.

Of the 18 varieties tested, three produced a high percentage of marketable heads in the April 20 transplanted trial: Bishop, Bermeo and Denali (Figure 2). Bishop and Bermeo have also been successful in all of my fall cauliflower trials and tend not to develop physiological disorders. If you decide to attempt a spring cauliflower planting, I'd recommend trying one or all of these three varieties.

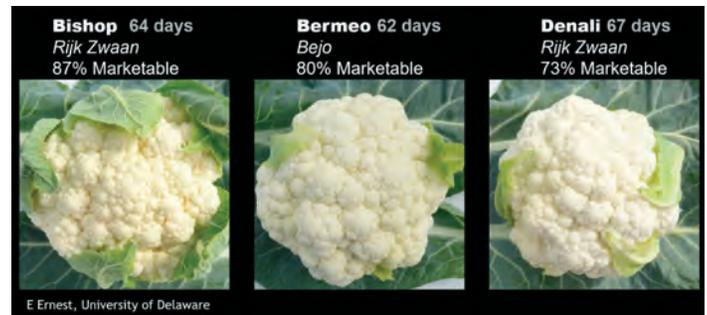


Figure 2. Three cauliflower varieties that performed well in the spring 2020 cauliflower trial.

None of the varieties produced marketable heads when transplanted on May 1 onto white plastic, indicating that the window for planting spring cauliflower in Delaware is probably quite narrow and success will vary depending on our unpredictable spring weather conditions.

Dr. Ernest is a Vegetable and Fruit Crops Scientist at the Univ. of Delaware. From the Weekly Crop Update, Univ. of Delaware Coop. Extension, Vol. 30 February 18, 2022.

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BERRY PRODUCTION

Strawberry Disease Identification: Neopestalotiopsis (aka Pestalotia) or a More Traditional Disease?

Neopestalotiopsis (Pestalotia) is a new strawberry disease that has been causing problems on the East Coast for a few years now.



Figure 1. Leaf symptoms typical of Neopestalotiopsis (Pestalotia). Photo: Kathy Demchak, Penn State

Since Neopestalotiopsis (or Pestalotia) was present in plug plant material distributed in PA and the Mid-Atlantic in the fall of 2021, here are some photos and tips on how to tell it apart from other foliar and fruit diseases. We don't know whether this disease will show up in the spring of 2022, but be on the lookout. Matted-row growers should know that this disease has not been found on the plant material used in matted-row plantings so far, so if you see similar symptoms, you are most likely seeing one of our more traditional diseases, but let your local extension educator know so we can follow up.

Pestalotia foliar symptoms progress very quickly during warm wet spells. Large portions of infected leaves are invaded within a few days under these conditions, and though the speed of invasion varies somewhat with cultivar, disease progression is noticeable over just a few days. Other foliar diseases, if widespread enough, can also invade large portions of the leaf and coalesce, but tissue invasion is much more gradual.

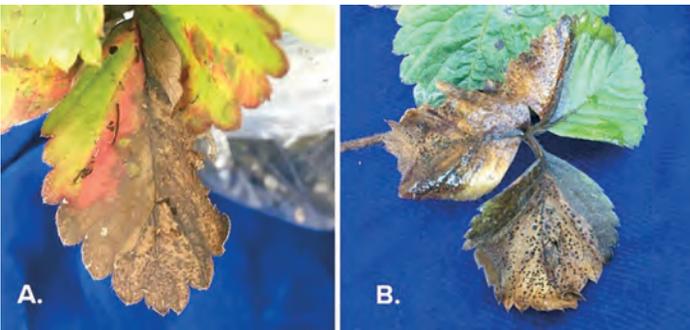


Figure 2. (A) Death of leaf tissue caused by angular leaf spot, not Neopestalotiopsis. Though a large portion of the tissue is dead, angular blotches can still be seen. (B) Black pycnidia form in lesions of leaves infected by Neopestalotiopsis. Note that healthy leaf tissue is continuing to be invaded. Photos: Kathy Demchak, Penn State

A second differentiating feature is that if you put leaves infected with Neopestalotiopsis in a plastic bag with a wet paper towel to keep humidity high, you will see many black pycnidia that look like tiny black pimples emerge on the leaves within a few days. These black pycnidia occur with other diseases, too, but there will only be a few of them and it takes longer for them to appear. With Neopestalotiopsis, any green tissue will continue to be invaded during this time.

The third differentiating feature is that in a few more days (or possibly as long as a week), tendrils of black spores will emerge from the pycnidia that curl as they grow. You will need a magnifying glass to see these, and you will only see them if the leaves are not rubbed against other leaves, as these tendrils are delicate and easily broken off. Eventually, these tendrils will fall off and if they are gathered on a white piece of paper, look like flecks of black pepper. It is easy for them to be picked up and moved around on wet hands or clothing, which could be one way that this disease gets moved around so easily.

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Figure 3. LBlack tendrils of spores emerging from pycnidia on a strawberry leaf infected by Neopestalotiopsis. Photo: Kathy Demchak, Penn State

Disease progression stops during the winter, so whether this disease will be seen in the spring of 2022 remains to be seen. However, if symptoms are observed, by looking closely at the above photos, you should be able to determine whether the symptoms are caused by Neopestalotiopsis or another disease. Thiram and Switch are still the two best products available for control.

Ms. Demchak is with the Department of Plant Science at Penn State University. From Penn State Extension, <https://extension.psu.edu/strawberry-disease-identification-neopestalotiopsis-aka-pestalotia-or-a-more-traditional-disease?> February 16, 2022.

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GREENHOUSE PRODUCTION

Starting-Up Heaters without Getting Burned – Heater Safety Checks

Chris Callahan

As the days grow longer and warmer, we can't help turning our attention to germination chambers, propagation houses, greenhouses, and high tunnels. It is an exciting time of year, but also a time to take some extra care with heating appliances. Before firing up the heaters in your heated growing spaces, take the time to plan for some preventive maintenance and do a few safety checks. Although this guide is mainly focused on propane heaters due to their wide-spread use, most of checks apply to all heaters.

Preventive Maintenance

Some annual preventive maintenance that growers find helpful include:

- Visually inspect each heater and give it an overall cleaning (see below for examples)
- Run the heater over the winter occasionally to check operation. Use your eyes, ears, and nose to check for things that seem out of the ordinary (see below for examples).
- Start the heater up several weeks before you will need it. There are generally some inevitable repairs and maintenance needed.
- Have a spare parts kit with things that tend to fail or need frequent replacement such as igniters, thermocouples, and seals.
- If this isn't your comfort zone, hire in a professional heater technician to give your heater a once-over to improve safety, fuel efficiency, and reliability.

Getting to Know Your Heater

Take some time to get familiar with the main parts of your heater. The photos below show the key parts of a common heater. Your heater's installation and operation manual (IOM) is a handy reference. If you've misplaced it, find the manufacturer's name and model number on the heater. Most manuals are available online at the manufacturer's website.

Start-up Checklist

Some of the key things to check are listed below. A more comprehensive checklist is available from Modine and other detailed references are included below.

Fuel Supply

- Fuel tanks are stable.
- Fuel lines are in good condition.
- Fuel lines are run to avoid being hit or stepped on.
- Fuel tanks valve is open.
- If anything seems amiss with the tanks or main line call your fuel company to have it corrected.
- You should not smell propane when the tank valve is open.

Fuel Regulator / Valve and Nozzle

- Fuel regulator / valve is free of damage, clear of debris, etc.
- Nozzle(s) are clear of any blockage.
- You should not smell propane.

Clean Heat Exchanger Inside and Out

- Inside of burner tubes, the heat exchanger, and the exhaust path is open and free of obstructions. This may require removing panels, blowing out with a reversed shop-vac or compressed air and resealing panels.
- Outside of the heat exchanger is clear of any cobwebs or other debris.
- Heat exchanger walls are solid and in good condition.

Exhaust Pipe

- The exhaust pipe is continuously connected from the heater to the outside.
- Replace any sections that have significant signs of corrosion.

- Exhaust termination cap is in place to prevent bird and rodent nesting or other blockage.
- Exhaust is well above snow line and otherwise free of obstruction.
- There is no smoke or soot when the heater is operating.

Thermostat

- The thermostat is switching on/off at the right temperature.
- The thermostat wire is solidly connected on both ends and is free of nicks, gnaw marks or other damage that could cause a short or open circuit.

Electronics

- The electronic control board and surrounding area is clean.
- There are no singe marks on the circuit board or wiring.
- The supply wiring is in good condition and run to avoid damage or interference with greenhouse use.

Eyes, Ears, and Nose

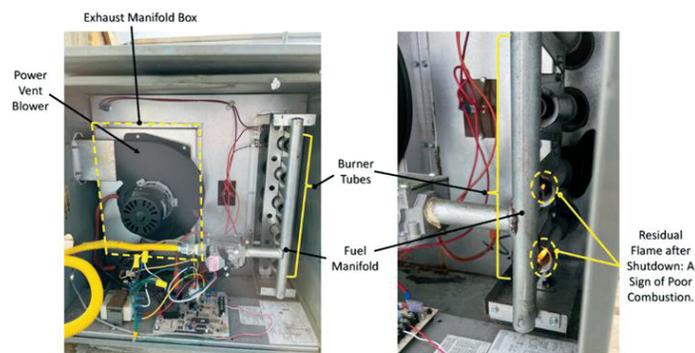
- Look for any signs of charring, singing, burning, smoke, significant vibration, or other maintenance needs.
- The main noises you should hear are the vent fan (if power vented model) and the heat distribution fan. Loud pops, bangs, or knocking mean something is wrong.
- You should not smell propane.

What Could Go Wrong?

The photos below were provided by a grower who experienced a startup issue. The unit heater had been powered up with the thermostat set very low for winter greens production in the tunnel. It was probably running very infrequently and for short durations. The control panel cover was left off during this time as well.

The grower had just set the thermostat up for some late winter production and sat down for a lunch break. They noticed a burning smell and saw the label on the side of the unit start to be singed. See the video below.

When they took the cover off, the grower noticed that the nice blue flames that are normally contained completely within the burner tubes were yellow and "rolling out" on the bottom two tubes. The flames of a propane unit heater should always be blue and contained within the burner tube and heat exchanger area when operating correctly. Yellow flames are a sign of poor combustion. When the unit was shut down, some residual, yellow flames would remain on the bottom two fuel nozzles.



The grower checked the fuel orifices on these two burner tubes and they were clear, so the problem was likely not a fuel delivery issue. The other possibility was a combustion air and exhaust flow issue.

In most propane unit heaters the combustion air is entrained into the burner through the opening between the orifice / nozzle

GREENHOUSE PRODUCTION

and the burner tube. The flow of the fuel at high velocity causes low pressure around it and brings the combustion air in. In power-vented heaters, this air entrainment is enhanced by the blower that sucks air through the burner tubes and exhausts it out the vent. In order for combustion air to mix well with the fuel to provide complete (and clean) combustion, there needs to be equal and easy flow through all the tubes.

The next thing the grower checked was that the inside of all burner tubes was clear in order to provide easy flow of exhaust and to support good combustion. This required removing the power vent / exhaust manifold box which is a pain, but worth it. Having some replacement seal material on hand will make re-assembly with a proper seal easier.

When the exhaust side of the burner tubes were examined, an obvious blockage was noted with soot in the surrounding area. It appears to have been a mouse nest.

By removing the exhaust baffles to control the flow rate through the tubes and clearing out with a vacuum, the problem was resolved.

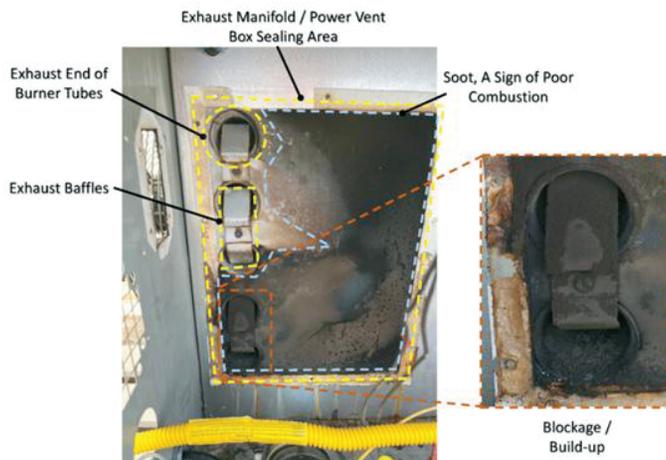
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Mr. Callahan is Extension Associate Professor of Agricultural Engineering at the Univ. of Vermont. From the Univ. of Vermont Extension, <https://blog.uvm.edu/cwcallah/2022/02/18/starting-up-heaters-without-getting-burned-greenhouse-and-high-tunnel-heater-safety-checks/>, February 18, 2022.

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