State of Organic Produce 2023, CEA Safety Guide & Student Profile: Hailey Schleining, UA

Greenhouse vegetable news from GrowerTalks magazine

GROWERTALKS MAGAZINE greenPROFIT MAGAZINE

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inside GROWER
Controlled Environment Agriculture

COMING UP THIS WEEK:

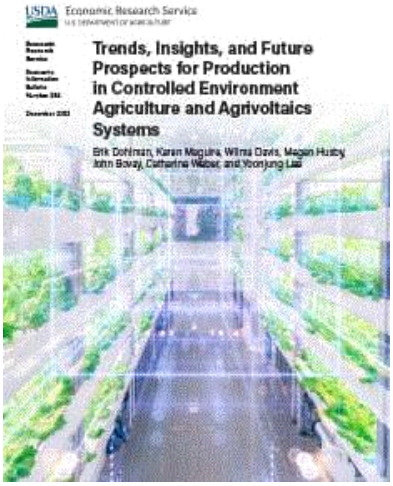
State of Organic Produce 2023
CEA Trends and Future
Produce Safety Guides
IAC Update by Jen Polanz
2025 & 2026 CAST Dates
Hailey Schleining, AU

Organic Produce Network Releases "State of Organic Produce 2023" Report

The Organic Produce Network, an organization founded in 2017 with the goal of bringing the "organic produce industry together to learn and grow," has released the 2023 edition of their "State of Organic Produce" report. Containing up-to-date information on Sales and Performance Overviews, Leading Category Performers, Retailer & Wholesaler Snapshots and 2023 Events, one significant take away is that U.S. organic produce sales increased by 1.6% from the previous year, topping $9.6 Billion in 2023.

To read the report in its entirety, please check out the OPN and their associated press release.

USDA ERS and VT Breaks Down CEA Trends, Insights and Future Prospects



The U.S. Department of Agriculture, Economic Research Service in conjunction with researchers from Virginia Tech recently released the January 2024 version of the Economic Information Bulletin (Number 264) titled "Trends, Insights, and Future Prospects for Production in Controlled Environment Agriculture and Agrivoltaics Systems."

The authors cited the potential of two systems for providing socioeconomic benefits beyond the short-term benefit for increasing food production, controlled environment agriculture (CEA) and agrivoltaics (AV), and covered topics such as:

- Recent innovations in CEA and AV production systems.
- The extent to which these systems have been adopted.
- Whether they are providing output for existing agricultural markets.
- Types of crops/agricultural goods being produced and supplied.

The authors also noted the recent increases in private and public investments in these technologies, benefiting both research & development and commercial production. The full report and press release can be found here for further analysis and review.

New Produce Safety Guides Available From NECAFS

The Northeast Center to Advance Food Safety (NECAFS), a USDA-funded regional center tasked with training, education and outreach related to the Food Safety Modernization Act (FSMA), announced the release of their “Produce Safety Guides for Hydroponic and Aquaponic Operations” as a way of summarizing GAPs and other requirements for hydroponic and aquaponic producers to be in compliance with the FSMA Produce Safety Rule (FSMA PSR).

Members of the NECAFS project team incorporated input from national advisory and collaborative groups to advise small to medium scale producers on how to tailor produce safety practices to the individual needs of their hydroponic and aquaponic production systems. The resources can be found on the project home page and include an introductory guide, a PDF factsheet and a grower case study conducted at Legacy Greens in Tallahassee, Florida.

More From Indoor Ag-Con from Editor Jen Polanz

Jen Polanz here … in the last enews we included links to multiple stories with highlights from Indoor Ag-Con in Las Vegas. The story on products, concepts and services is now updated to include even more products, including BioTherm’s dissolved oxygen system and its CO2 enrichment machine, as well as the unique Spyder monitoring system from Neatleaf. CLICK HERE to check out the updated story.

Prior to the show, I spoke with John Morrow at 3M, a company in a lot of different industries that is looking for ways to help growers with light management solutions for greenhouse production. CLICK HERE to see the products 3M is exploring for horticulture.

My discussion with John led me to another new and unique product from the Swiss company Voltiris, on which 3M is a partner. It’s a film-based product (pictured above) that essentially filters the light spectrum plants need to the crops while diverting the spectrum they don’t need to a solar cell for energy production. CLICK HERE to read the full story.

California Spring Trials (CAST) 2025 & 2026 Dates Announced

For anyone who has had the pleasure of attending CAST in previous years, mark your calendars now with the newly released 2025 and 2026 dates as this is not an event you want to miss! Featuring a wide selection of breeders and growers exhibiting their newest introductions at this industry wide sales and marketing event, specific trial stops within Northern and Central California will be announced at a later date. As one of my favorite events of the year, I hope to see you all there!

Student Profile—Hailey Schleining, UA

As editor of a newsletter covering CEA, I am constantly exposed to different applications as students and researchers make the science their own. This week I spoke with Hailey Schleining of the University of Arizona about her experience obtaining an Accelerated Masters degree while serving as the Graduate Student Program Coordinator for the UA CEA Center. As always, please reach out to the student if you have further questions and reach out to me if you would like to nominate yourself or a student to be featured!

1. Before we begin, can you tell all your (soon to be) fans who you are? Bonus points for all the things that make you interesting outside of your work.
I am an Accelerated Master's student in Biosystems Engineering at the University of Arizona as well as the Graduate Student Program Coordinator at the UA Controlled Environment Agriculture Center. My driving purpose is to develop sustainable innovations to strengthen our future with a strong interest in the food, energy, water (FEW) nexus. I love to read, explore and swim in the ocean.

2. Can you tell us a bit about your research? Skip the Intro and Materials & Methods sections and just give us the conclusions.
My research is centered on a novel photobioreactor for microalgae cultivation. The patent-pending design holds significant potential for improved microalgae production compared to a conventional photobioreactor. Such advancements may increase the application of microalgae as a sustainable alternative for commercial products such as biofuel.

3. While most are familiar with the elevator pitch, I find that I get more mileage out of my cocktail pitch, aka how would you describe a simplified version of what you do to someone

new at a cocktail party?
In my current role, I lead the organization of our events, tours, website and marketing initiatives for the UA Controlled Environment Agriculture Center. Additionally, I engage with community members, students, faculty and company representatives, among others.

4. If you could recommend anything to a younger version of yourself, or any new student for that matter, what would it be?
I would recommend pursuing something that resonates with your passions and purpose. Once you've identified your passions, document everything you learn during the process so you can apply all the knowledge you have gained to your future endeavors.

5. What's next for you? How about if you could do anything in the world?
I'm currently looking for a full-time engineering position in which I can apply my experience and skills to support sustainability efforts after I graduate with my MS in Biosystems Engineering in May of 2024. My ultimate career goal is to work as a leader on renewable energy projects to promote energy security and reduce our impact on the environment.

6. Finally and for my own benefit, what's your favorite outdoor activity? (In honor of my close friend Frank, "these hands were made for typing, not being outdoors" is also an acceptable answer.)
My favorite outdoor activity is simply exploring nature, whether that be through hiking or snorkeling.

Stay curious, ask questions and let me know how it goes at scampbell@ballpublishing.com.

Dr. Sean Campbell
Editor-at-Large
Inside Grower

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