



# summer 2024 newsletter

K-State Olathe Horticulture  
Research and Extension Center

Welcome to the K-State Olathe Horticulture Research and Extension Center's quarterly newsletter. To learn more about the Center, click [HERE](#) to be directed to the Center's web site.

## Fruit & Vegetable Research Update

### Current Research Projects



*Cantaloupe growing in OHREC haygrove tunnel*

**Cantaloupe Variety Trials:** Dr. Ravneet Sandhu, Research Assistant Professor in Horticulture and Natural Resources, is evaluating six cantaloupe varieties this summer. After harvest weights are recorded, representative samples are sent to K-State Olathe for further post-harvest testing and data collection. Look for her preliminary findings to be available in 2025.

**Water Use in High Tunnels:** Claire Barnhart, Graduate Research Assistant and Urban Food Systems Master's student, is wrapping up her research project evaluating various commercial mulch materials and their effects on soil quality and water use by tomatoes grown in and out of high tunnels. Claire anticipates a May 2025 graduation.



*Graduate student Claire gathering a soil sample in her outside plots.*



*Vertical solar panels in the agrivoltaics research plot.*

**Agrivoltaics:** Alex Thill, Urban Food Systems Master's student, joined OHREC over the summer as a Graduate Research Assistant. His research focuses on agrivoltaics by evaluating the impact of vertical solar panels on various types of vegetables grown adjacent to the panels. Harvest and data collection from summer crops are nearly complete with fall crops in the ground now for seasonal comparisons.

**Practicum Project:** New this summer was a Practicum Class for students at K-State Olathe to immerse themselves in hands-on vegetable production. Students selected, planted, maintained, and harvested their own vegetables and assisted with harvest of OHREC research vegetable plots while learning about inputs and watering schedules for successful vegetable production.



*K-State Olathe Practicum Students assist with pepper harvest.*



*Tomatoes (center two rows) and bell peppers (far right and far left rows)*

**Tomato and Pepper Variety Trials:** Again in 2024, multiple varieties of red, slicing tomatoes and bell peppers are being grown for variety trial comparisons. Data is collected on production and post-harvest quality parameters. Look for results from 2024 trials to be reported at Commercial Vegetable Field Day 2025 next August.

**Strawberry Trials:** In August, Dr. Sandhu planted four varieties of strawberries to evaluate the effect of planting date on yield and fruit quality. There will be a later planting on one variety to compare data based on planting date. Harvest will happen next spring with preliminary results available for Commercial Vegetable Field Day in 2025.



*Dr. Sandhu and graduate students plant strawberries.*



## Recent Publications

June 2024 by the International Society for Horticultural Science, proceedings from the ISHS Acta Horticulturae 1396, VII International Conference Postharvest Unlimited in Wageningen, Netherlands:

Jenkins, T., Pliakoni, E.D., Rivard, C., Aslanidou, M. and Katsoulas, N. (2024). Effect of system, grafting, and harvest maturity stage on the quality of tomatoes grown in greenhouses. Acta Hort. 1396, 465-470  
DOI: 10.17660/ActaHortic.2024.1396.61  
<https://doi.org/10.17660/ActaHortic.2024.1396.61>

## Recent Grant Awards

Recent grant awarded to Dr. Rivard:

- USDA Beginning Farmer Rancher Development Program (BFRDP) Grant entitled *Supporting Beginning Vegetable Farmers Through Expanded Programs in Kansas and Missouri*
- North Central Region Sustainable Agriculture Research and Education (NCR-SARE) Professional Development Program Grant entitled *Delivering Professional Development and Networking Opportunities for Urban Agriculture Professionals in the North Central Region*

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# Turfgrass Program Update

## Kansas Turf & Landscape Conference

The 2024 Kansas Turf & Landscape Conference is scheduled for December 4-5 at the Hilton Garden Inn, Manhattan. The conference features educational sessions, networking, a trade show, State Pesticide Applicator Recertification Credit Hours, GCSAA Education Points, and Intl. Society of Arboriculture CEUs. Visit <https://www.k-state.edu/turf/events/index.html> for more information including online registration, official program, and hotel room rates at the Hilton Garden Inn.



74TH KANSAS  
**TURF & LANDSCAPE CONFERENCE**  
December 4-5, 2024  
HILTON GARDEN INN CONFERENCE CENTER  
MANHATTAN, KS

For more details, visit <https://www.k-state.edu/turf/events>

Commercial Pesticide Recertification  
1 Core Hour, 3A & 3B - 7 hours  
GCSAA Education Points  
International Society of Arboriculture CEUs

**K-STATE** Research and Extension  
**KIF** KANSAS TURFGRASS FOUNDATION  
**KNLA**





## 2024 K-State Turf Research Report

Volume 10, Issue 4 (2024) is available online at:

<https://newprairiepress.org/kaesrr/vol10/iss4/>

Highlights of this year's reports include:

- Rooting Comparison of Zoysiagrass Cultivars in the Greenhouse
- Impact of Sod Growers' Grow-in Strategies on the Performance of Zoysiagrass Sod
- 2019 National Turfgrass Evaluation Program Bermudagrass Test: 2023 Data
- 2019 National Turfgrass Evaluation Program Bermudagrass Test: 2019-2023 Summary Report

## 2025 Turf and Ornamentals Field Day

Mark your calendars now for the 2025 K-State Turf and Ornamentals Field Day on Thursday, August 7 in Manhattan. This annual field day provides updates from faculty researchers and graduate students on turfgrass and ornamentals research being conducted at K-State as well as a robust trade show.

## Turf Extension Blogs from Olathe Horticulture Center

Read a couple of recent blog entries related to fall turf management:

- Fall Seeding Tips: <https://blogs.k-state.edu/turf/fall-seeding-tips-2/>
- Thinking Ahead to Factors that Can Impact Freeze Injury of Warm-Season Grasses:

<https://blogs.k-state.edu/turf/thinking-ahead-to-factors-that-can-impact-freeze-injury-of-warm-season-grasses/>

## Resources for Turf and Landscape Information at K-State

If you're looking for information on managing turf and landscapes in Kansas, there are several resources and social media sites with which you should be familiar.

- K-State Turf and Landscape Blog: <https://blogs.k-state.edu/turf/>
- K-State Turf and Landscape Website: [www.ksu.edu/turf](http://www.ksu.edu/turf)
- Twitter: @KSUTURF
- Facebook: <https://www.facebook.com/KSUTurf>
- K-State Turf and Landscape Website: [www.ksu.edu/turf](http://www.ksu.edu/turf)

The website offers information on undergraduate education at K-State, extension articles, research reports, and much more.

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# Backyard Garden Update

The Johnson County Extension Master Gardeners (EMG) Backyard Garden 2024 theme is "**Cultivate Community: Grow, Learn, Share**". Making good on that theme, as of late September, the Backyard Garden (BYG) had grown, harvested, and donated 5,000+ pounds of produce and 554 flower bouquets to local food pantries with several harvests yet to come. Summer in the BYG is not limited to growing produce and flowers. Garden volunteers hosted numerous individual visitors and groups including (but not limited to): Wyandotte County EMGs, KC Garden Club, St. Paul's United Methodist Community Garden members, and Extension Master Food Volunteers. Backyard Gardeners staff an educational table each month at the Lenexa Farmers Market, provided a host site for the Wilderness Plant Propagation event, assisted OHREC with educational programming for the Wee Workshop Summer Day Camp event for 1<sup>st</sup> through 5<sup>th</sup> graders; led tours of the BYG for administrators from KSU's College of Agriculture and faculty from the KSU Department of Horticulture and Natural Resources; and made floral centerpieces for the Growing Growers 20<sup>th</sup> Anniversary Dinner. As summer comes to an end, Backyard Gardeners host new EMGs-in-training who are interested in volunteering at the BYG for the 2025 growing season.



*Flower bouquets ready for donation*



*Extension Master Food Volunteers get a tour of the BYG.*



*Weighing and packaging BYG harvest for donation to local food pantries.*

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## OHREC Update

### New Faculty



*Dr. Ravneet Sandhu*

Ravneet Sandhu, Ph.D., Research Assistant Professor, joined OHREC in June. She has a split research and teaching appointment at K-State Olathe and is stationed at OHREC. Sandhu is developing an externally funded fruit crop production and IPM program that addresses the needs of produce and related industries in the greater Kansas City region. Her research program focuses on pest, weed, insect and disease control and

developing strong relationships with tree and small fruit producers throughout Kansas. Sandhu also teaches courses in the horticulture program at K-State Olathe focusing on specialized areas such as pest and weed management in horticulture production. She brings over seven years of research and extension experience with a background in pesticide application, drift management, pesticide efficacy, precision weed management, weed ecology, crop production, data acquisition, data management and analysis.

## Summer Intern

Kylie Blevins, KSU senior majoring in Horticulture and Natural Resources with a minor in Plant Pathology, joined OHREC for the summer as a vegetable program intern. The Center typically hires one or more summer intern employees. Contact us if you or someone you know is interested in working for Summer 2025.



*Kylie Blevins*

## OHREC Graduate Students



*Alex Thill*

Alex Thill, Master's Degree student in the Urban Food Systems Program, joined OHREC this summer. His undergraduate degree is in environmental engineering from the University of Alabama and as the first engineer at OHREC, Alex made an immediate impact by adding an array of vertical solar panels to the research plot and adding a variety of vegetables

Courtney Becker, Doctorate Degree student in the Department of Horticulture and Natural Resources, joined OHREC over the summer. Courtney holds a BGS degree in environmental studies with a minor in geology and a permaculture design certificate, and a Professional Science Master's Degree in environmental assessment from the University of Kansas. Her doctoral research involves a comprehensive environmental assessment of the Center's 300+ acres.



*Courtney Becker*





*Claire Barnhart*

Claire Barnhart, Master's Degree student in the Urban Food Systems Program, is completing her research on conserving soil moisture in high tunnels by evaluating the impact on tomatoes of various mulch treatments. She has set up trials on three area farms as well as in the Center's research plots.

## **Summer Visitors**

OHREC hosted several visits over the summer, including:

KSU Horticulture and Natural Resources Department Faculty, June 6

Green Teams, June 17

KSU COA Dean Ernie Minton, COA Director of Research Jane Schuh, and Eastern Region Extension Director Bob Weaber, July 1

Wee Workshop Summer Day Camp Field Experience, July 12

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# **K-STATE**

## **Research and Extension**

**Kansas State University Agricultural Experiment Station  
and Cooperative Extension Service**

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