

Welcome to the K-State Olathe Horticulture Research and Extension Center's quarterly newsletter. To learn more about the Center, click HERE (http://www.kstateohrec.org/ohcfall2020.html) to access the Center's web site.

Fruit & Vegetable Research Update

Fruit & Vegetable Trials

Mission critical research at OHC continued throughout the summer but the pandemic changed the Commercial Fruit and Vegetable Field Day as it transformed into an online event. Preparing for the online Field Day took quite a bit of time, but the results were worth the extra effort.

Access research project update videos and the full Field Day recording with the following links.

This link takes you to the 10 individual Field Day videos: https://www.youtube.com/playlist?list=PLQhVleKE4VXevNUW NjNytcPrA-8aTWJF

These are the titles of each session from the 2020 Fruit and Vegetable Field Day:

- KSU Olathe Horticulture Center 2020 Field Day Drone Footage
- Effects of Grafting on Nutritional Quality of Tasti-Lee Tomatoes
- Yield, Quality, and Economics of High Tunnel Strawberries
- Tomato and Pepper Variety Trials
- Enhancing High Density Apple Production in Kansas with Drape Netting
- High Tunnel and Open Field Production Systems for CBD Hemp
- Business Education for Specialty Crop Farmers
- KSU Olathe Horticulture Center Pond Project
- Introduction to a Dosatron Injection System for Produce Washing
- KSU Olathe Postharvest Physiology Lab Tour

To watch a recording of the Field Day as it happened, including all videos, discussions, and the Growing Growers KC graduation use this link:

https://ksu.zoom.us/rec/share/pe9TC526fPg78mM2590A3Y8HnPF1cAoTB2RzN-Sr4d-B5aayBr6xt4mxilIq5oLl.pvVtF46maz2dDOcK

Access Passcode: ?4m!c8AV





L to R. Cary Rivard records the hemp trial report for 2020 Field Day. Graduate student Megan McManus records her report for 2020 Field Day.

The field day wasn't the only time cameras rolled at OHC this summer. The Center also served as a filming site for some K-State Research and Extension food safety videos.





L to R. OHC's pack house was the setting for a KSRE video "How to Clean and Sanitize Packing Areas and Harvest Equipment". Link url: https://youtu.be/-L44B42JDqU

OHC's growing fields were the site of filming for a video about control of wildlife in outdoor growing areas.

Turfgrass Program Update

By Jack Fry

Turfgrass Science Program Update

Olathe and the Kansas City area have become the central location for zoysiagrass cultivar development and the evaluation of cultivars and experimental genotypes of a number of other turfgrass species. After several years of evaluating new, potential fine-



Manoj Chhetri, Ph.D. student (left), and Vicente Mascote, research associate, assist in harvesting promising zoysiagrass genotypes in October, 2020 for further evaluation.

This autumn, a new Fine Fescue cultivar evaluation trial, sponsored by the National Turfgrass Evaluation Program, (NTEP) was established. Fine fescues are considered low-maintenance grasses, and this term actually includes a number of different species, including hard fescue, strong creeping red fescue, slender creeping fescue, chewings fescue, and sheep fescue. Several of these are often used in shady sites. This trial is being done in full sun under low maintenance conditions (including minimal irrigation).

textured, high quality experimental zoysiagrasses, we harvested 22 of those this autumn for propagation. The United States Golf Association is sponsoring this project. Similarly, Purdue University and Texas A&M AgriLife Research – Dallas have identified about 20 genotypes at each of their locations; A&M will do the propagating this winter. Next spring, we'll be planting these 60 or so experimentals in larger plots at the Olathe Center. Once they fill in, we'll lower the mowing height comparable to that used on golf course fairways and tees. Some of these may even have potential for use on golf course greens in the transition zone!



Fine fescue species emerging in the NTEP Fine Fescue trial in Olathe in September, 2020

Additional NTEP trials at the Olathe Center include the tall fescue cultivar trial, and zoysiagrass trial. You can see a summary of the zoysiagrass trial presented at this video link (filmed in July): 2020 Field Day Series Video 1

https://mediasite.k-state.edu/mediasite/Play/40fe3db2e9644711889466a93ae0a0ac1d



Dani McFadden, M.S. student in Turfgrass Science at K-State, prepares to seed a plot in the new NTEP Creeping Bentgrass Putting Green trial at Milburn Country Club in September, 2020

We are also very grateful to have the cooperation of local golf courses, which are allowing us to use their property to evaluate grasses on their sites. This fall, the NTEP creeping bentgrass putting green trial was established at Milburn Country Club. Steve Wilson, golf course superintendent (and K-State alumnus), kindly removed some existing bentgrass from his nursery green to allow us to establish the new trial.

In addition, we continue to evaluate ten experimental zoysiagrasses at Shadow Glen Golf Club, which was arranged by golf course superintendent Scott Johnson (K-State alumnus). These ten experimental zovsiagrasses have demonstrated improved quality relative to Meyer (a commonly used cultivar in the region). In addition, all have demonstrated tolerance to a common disease problem, large patch.



Differences in fall color are becoming evident in October, 2020 on a trial evaluating 10 experimental zoysiagrasses at Shadow Glen Golf Club in Olathe, KS.

The K-State turf team also posted a free field day series this summer regarding research projects being done in Manhattan. Find links to these videos here: https://blogs.kstate.edu/turf/

In addition, the team puts together annual written turf research report. You can find the 2020 K-State Turfgrass Research Report here: https://newprairiepress.org/kaesrr/vol6/iss7/

Turf research at Olathe and in the Kansas City area is expanding. The K-State turf team is thankful to have the support of the Kansas turfgrass industry to continue research progress during these difficult times.

Backyard Garden Update



The Backyard Gardeners (BYG) wrapped up a nearly a full season in mid-October after harvesting and delivering more than a ton of fresh produce (nearly 3,100 pounds). Fruit and vegetables harvested from the BYG were donated to several Olathe-area food pantries to help fight hunger in the community. Even though the gardening season had to be modified because of COVID-19, volunteers were able to work three days a week for most of the growing season to maintain the garden but were not able to host visitors for open garden visits. The BYG has been put to bed for the winter in anticipation of a full garden season for 2021.

Activities at OHC

Pond Project

The pandemic may have closed the Center to visitors, but improvement projects continued through the summer -- specifically with the irrigation pond. As reported last fall, the pond-that-didn't-hold-water was re-sealed and has held water all summer (see photos below). Yeah! Now that the pond holds water, work has begun on functional improvements such as a windmill for aeration, a dock for access to monitor water quality, fish stocking with habitat creation, and a pump house. A recently awarded grant from the KSU College of Agriculture will fund the addition of a solar-powered pump. With these improvements this fall, the pond will be ready to provide irrigation water to the research fields next spring.







L to R. A full OHC pond holding water nicely. A windmill aeration system was constructed and installed over the summer. A walkway was built for access to the floating research deck (aka repurposed pontoon boat) to make water sampling easier.

OHC on KSHB 41 News "Fill the Fridge"

An extra bonus from fruit and vegetable trials is there's lots of produce (tons in fact) that doesn't go to the lab. That produce is donated to After the Harvest and from there it goes to metro area food pantries, child development and homeless centers, and to Harvesters. This year, After the Harvest was featured on KSHB Channel 41's Fill the

Fridge campaign in September. The <u>news segment</u> Link url: <u>https://rb.gy/fknuwn</u> that aired on September 11 was filmed at the OHC while ATH volunteers gleaned tomatoes.





KSHB Action News Channel 41's anchor Lindsay Shively and a photographer followed After the Harvest volunteers to the OHC over the summer.

Growing Growers KC



Growing Growers Kansas City's season of workshops transitioned to online learning for 2020 workshops with strong participation. Six apprentices were placed with mentors in the area. All apprentices received graduation certificates during an

online recognition as part of the Commercial Fruit and Vegetable Field Day on August 30. For more information about the program, apprenticeship applications, and mentor applications, visit the GGKC web site at: www.growinggrowers.org or email growers@ksu.edu. Graduate student Megan McManus, who is based at the Center, coordinated GG this year as part of her master's program through K-State Olathe's Urban Food Systems Program.

Urban Food Systems Symposium



A successful virtual 2020 Urban Food Systems Symposium (UFSS) wrapped up on October 28. Hosted by Kansas State University and K-State Research and Extension, the virtual symposium featured six keynotes, 46 breakout session presentations, and 27 poster sessions; all focused on the diverse and complex urban

food system in the United States. The virtual format attracted more than 300 participants from across the globe for sessions offered on each of the four Wednesdays in October. For registered participants, access to all keynotes, breakouts, and poster sessions is available through April 2021 using the Whova app. This was the third UFSS. The first UFSS in 2016 was also hosted by K-State and KSRE. The next UFSS is anticipated to be in 2022.

Kansas Specialty Crop Growers Association



Kansas Specialty Crop Growers Association (KSCGA) continues to grow. In the spring, the association received designation as a 501(c)5 not-for-profit organization from the IRS and in

late summer received word of a successful Specialty Crop Block Grant through the Kansas Department of Agriculture. Grant activities begin this fall with the first order of business to hire a part time employee. KSCGA membership dues are only \$10 per year and the organization still has some grant funds to cover that cost for members who sign up on the web site www.kscqa.org. KSCGA also assisted the Kansas Rural Center with a project (NCR-SARE funded) to educate growers about marketing options in response to COVID-19. Officers for 2020 are Gabe Spurgeon, South Baldwin Farms, president; Brice Wiswell, Geiringers Family Orchard & Berry Farm, vice president; Zac Hoppenstedt, Johnson County Extension Horticulture Agent, secretary; and Dr. Cary Rivard, Extension Fruit and Vegetable Specialist and OHC Director, treasurer.

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