Horticulture 2024 Newsletter No. 3 January 22, 2024

1712 Claflin, 2021 Throckmorton Plant Science Cntr. Manhattan, KS 66506 (785) 532-6173

Video of the Week: Building a Raised Bed for Gardens

ANNOUNCEMENTS

REMINDER: Share your 2023 Hort Newsletter Experiences!



We have had great feedback from readers about our 2023 Hort Newsletter. We hope to make the 2024 Hort Newsletter an even more useful resource for our subscribers. Please take a moment to share your K-State Hort Newsletter experiences so we can better serve your needs. Scan the QR code to the left or follow the link to a brief survey. All responses are anonymous. Thank you!

Horticulture Newsletter Needs Assessment

GARDEN SPOTLIGHT Request: This year we would like to feature gardeners across Kansas in our weekly newsletter. If you have innovative gardening practices including solutions to gardening challenges, sustainable gardening ideas, gardening with special populations programs (such as schools, assisted living centers, hospitals, etc.), or another gardening venture you want to share, we want to hear from you! Please email Cynthia at cdom@ksu.edu to tell your story.

***Last week, K-State experienced campus-wide IT complications. This prevented us from distributing our email Hort Newsletter. We apologize for the inconvenience. You should receive Hort Newsletter #2 (from last week) today along with your scheduled Hort Newsletter #3.

ORNAMENTALS

Growing Herbs Indoors



By mid-January many gardeners are getting antsy to start growing. While it may be too soon to start seeds for outdoor gardening, there are many herbs with compact root systems that are well-suited for growing from seed to harvest indoors. Chives, cilantro, basil and dill are good options. They germinate quickly and remain relatively small in size. Though your indoor plants may not achieve the same productivity as those grown outdoors during summer, you can still enjoy fresh cut herbs and get your hands dirty while waiting for spring.

Begin with viable seed from a reputable source. Plant the seeds in containers using a soilless seed-starting mix. Keep the soil moist during the germination stage. Secure fluorescent lights 4 to 6 inches above the soil surface. As the

seedlings grow you will need to adjust the lights to maintain this distance. Keep lights on for 14 to 16 hours each day. Alternatively, if you have a south-facing window that receives at least six hours of direct sunlight this may be option. If grown using natural light through the window, you will need to rotate the containers as the plants grow to promote uniform growth. Also, be sure the window isn't drafty. Herbs

prefer a daytime temperature between 65- and 70-degrees F and nighttime temperature between 55- and 60-degrees F.

The air in our homes can become very dry during the winter which is detrimental to growing herbs. You can create microclimates with higher humidity by grouping multiple plants close together. Another option is to use a humidifier near the plants. Air circulation is another concern which can be remedied by using a small fan.

Indoor growing conditions are obviously not ideal for growing an herb garden. However, it is an option for gardening during the off-season. Using best practices for the situation and managing expectations is important for determining success.

TREES

Fruit Trees and Winter Damage



Our recent extreme cold snap may have growers anxious about the status of their fruit trees. Fortunately, during dormancy, the freezing temperatures are not harmful.

Fruit trees develop cold hardiness, or the ability to tolerate low temperatures, with exposure to freezing weather. As the weather warms up they lose this cold hardiness which is why early spring frosts can be detrimental. The cold

weather we have been experiencing is not harmful since it followed progressively lowering temperatures. Damage to fruit trees typically occurs when the weather fluctuates rapidly from warm to extreme low temperatures. Fruit trees that were not pruned properly are at a greater risk of damage from the extreme cold as well.

As fruit trees begin to set buds the cold hardiness varies. This chart from Washington State University reports the temperatures fruit trees can withstand during various stages of budding. https://treefruit.wsu.edu/article/critical-bud-temperatures/

MISCELLANEOUS

Permanent + Agriculture = Permaculture



Permaculture is a land management strategy that combines ecology, food production and landscape design. By working with nature's systems, the production yield increases while the manual labor decreases.

One permaculture principle is to turn waste into resources. Composting is one common example of this by turning food scraps and animal waste into soil for growing. Water collection systems such as rain barrels are another example.

Another permaculture strategy is to restore the environment. This involves observing what is and isn't working well within a landscape. Areas of erosion or flooding as a result of human interference are locations that could potentially be restored by making small changes over time. Even an effort such as returning a lawn to native landscape can be restorative.

Increasing yields is a third permaculture focus. This primarily refers to the harvest from the landscape which can be increased as a result of improving the soil, growing more edible plants, succession planting and using season extenders. Some growers may suggest that increasing the yield also includes other

benefits reaped such as enjoyment of watching wildlife invited to the landscape and overall improved well-being.

Minimizing manual labor is one of the goals of permaculture as well as one of the natural outcomes of working *with* the environment. Growing recommended cultivars and companion planting are strategies to reduce problems with pests. Fewer pests equals less effort from the grower. Likewise, selecting the proper locations for specific plants prevents the grower from battling the environment and allows the plants to flourish.

In short, permaculture is a tool for sustainability. The designs are intended to meet the needs of humans while simultaneously supporting the health of the environment. The principles are based on a respectful approach to others. In Hort Newsletter 2024 we will share various strategies that can be implemented into your landscape to grow towards sustainability.

Designing your Landscape



This is a great time to be making plans for the upcoming growing season. As you're selecting plants and designing your landscape, don't forget to check out the resources you have available.

From the K-State Horticulture Resource Center website (https://hnr.k-state.edu/extension/horticulture-resource-center/) you can scroll down to locate the link to "Recommended Plants". You'll find a link to "Kansas Roots" which is goldmine for garden planning. Search plants by name

using the plant library or do an advanced search by plant characteristics. You can also find garden centers within your region.

It's always a good idea to start with your local extension office. The experts there are familiar with your regional growing conditions as well as sources for new plants/seeds. Find your extension agency here: https://www.ksre.k-state.edu/about/statewide-locations/

Proper planning is the first step towards a successful growing season. Let us help!



QUESTION of the WEEK

"How do I find out what's going on with the soil in my garden?"

This is a great time to get your soil tested so you're ready for the growing season.

The K-State Research and Extension Soil Testing Lab provides high quality analysis of soil, plant, forage, grain and water for farmers, homeowners and researchers. Visit the <u>Soil Testing Lab</u> site to download the correct form and submit your samples. You will be able to create an account and view your results online.

Have you checked out K-State's <u>Horticulture Resource Center</u>? We are here to help you achieve garden success! Find links to our current and past newsletters, common plant and pest problems, recommended plants and contacts for expert analyses. We can also help you find your local extension office for region-specific advice.

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For questions or further information, contact: cdom@ksu.edu OR cdipman@ksu.edu This newsletter is also available on the World Wide Web at: http://hnr.k-state.edu/extension/info-center/newsletters/index.html

The web version includes color images that illustrate subjects discussed. To subscribe to this newsletter electronically, send an e-mail message to cdom@ksu.edu or cdipman@ksu.edu listing your e-mail address in the message.

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