

Starting Plants from Seed by Paul Winski, Harris County Extension Agent, Horticulture

Happy New Year! Along with the first of the year, many gardeners will be planning their spring vegetable and flower gardens and preparing to sow their seeds. Starting your own plants is inexpensive and allows you to grow the varieties that you choose and that may not be available at the local garden center. Here are some tips to help you successfully sow and grow your plants in 2022.

Seed

There are plenty of sources to purchase seeds and their prices can vary greatly. Producing quality seedlings starts with good seed. Check the seed packet for species, variety expiration date and germination %.



Starting Plants from Seed, cont. by Paul Winski, Harris County Extension Agent, Horticulture

Germination

- **Location** Choose a site that is safe from heavy traffic, pets, cold drafts or excess heat. Avoid placing your trays on windowsills since there can be variations in temperature and light leading to poor germination or poor-quality seedlings.
- Moisture Keep the growing media moist, not wet while the seeds are germinating.
 Seedlings draw energy from nutrients in the seed for germination, no additional fertilizer is needed during this stage.
- **Light** Some seeds require light to germinate while others do not. There are plenty of lighting options to choose from. Grow lights, cool white fluorescent tubes or even LED lighting is available to help with the development of your young seedlings.
- **Heat -** When germinating your seeds indoors, the ambient air temperature should be between 67 72oF. If bottom heat is used, the air temperature can be as low as 60oF. Bottom heat can improve germination success dramatically and result in a uniform crop.
- **Germination Media** The seed starting mix should be sterile, loose, drain well and fine textured. Most mixes will consist of peat moss, vermiculite and perlite. Do not use your garden soil for starting seedlings.
- Containers Sow seeds in small, individual containers or a tray with divided cells. These containers will make planting the seeds easier and allow the root system to develop while minimizing root injury during transplanting. The trays or containers should have drainage holes and be clean to avoid any possible disease problems. Clear plastic domes that fit over the trays allow for light and can also help retain heat and maintain moisture.

Transplanting

 Transplant seedlings that have outgrown their containers into a larger pot. Lift seedlings by their root ball, handle the seedling by its leaves and not the stem, since you can accidently crush it. Once the plant has established itself in this container and developed a healthy root system it will be ready for planting in your garden.

Here are some additional resources on seed starting indoors:

https://extension.unh.edu/resource/starting-plants-seed-fact-sheet https://extension.umn.edu/planting-and-growing-guides/starting-seedsindoors#containers-1178962

https://extension.missouri.edu/publications/g6570

Frost & Freeze Protection

by Brandi Keller, Harris County Extension Agent, Horticulture



It's only January 3rd and we have already had freezing or near-freezing temperatures. In case we have more of these days ahead, here are some tips/resources to protect your plants as best as you can. Remember, it's all on a case-by-case basis and there are no guarantees - except bringing potted plants into a protected garage or the house. We can expect the threat of frost or freeze through February 2nd to March 1st, depending on your location around Harris County.

Frost protection options

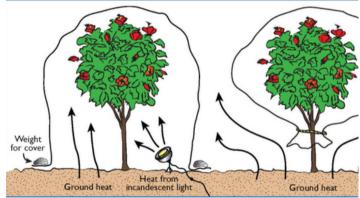
Water if soil is dry.
Cover tops and sides of plants.
Move under cover (eaves, trees, patio)
Move near buildings with heat.
Place bucket of water near plants.

Freeze protection options

Cover plant and secure to the ground. Add source of (safe) heat under cover. Provide a windbreak.

Bank citrus and other plants with soil. Mulch annual, perennial, and tender plants.





Cover partially

Drape or tent the upper/side parts of plants to slow the plant's cooling. Sheets, blankets, boxes, or frost-blankets can be used. Chance of frost increases with cold, clear nights. Moving plants under tables, eaves, covered patios, or larger plants can provide protection needed to prevent frost.

Frost can occur between 33-37° if dew point drops below 32°. Clear nights increase chances.

Cover fully and Heat

The image above can be found on the first resource link. Covering a plant's leaves alone during a freeze will not protect it. Heat needs to be captured and contained by securing the cover to the ground. This can be as simple as covering and forcing ground heat upward toward the plant or adding heat.

Freeze occurs below 32° and a hard freeze at 28° for more than 4 hours. Wind increases threat.

Resources:

<u>Protecting Landscapes and Horticultural Crops from Frosts and Freezes</u>

<u>Cold Weather Damage on Citrus</u>

Watch "How To Make Holiday Plants Last" HERE.

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Q&A

Why water plants before a frost?

Dry soil stresses a plant, causing more damage during a freeze. Water also releases heat during cold periods or overnight.

Can I use plastic to cover plants?

Plastic should not be used alone as it can burn the parts of the plants in which it is touching. However, plastic can be used if then covered with a blanket, as the blanket helps slow radiant cooling. Remove during the day to avoid overheating.

What type of lights can be used safely under coverings?

You don't need to produce a lot of heat, just enough to raise it a couple degrees, depending on the temperature. Holiday string lights accomplish this well, primarily the larger bulbs. A clamp-on floodlight with a heat lamp bulb can also be used.

Citrus Trees

Sweet oranges tend to be more cold-hardy. Cover and add heat to small trees.

Hardy Perennials

Proper mulch will insulate the roots, but decide on what is worth the effort if covering.

Winter Annuals

Cover with frost cloth for both events and survival will increase.













Tender Tropicals

Covering during prolonged freezes will not protect. Extra mulch insulates roots from cold weather.

Native Plants

Native plants have evolved with our region. They are more likely to survive from freeze and frosts.

Vegetables & Herbs

Cool season veggies vary with hardiness, but root crops will have the extra protection of soil, if it doesn't freeze.

Watch "How To Make Holiday Plants Last" HERE.

The Home Grown Podcast!

The Home Grown podcast is presented by the Agriculture & Natural Resources (ANR) Unit of the Harris County Texas A&M AgriLife Extension office. The series provides information on urban agriculture / horticulture / gardening and ag literacy. The program focuses on topics that are relevant to the urban gardener.

Episode #1

In Episode 1 we'll be talking to the Harris County Texas A&M AgriLife Extension Agents: Paul Winski, Brandi Keller and Shannon Dietz.

Episode #2

A visit with Bill Barr - mentor, friend and plant propagator/plantsman extraordinaire.

Episode #3

In this episode, Brandi Keller visits with Harris County Master Gardener, William Isbell.

Episode #4

In this episode, Shannon talks with Janna Roberson, the executive director of Urban Harvest in Houston, TX.

Episode #5

In this episode, Paul talks with Robert Grove, the general manager of the greenhouse operation at the Brookwood Community in Brookshire, Texas.

Episode #6

In this episode, Brandi visits with Diana Foss, Urban Biologist for Texas Parks and Wildlife.

Episode #7

Shannon talks with Harris County Deputy Daniel Cline on this episode of the Home Grown Podcast.

Episode #8

Paul talks with Dr. Sonja Davis & Amanda Krippel (Harris County FCH Agents, Texas A&M AgriLlfe Extension)

How do you access the podcast?

Click on the image below or go to https://www.buzzsprout.com/1791415. You can also search "Home Grown" where ever you find your podcasts.



Harris County
Extension Agents

Horticulture
Paul Winski
Brandi Keller
Ag/Natural Resources
Shannon Dietz

2022 HOME GROWN LECTURE SERIES



Lectures will be on the first Thursday of each month and include live demonstrations.

Register now so you don't miss one!

Winter

STARTING PLANTS FROM SEEDS

Paul Winski - Texas A&M AgriLife Harris County Extension Agent-Horticulture

January 6, 2022 - 10:00 a.m.

BASIC GRAFTING TECHNIQUES

Shannon Dietz - Texas A&M AgriLife Harris County Extension Agent-Agriculture and Natural Resources

February 3, 2022 - 10:00 a.m.

TOMATOES FOR THE PATIO

Brandi Keller - Texas A&M AgriLife County Extension Agent-Horticulture

March 3, 2022 - 10:00 a.m.

Summer

IDENTIFYING PEST & DISEASE ISSUES IN THE GARDEN

Paul Winski - Texas A&M AgriLife Harris County Extension Agent-Horticulture

July 7, 2022 - 10:00 a.m.

SAFETY IN THE HOME GARDEN

Shannon Dietz - Texas A&M AgriLife Harris County Extension Agent-Agriculture and Natural Resources

August 4, 2022 - 10:00 a.m.

ALL ABOUT MINT

Brandi Keller - Texas A&M AgriLife County Extension Agent-Horticulture

September 1, 2022 - 10:00 a.m.

Spring

STARTING PLANTS FROM CUTTINGS

Paul Winski - Texas A&M AgriLife Harris County Extension Agent-Horticulture

April 7, 2022 - 10:00 a.m.

HOME BUTCHER: MAKING BOUDIN

Shannon Dietz - Texas A&M AgriLife Harris County Extension Agent-Agriculture and Natural Resources

May 5, 2022 - 10:00 a.m.

10 REASONS FOR YELLOWING LEAVES

Brandi Keller - Texas A&M AgriLife County Extension Agent-Horticulture

June 2, 2022 - 10:00 a.m.

Fall

PROPER PRUNING IN THE LANDSCAPE

Paul Winski - Texas A&M AgriLife Harris County Extension Agent-Horticulture

October 6, 2022 - 10:00 a.m.

HOLIDAY MEATS - NOT JUST TURKEY!

Shannon Dietz - Texas A&M AgriLife Harris County Extension Agent-Agriculture and Natural Resources

November 3, 2022 - 10:00 a.m.

PLANTABLE CHRISTMAS TREE ALTERNATIVES

Brandi Keller - Texas A&M AgriLife County Extension Agent-Horticulture

December 1, 2022 - 10:00 a.m.

Registration



homegrown2022.eventbrite.com



HARRIS COUNTY MASTER GARDENERS

2022 PLANT SALES

6 Sales - 2 Locations Including activities for families!

For more information go to: hcmga.tamu.edu/plant-sales/
Times for all sales - 9am-1pm or while supplies last.

SOUTHEAST SALE

Genoa Friendship Garden 1210 Genoa Red Bluff Houston 77034 <u>Map for Directions</u>

February 19th-21st Tomato Sale

March 19th-21st Fruit Tree Sale

April 16-18th
Spring Vegetables &
Peppers Sale

May 14-16th Perennials & Herb Sale



Online & in-person sales!
Online sales begin Feb 7th

NORTHWEST SALE

Weekley Park 19110 Longenbaugh Cypress 77433 <u>Map for Directions</u>

February 5th
Fruit Tree & Tomato

April 9th
Spring Perennial,
Veggie & Herb Sale

In-person only!















Harris County ANR Annual Vegetation Management Conference

FRIDAY, JANUARY 14, 2022 8:00am - 3:00pm (Light breakfast & Lunch included)

> Baytown Community Center 2407 Market Street Baytown, TX 77520



Each location will offer 5 CEU credits (*Pending TDA approval)
Check-In Time: 8:00 AM - 9:00 AM
Classes start promptly at 9:00 AM

Early Bird registration begins on <u>December 11th</u>
with a reduced price of <u>\$50</u>.
Regular registration price of <u>\$60</u> begins on <u>December 26th.</u>

Click here to register at https://vegmanagementconf-baytown2022.eventbrite.com/

The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic formation, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&m AgriLife. Individuals with disabilities who require an auxiliary aid, service, or accommodation in order to participate in this meeting are encouraged to contact the County Extension Office prior to the meeting to determine how reasonable accommodations can be made.





Harris County ANR Annual Vegetation Management Conference

WEDNESDAY, JANUARY 19, 2022 8:00am - 3:00pm (Light Breakfast & Lunch included)

Harris County Precinct 4
Tomball Service Center
14444 Holderrieth Rd
TOMBALL, TX 77377



Each location will offer 5 CEU credits (*Pending TDA approval)
Check-In Time: 8:00 AM - 9:00 AM
Classes start promptly at 9:00 AM

Early bird registration will begin on <u>December 11th</u> with a reduced price of <u>\$50</u>.

Regular registration price of <u>\$60</u> begins on <u>December 26th</u>.

Click here to register at https://vegmanagementconf-houston2022.eventbrite.com

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Contact Us



Brandi Keller, County Extension Agent Horticulture -Brandi.keller@ag.tamu.edu

<u>Shannon Dietz - County Extension Agent</u> <u>AG/NR - Shannon.Dietz@ag.tamu.edu</u>

Social Media/Websites

Harris County Horticulture Facebook

Horticulture YouTube Channel

Harris County Master Gardeners Facebook

Harris County Ag & Natural Resources Facebook

Harris County AgriLife Website

If you would like to *unsubscribe* from the Home Grown newsletter, please email Susan Hubert at susan.hubert@ag.tamu.edu





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