

Posse+Plus, Wood County Texas

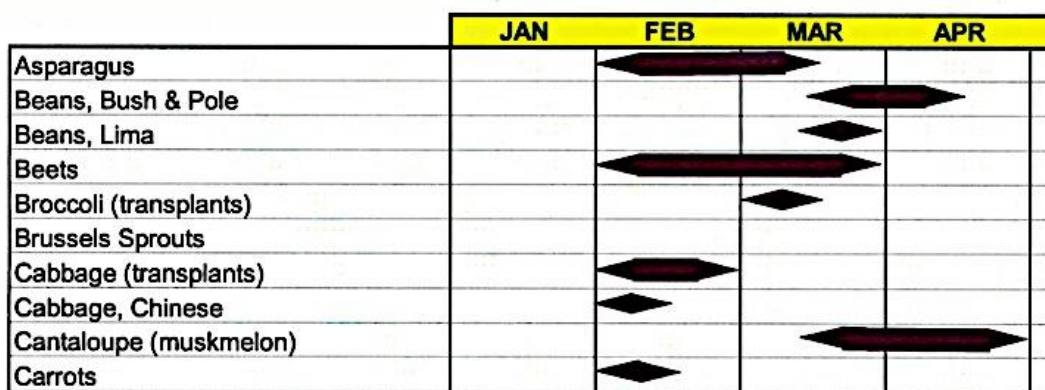
Planting Vegetable Gardens

Vegetable Garden Planting Guide, Tyler Texas

One of the most important considerations when planting a spring garden is the last freeze date in early spring. Many gardeners use local planting charts designed for their specific area.

Vegetable Garden Planting Guide

for the Tyler Area



Average last spring freeze date 3/15 - Average first fall freeze date 11/15

(Full Vegetable Garden Planting Guide on page 24)

This Vegetable Garden Planting Guide was developed for Tyler, Texas using average weather data before 2013. Weather data changes over time and below is the 2023 average freeze data.

Tyler Texas Weather Station Freeze Data

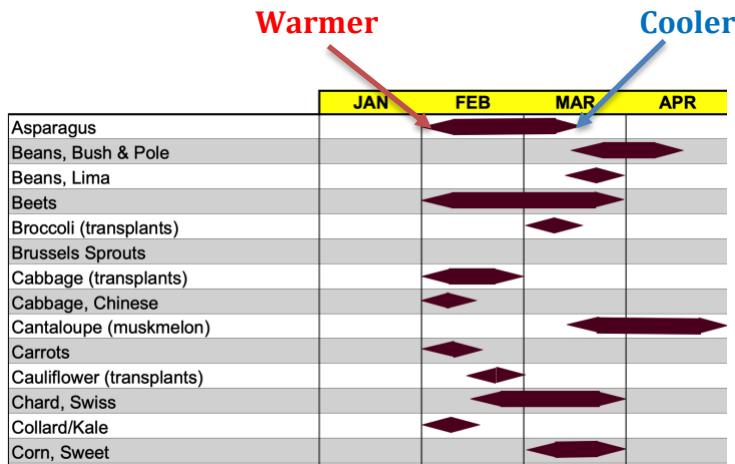
Freeze Data

	First Freeze (≤32 °F)	Last Freeze (≤32 °F)
Average	26 November	02 March
Earliest	29 October (2017)	27 January (2017)
Latest	5 January (2016)	27 March (2013)

The Vegetable Garden Planting Guide for Tyler Texas lists the last average spring freeze date as March 15. This was an accurate average when the planting guide was developed in 2013.

Current weather data from the [Tyler Texas Weather website](#) lists March 2 as the last average spring freeze date. The earliest last freeze date is January 27 but the latest last freeze date is March 27. That is a two-month difference. This variability can make it difficult to determine when to plant a spring garden.

Planting Guide Average Last Freeze Date	Planting Guide Average First Freeze Date	Planting Guide Average Growing Season
March 15	November 15	245 Days
Updated 2023 Average Last Freeze Date	Updated 2023 Average First Freeze Date	Updated 2023 Average Growing Season
March 2	November 26	269 Days

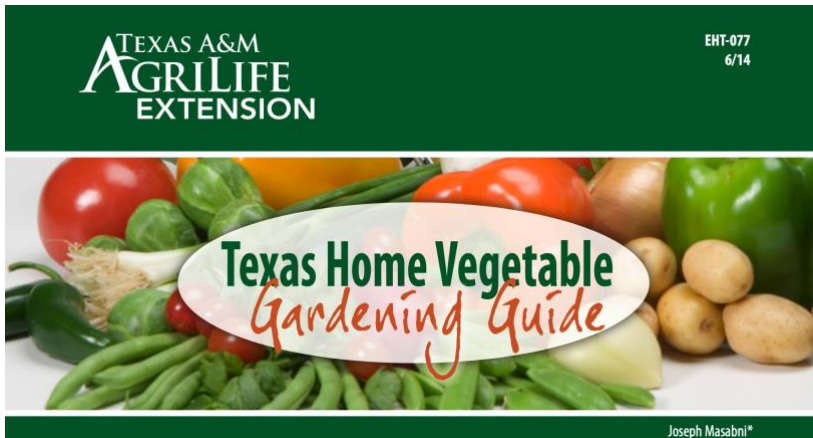


When spring temperatures are warmer than normal use the early marginal and optimal dates for planting.

When spring temperatures are cooler than normal use the late marginal and optimal dates for planting.

Texas Home Vegetable Gardening Guide

<https://agrillifeextension.tamu.edu/wp-content/uploads/2023/08/EHT-077-texas-home-vegetable-gardening-guide.pdf>



The *Texas Home Vegetable Gardening Guide* is a great resource. It can be downloaded at the link above.

Garden Site

Although many urban gardeners have little choice, selecting a garden site is extremely important. The ideal garden area

gets full or nearly full sunlight and has deep, well-drained, fertile soil. The garden should be near a water outlet but not close to competing shrubs or trees. However, if you modify certain cultural practices and select the right crops, almost any site can become a highly productive garden.

Table 1. Home garden vegetables.			
Small gardens		Large gardens	
Beets	Green bean	Cantaloupe	Potato
Broccoli	Lettuce	Cauliflower	Pumpkin
Bush squash	Onion	Collard	Southern pea
Cabbage	Parsley	Cucumber	Sweet corn
Carrot	Pepper	Mustard	Sweet potato
Eggplant	Radish	Okra	Watermelon
English pea	Spinach		
Garlic	Tomato		

Table 2. Light requirements of common vegetables.		
Require bright sunlight		
Bean	Eggplant	Potato
Broccoli	Okra	Pumpkin
Cantaloupe	Onion	Squash
Cauliflower	Pea	Tomato
Cucumber	Pepper	Watermelon
Tolerate partial shade		
Beet	Collard	Parsley
Brussels sprouts	Kale	Radish
Cabbage	Lettuce	Spinach
Carrot	Mustard	Turnip

Table 3. Maturity rates of common vegetables.		
Quick (30 to 60 days)		
Beets	Mustard	Summer squash
Bush bean	Radish	Turnip
Leaf lettuce	Spinach	Turnip green
Moderate (60 to 80 days)		
Broccoli	Green onion	Parsley
Chinese cabbage	Kohlrabi	Pepper
Carrot	Lima bean	Tomato
Cucumber	Okra	
Slow (80 days or more)		
Brussels sprouts	Cauliflower	Pumpkin
Bulb onion	Eggplant	Sweet potato
Cabbage	Garlic	Tomato
Cantaloupe	Irish potato	Watermelon

Table 4. Ease of transplanting.		
Easily transplanted		
Beet	Cauliflower	Onion
Broccoli	Chard	Tomato
Cabbage	Lettuce	
Require care		
Carrot	Eggplant	Pepper
Celery	Okra	Spinach
Very difficult without using containers		
Bean	Cucumber	Turnip
Cantaloupe	Pea	Watermelon
Sweet corn	Squash	

A gardener needs a plan just as an architect does. Careful planning lessens gardening work and increases the return on your labor.

Table 3 shows the relative maturity rates of various vegetable crops. Long-term crops require a long growing period. Plant them where they won't interfere with the care and harvesting of short-term crops. Plant tall-growing crops (okra, staked tomatoes, pole beans, sweet corn) on the north side of the garden where they will not shade or interfere with the growth of low-growing crops such as radishes, leaf lettuce, onions and bush beans. Group crops according to their rate of maturity so a new crop can be planted to take the place of another as soon as it is removed. When you plant a new crop, it should be totally unrelated to the crop it is replacing. This is called crop rotation. Crop rotation helps prevent the buildup of diseases and insects. For example, follow early beans with beets, squash or bell peppers.

Table 5. Days from planting to emergence under good growing conditions.

Bean	5-10	Cucumber	6-10	Pepper	9-14
Beet	7-10	Eggplant	6-10	Radish	3-6
Broccoli	5-10	Lettuce	6-8	Spinach	7-12
Cabbage	5-10	Okra	7-10	Squash	4-6
Carrot	12-18	Onion	7-10	Tomato	6-12
Cauliflower	5-10	Pea	6-10	Turnip	4-8
Corn	5-8	Parsley	15-21	Watermelon	6-8

Table 7. Common garden problems.

Symptom	Possible causes	Corrective measure(s)
Plants stunted in growth; sickly, yellow color	Not enough soil nutrients or soil pH is abnormal	Use fertilizer and correct pH according to a soil test. Use 2 to 3 pounds of complete fertilizer per 100 square feet in the absence of soil test.
	Plants growing in compacted, poorly drained soil	Modify soil with organic matter or coarse sand.
	Insect or disease damage	Use a regular spray or dust program.
	Iron deficiency	Apply iron to soil or foliage.
Plants stunted in growth; sickly, purplish color	Low temperature	Plant at the proper time. Don't use light-colored mulch too early in the season.
	Low available phosphate	Apply sufficient phosphate at planting.
Holes in leaves; leaves yellowish and dropping, or distorted in shape	Insect damage	Use recommended insecticides at regular intervals.
Plant leaves with spots; dead, dried areas; or powdery or rusty areas	Plant disease	Use resistant varieties; remove diseased plants and use a regular spray program.
Plants wilt even though they have sufficient water	Soluble salts too high or root system damage	Have soil tested. Use soil insecticides, fungicides and resistant varieties.
	Poor drainage and aeration	Add organic matter or sand to the soil.
	Insect or nematode damage	Use recommended varieties and apply soil insecticides or nematicides.
Plants tall, spindly and unproductive	Excessive shade	Relocate to a sunny area. Keep down weeds.
	Excessive nitrogen	Reduce applications of nitrogen
Blossom drop (tomato)	Hot, dry periods	Use mulch and water. Plant heat-tolerant varieties.
	Minor element deficiencies	Use fertilizer containing zinc, iron and manganese.
Failure to set fruit (vine crop)	Poor pollination	Avoid spraying when bees are present.
Leathery, dry, brown blemish on the blossom end of tomato, pepper and watermelon	Blossom end rot	Keep the soil moisture uniform. Avoid overwatering and excessive nitrogen.

Table 8. Vegetable planting.

Vegetables	Seed or plants per 100 feet	Depth of planting (in)	Distance between rows (in)	Distance between plants (in)	Height of crop (ft)	Spring planting relative to frost-free date	Fall planting relative to first freeze date
Asparagus	1 oz seed or 66 plants	1-1½ or 6-8	36-48	18	5	4 to 6 weeks before	not recommended
Beans, snap bush	½ lb seed	1-1½	30-36	3-4	1½	1 to 4 weeks after	8 to 10 weeks before
Beans, snap pole	½ lb seed	1-1½	36-48	4-6	6	1 to 4 weeks after	14 to 16 weeks before
Beans, Lima bush	½ lb seed	1-1½	30-36	3-4	1½	1 to 4 weeks after	8 to 10 weeks before
Beans, Lima pole	¼ lb seed	1-1½	36-48	12-18	6	1 to 4 weeks after	14 to 16 weeks before
Beets	1 oz seed	1	14-24	2	1½	4 to 6 weeks before	8 to 10 weeks before
Broccoli	¼ oz seed	½	24-36	14-24	3	4 to 6 weeks before	10 to 16 weeks before
Brussels Sprouts	¼ oz seed	½	24-36	14-24	2	4 to 6 weeks before	10 to 14 weeks before
Cabbage	¼ oz seed	½	24-36	14-24	1½	4 to 6 weeks before	10 to 16 weeks before
Cabbage, Chinese	¼ oz seed	½	18-30	7-12	1½	4 to 6 weeks before	12 to 14 weeks before
Carrot	½ oz seed	½	14-24	2	1	4 to 6 weeks before	12 to 14 weeks before
Cauliflower	¼ oz seed	½	24-36	14-24	3	not recommended	10 to 16 weeks before
Chard, Swiss	2 oz seed	1	18-30	6	1½	2 to 6 weeks before	12 to 16 weeks before
Collard (Kale)	¼ oz seed	½	18-36	6-12	2	2 to 6 weeks before	8 to 12 weeks before
Corn, sweet	3-4 oz seed	½	24-36	9-12	6	1 to 6 weeks after	12 to 14 weeks before
Cucumber	½ oz seed	½	48-72	8-12	1	1 to 6 weeks after	10 to 12 weeks before
Eggplant	⅛ oz seed	½	30-26	18-24	3	2 to 6 weeks after	12 to 16 weeks before
Garlic	1 lb seed	½	14-24	2-4	1	not recommended	4 to 6 weeks before
Kohlrabi	¼ oz seed	½	14-24	4-6	1½	2 to 6 weeks before	12 to 16 weeks before
Lettuce	¼ oz seed	½	18-24	2-3	1	6 weeks before or 2 weeks after	10 to 14 weeks before
Muskmelon (Cantaloupe)	½ oz seed	1	60-96	24-36	1	1 to 6 weeks after	14 to 16 weeks before

Table 8. Vegetable planting continued.

Vegetables	Seed or plants per 100 feet	Depth of planting (in)	Distance between rows (in)	Distance between plants (in)	Height of crop (ft)	Spring planting relative to frost-free date	Fall planting relative to first freeze date
Mustard	¼ oz seed	½	14-24	6-12	1½	1 to 6 weeks after	10 to 16 weeks before
Okra	2 oz seed	1	36-42	12-24	6	2 to 6 weeks after	12 to 16 weeks before
Onion (plants)	No seed/ 400-600 plants	½	14-24	2-3	1½	4 to 10 weeks before	not recommended
Onion (seed)	1 oz seed	½	14-24	2-3	1½	6 to 8 weeks before	8 to 10 weeks before
Parsley	¼ oz seed	⅛	14-24	2-4	½	1 to 6 weeks before	6 to 16 weeks before
Peas, English	1 lb seed	2-3	18-36	1	2	2 to 8 weeks before	2 to 12 weeks before
Peas, Southern	½ lb seed	2-3	24-36	4-6	2½	2 to 10 weeks after	10-12 weeks before
Pepper	⅛ oz seed	½	30-36	18-24	3	1 to 8 weeks after	12 to 16 weeks before
Potato, Irish	6-10 lb seed	4	30-36	10-15	2	4 to 6 weeks before	14 to 16 weeks before
Potato, sweet	No seed/ 75-100 plants	3-5	36-48	12-16	1	2 to 8 weeks after	not recommended
Pumpkin	½ oz seed	½	60-96	36-48	1	1 to 4 weeks after	12 to 14 weeks before
Radish	1 oz seed	½	14-24	1	½	6 weeks before/ 4 weeks after	1 to 8 weeks before
Spinach	1 oz seed	½	14-24	3-4	1	1 to 8 weeks before	2 to 16 weeks before
Squash, summer	1 oz seed	½	36-60	18-36	3	1 to 4 weeks after	12 to 15 weeks before
Squash, winter	½ oz seed	½	60-96	24-48	1	1 to 4 weeks after	12 to 14 weeks before
Tomato	⅛ oz seed or 50 plants	½ or 4-6	36-48	36-48	3	1 to 8 weeks after	12 to 14 weeks before
Turnip, greens	½ oz seed	½	14-24	2-3	1½	2 to 6 weeks before	2 to 12 weeks before
Turnip, roots	½ oz seed	½	14-24	2-3	1½	2 to 6 weeks before	2 to 12 weeks before
Watermelon	1 oz seed	½	72-96	36-72	1	1 to 6 weeks after	14 to 16 weeks before

Table 9. Vegetable harvest and yield.

Vegetable	Days to harvest	Length of harvest	Yield/100 ft	Approximate planting/person	
				Fresh	Canned/frozen
Asparagus	730	60	30 lb	10-15 plants	10-15 plants
Beans, snap—bush	45-60	14	120 lb	15-16 ft	15-20 ft
Beans, snap—pole	60-70	30	150 lb	5-6 ft	8-10 ft
Beans, Lima—bush	65-80	14	25 lb shelled	10-15 ft	15-20 ft
Beans, Lima—pole	75-85	40	50 lb shelled	5-6 ft	8-10 ft
Beet	50-60	30	150 lb	5-10 ft	10-20 ft
Broccoli	60-80	40	100 lb	3-5 plants	5-6 plants
Brussels Sprouts	90-100	21	75 lb	2-5 plants	5-8 plants
Cabbage	60-90	40	150 lb	3-4 plants	5-10 plants
Cabbage, Chinese	65-70	21	80 heads	3-10 ft	N/A
Carrot	70-80	21	100 lb	5-10 ft	10-15 ft
Cauliflower	70-90	14	100 lb	3-5 plants	8-12 plants
Chard, Swiss	45-55	40	75 lb	3-5 plants	8-12 plants
Collard (Kale)	50-80	60	100 lb	5-10 ft	5-10 ft
Corn, sweet	70-90	10	10 dozen	10-15 ft	30-50 ft
Cucumber	50-70	30	120 lb	1-2 hills	3-5 hills
Eggplant	80-90	90	100 lb	2-3 plants	2-3 plants
Garlic	140-150	N/A	40 lb	N/A	1-5 ft
Kohlrabi	55-75	14	75 lb	3-5 ft	5-10 ft
Lettuce	40-80	21	50 lb	5-15 ft	N/A
Muskmelon/ Cantaloupe	85-100	30	100 fruits	3-5 hills	N/A
Mustard	30-40	30	100 lb	5-10 ft	10-15 ft
Okra	55-65	90	100 lb	4-6 ft	6-10 ft
Onion (bulb)	80-120	N/A	100 lb	3-5 ft	30-50 ft
Onion (seed)	90-120	N/A	100 lb	3-5 ft	30-50 ft
Parsley	70-90	90	30 lb	1-3 ft	1-3 ft
Pea, English	55-90	7	20 lb	15-20 ft	40-60 ft
Pea, Southern	60-70	30	40 lb	10-15 ft	20-50 ft
Pepper	60-90	90	60 lb	3-5 plants	3-5 plants
Potato, Irish	75-100	N/A	100 lb	50-100 ft	N/A
Potato, sweet	100-130	N/A	100 lb	5-10 plants	10-20 plants
Pumpkin	75-100	N/A	100 lb	1-2 hills	1-2 hills
Radish	25-40	N/A	100 bunches	3-5 ft	N/A
Spinach	40-60	40	3 bushels	5-10 ft	10-15 ft

Table 9. Vegetable harvest and yield.

Vegetable	Days to harvest	Length of harvest	Yield/100 ft	Approximate planting/person	
				Fresh	Canned/frozen
Squash, summer	50-60	40	150 lb	2-3 hills	2-3 hills
Squash, winter	85-100	N/A	100 lb	1-3 hills	1-3 hills
Tomato	70-90	40	100 lb	3-5 plants	5-10 plants
Turnip, greens	30	40	50-100 lb	5-10 ft	N/A
Turnip, roots	30-60	30	50-100 lb	5-10 ft	5-10 ft
Watermelon	80-100	30	40 fruits	2-4 hills	N/A

Some Ideas on How to Warm Soil and Protect Seedlings from Frost

Sometimes soil needs help to become warm enough for sowing in spring. Raised beds warm up quickly, so are ideal for the earliest sowings.

Warm your soil by covering it over with black plastic or row covers at least one week before sowing. Peg it down at regular intervals with U-shaped pegs, or weigh the edges down with rocks. Individual plants can be protected with squares of plastic cut to size, or by using purpose-sold cloches. Soil temperatures beneath will rise by a couple of degrees, making all the difference for early sowings.

You can also make your own cloches. Use sharp scissors to cut a bottle in half, then place the top half over your seedling. Leave the lid off on sunny days. You can use the bottoms of the bottles too – just cut a hole in the base for ventilation. Push your bottle cloches into the soil or hold them in place with a cane to stop them blowing away.

Surround plants with water-filled bottles, which will absorb heat during the day then release it at night, warming the air around your plants. This is especially effective within a greenhouse, tunnel or cold frame.

You can also fill plastic bottles with hot water on cold nights to protect seedlings. Cluster your seedlings into a confined place such as a cold frame, fill gallon-sized bottles with hot water and place these into the cold frame with your seedlings. The radiated heat from the bottle will lift the temperature inside by a few degrees.

Polystyrene boxes, such as those used in fish markets, shield your seedlings from extreme temperature fluctuations. At night, simply put the lid on or lay a sheet of glass or a doubled-up layer of fabric over the top. Or even better, make a portable cold frame by slotting lengths of plastic pipe into the corners of the box, then simply pull row cover plastic over the top.

How To Test Seed Germination with A Simple Viability Test

<https://getbusygardening.com/how-to-test-viability-of-old-seeds/>

Published on February 8, 2018 Updated on February 9, 2023 By Amy Andrychowicz

When you have a bunch of old packets lying around, how do you know if the seeds are still good? Perform a seed viability test! In this post I will show you exactly how to test the viability of seeds using a simple germination test method.

If you enjoy growing seeds, you know that you hardly ever use up every packet. It's nice to build up a stash, and to be able to keep them for a few years after you buy them.

Not only is it less wasteful, it's a money saver too! I always have a nice stash so that I don't have to buy them every year.

But it's also important to understand that seeds don't last forever. There's no way to know if they are still good just by looking at them either – you have to do a seed viability test.

Before we dive into the steps for testing the viability of your seeds, let me define some technical terms for you...

What Does Viability Mean?

Seed viability basically means the seed is alive and able to germinate and grow into a plant. If a seed is not viable, that means the seed is dead and it will never grow.

Why Are Some Seeds Viable and Others Are Not?

Well, sometimes seeds aren't mature enough to become viable because they were harvested too early, or maybe they were harvested from sterile plants, or maybe the plant was never pollinated.

Other times it's because seeds lose their viability over time, and many types old seeds won't germinate.

Seed Viability and Germination

Seed viability and germination go hand in hand. The more viable a seed is, the higher its germination rate will be.

This is important to understand because we only want to use good seeds with high germination rates for seed starting, otherwise we'll waste our time (and money) planting seeds that will never grow.

And this is why it's important to always test viability of garden seeds before you plant them so you don't waste time planting bad seeds.

How Long Do Seeds Last?

One of the most common questions I get from new gardeners is how long do seeds last?. Unfortunately, there's not a set amount of time that seeds will last.

It depends on the type of seed, and can also depend on how they are stored. Many seeds can be stored for several years, even decades, while others will only be viable for one or two years.

But one thing is for sure, seeds don't last forever. The good news is that you can use this simple viability test for any type of garden seed you want.



What Is a Seed Viability Test?

A seed viability test (aka seed germination test) is basically just a way to figure out if your old seeds will grow by testing seeds for germination.

Performing a seed viability test is really the only way you'll reliably be able to tell if seeds are viable.

It's very easy to do, and something you should definitely get into the habit of doing every year if you have old seeds, or have collected seeds from your garden.

How To Test Viability of Garden Seeds

A standard germination test on older seeds can be done using the paper towel germination and baggie test. This is one of the most common methods of testing viability of seeds.

Sprouting seeds in wet paper towels is super easy, and doesn't take very long. Plus, you don't have to worry that your sample seeds will go to waste, because you can plant the seeds that have germinated in the paper towel.

Supplies Needed for Your Paper Towel Test:

Don't worry, you don't need any fancy germination test equipment for this, you can use items you already have around the house.

- *Zipper baggie (I like to use the snack sized baggies, but the sandwich baggies also work great)*
- *Paper towels*
- *Old seeds*
- *Sharpie marker or paint pen*
- *Water*



Steps For the Paper Towel Germination & Baggie Test

You can use as many seeds as you want for the seed testing, but I recommend using ten sample seeds for easy math. However, if you don't have that many seeds to spare, then you can use fewer seeds.

But I wouldn't use less than five seeds otherwise your seed viability test won't be very accurate. Here's how to germinate

seeds in a paper towel with the baggie test, step-by-step...

Step 1: Prepare the paper towel – One or two wet paper towels will be sufficient for the test.

Wet down the paper towel, wring it out a little and lay it on a flat surface (you want it damp but not dripping with water, so don't ring out all the water).



Step 2: Place sample seeds on the wet paper towel – Nothing fancy here, you can simply lay the seeds on top of the wet paper towel, just make sure they aren't touching each other.

Step 3: Fold the paper towel – Carefully fold the seeds into the paper towel, and gently press down to ensure the towel comes in contact with the seeds (so there aren't any air bubbles in there).

Step 4: Label the plastic bag – Use a paint pen or permanent marker to write the name of the seeds you're testing on the baggie (and the date if you're starting your seed viability tests on different days).



Step 5: Put the paper towel into the bag – Place the folded moist paper towel with the seeds in it into the baggie, and zip up the bag.

Step 6: Add heat – Put your seed viability test bags in a warm location (out of direct sunlight). The top of the refrigerator, next to a heat vent, or on top of a seed starting heat mat would be good places.

Now that you've got your seed viability test set up, forget about it for a few days. Then check the seeds every couple of days to see if any have germinated.

You can usually tell if any seeds have germinated by looking through the baggie, but sometimes you have to remove the paper towel and carefully unfold it to check the seeds.



Bean seed germination after three days

Keep in mind that some seeds take longer to germinate than others, so be patient.

In my seed viability test, it only took a couple of days for the green bean seeds to start germinating. But green beans are fast growing seeds.



Testing viability of old pepper seeds

My marigold seeds and pepper seeds on the other hand were much slower to germinate, and I didn't see signs of life until the sixth day of my seed viability test.

Most seeds will start to germinate within a week to ten days, but let them sit in the baggie for at least two weeks before you give up.

Each time you check your seeds, make sure the paper towel isn't drying out. You never want the paper towel to dry out or it will impact the results of the germination test.

If your paper towel looks like it's drying out, then you can just add a little bit of water into the baggie to wet it again.

If you're planning to plant your sample seeds, then I recommend removing each one that has germinated and planting it in soil right away.

Otherwise, the sprouted seeds could start to mold or rot if they're left inside the baggie for too long.



Sample green bean seeds have all germinated

How To Tell If Seeds Are Good or Bad

Use this seed viability chart to check how good your seeds are. This chart is if you used ten seeds for your seed viability test. Otherwise, you can adjust the math if you used a different amount of seeds.

Viability Of Seeds Chart

10 seeds germinated = 100% viable

8 seeds germinated = 80% viable

5 seeds germinated = 50% viable

1 seed germinated = 10% viable

You get the picture. So, after you test viability of garden seeds, you can plan to start more seeds to compensate for the low viability of old seeds.

Plan to start more of the seeds with a lower germination rate (or toss them out and buy new seeds).

For example, if your seed germination percentage test rate is only 50%, then you should plant twice as many seeds than you need to ensure you're planting a decent number of viable seeds.

If your seed germination percentage rates are in the 80-100% range, then you know the seed quality is good, so you can plant less of those seeds.

Otherwise, if you don't want to mess with it, then I would consider any seed germination test that results in less than a 50% viability rate bad seed that can just be tossed out.



Old seed packets

As for the test results of germinating old seeds from my stash... the green bean seeds were 100% viable, the marigold seeds were 60% viable, and my pepper seeds were 80% viable.

Pretty good results for a bunch of old seeds – and that means I won't have to buy seeds this year!

After you're done with your seed viability test, you can plant the seeds that germinated if you want to. Just be careful not to break off any of the delicate roots.

What To Do If Seeds Don't Germinate

Like I said above, be sure to give it a couple of weeks to allow slower seeds to germinate before giving up on your seed viability testing efforts.

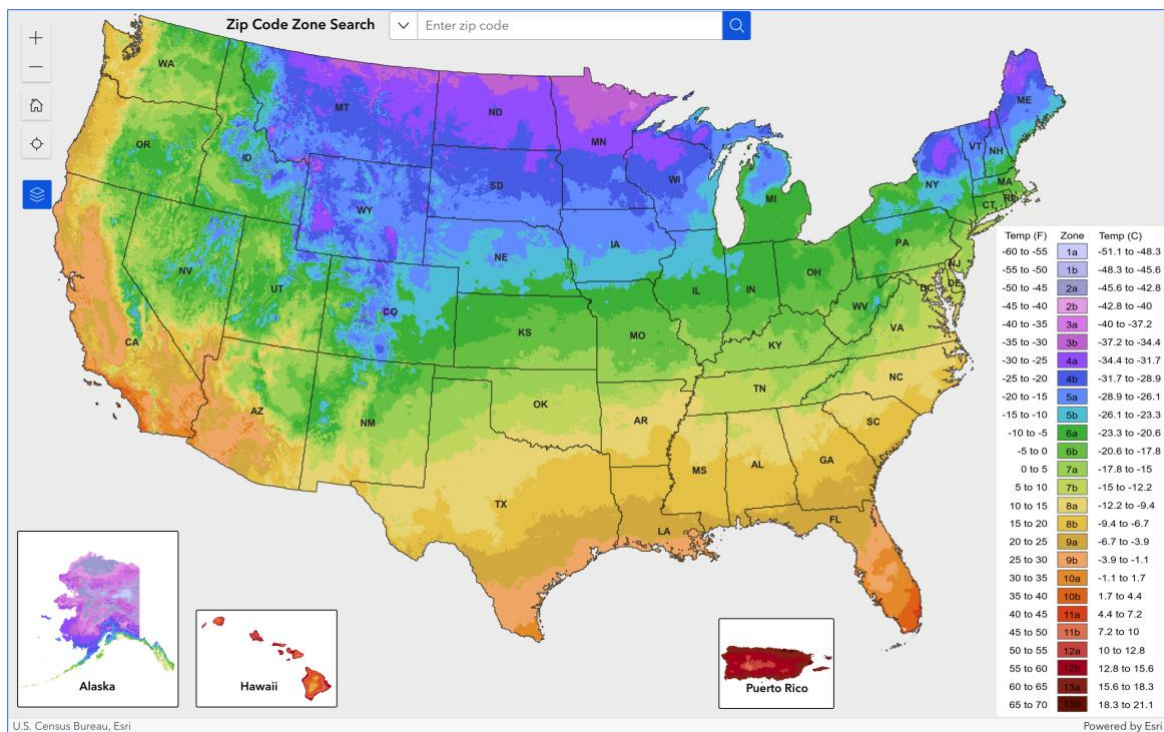
But, if the seeds are not germinating in the paper towel after 4-6 weeks, or the seeds are rotting, then you can either throw away those old seeds, or you can try testing another batch.

If you're trying to grow a type of seed that's rare or hard to find, then I would try germinating another batch. You could also use the paper towel method on all of the seeds you have left, and then plant any of them that germinate.

If you like to save seeds from your garden, or have a stash of old seeds sitting around, take the time to do this simple germination test on them.

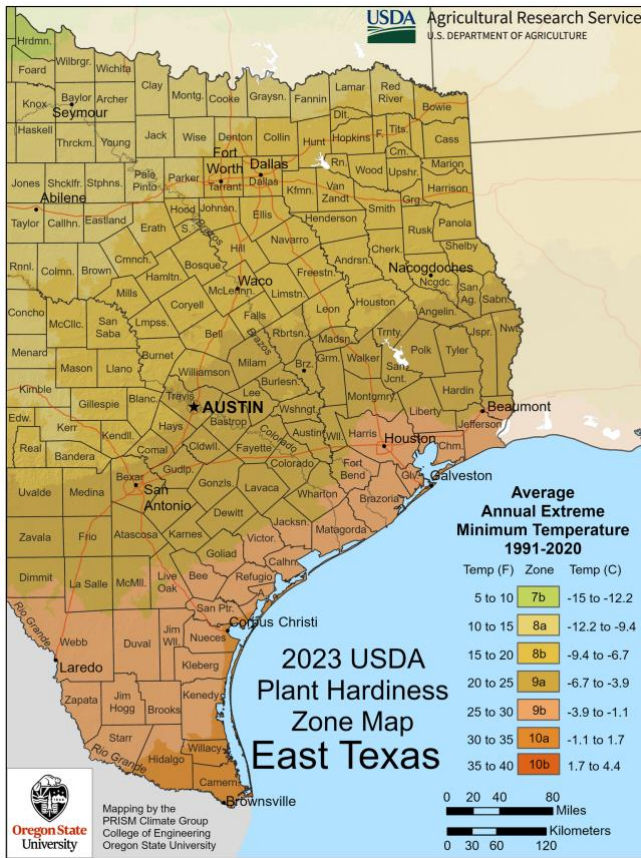
Remember, seeds don't last forever, so it's best to test viability of garden seeds to make sure you're not wasting your time and money planting bad seeds.

2023 USDA Plant Hardiness Zone Map



<https://planthardiness.ars.usda.gov/>

The USDA Plant Hardiness Zone Map is the standard by which gardeners and growers can determine which perennial plants are most likely to thrive at a location. The map is based on the average annual extreme minimum winter temperature, displayed as 10-degree F zones and 5-degree F half zones.



The new 2023 plant hardiness zone for Wood County Texas is **8b**. Use when selecting perennial vegetables such as artichokes, asparagus, broccoli, spinach, sweet potatoes, and watercress. Also used when choosing fruit and nut varieties.

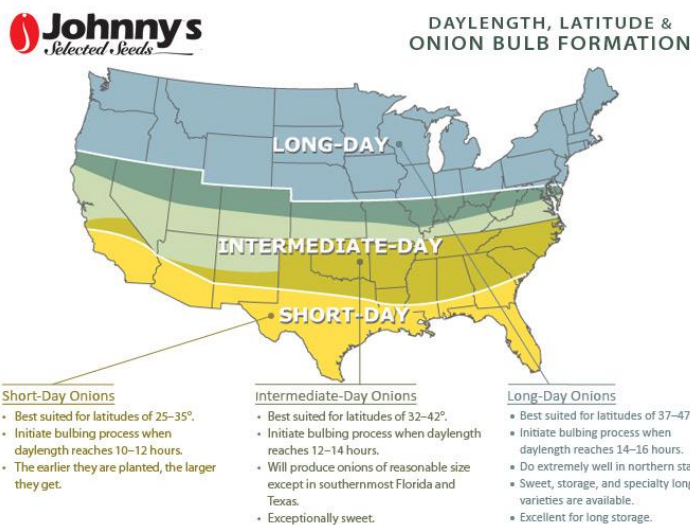
All Plant Hardiness Zone Maps (PHZM) should serve as **general guides for growing perennial plants**. They are based on the average lowest temperatures, not the lowest ever. Zones in this edition of the USDA PHZM are based on 1991-2020 weather data. This does not represent the coldest it has ever been or ever will be in an area, but it simply is the average lowest winter temperatures for a given location for this 30-year span (1991-2020).

Consequently, growing plants at the extreme range of the coldest zone where they are adapted means that they could experience a year with a rare, extreme cold snap that lasts just a day or two, and plants that have thrived

happily for several years could be lost.

A Word About Onions

Bulb onions depend on the number of sunlight hours to form bulbs. Northern latitudes have more daylight hours in the summer than southern latitudes. Choose short day onions for Wood County for best results.



Short day (11–12-hour day length)	
Yellow	Chula Vista, Cougar, Jaguar, Legend, Linda Vista, Mercedes, Prowler, Safari, Sweet Sunrise, TX 1015Y, Early Grano 502, Granex
White	Cirrus, Marquesa, TX Early White, Crystal Wax
Red	Red Bone, Rio Santiago, Sakata Red, Red Burgandy
Intermediate day (12–13-hour day length)	
Yellow	Caballero, Cimarron, Riviera, Utopia, Yula
White	Alabaster, Mid Star, Sierra Blanca, Spano
Red	Fuego
Long day (14–16-hour day length)	
Yellow	Armada, Capri, Durango, El Charo, Ole, Seville, Sweet Perfection, Valdez, Vaquero, Vega
White	Blanco Duro, Sterling, White Spanish Sweet
Red	Tango

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VEGETABLE GARDENING IN CONTAINERS

Joseph G. Masabni*

If your vegetable gardening is limited by insufficient space or an unsuitable area, consider raising fresh, nutritious, homegrown vegetables in containers. A window sill, a patio, a balcony or a doorstep will provide sufficient space for a productive mini-garden. Problems with soilborne diseases, nematodes, or poor soil conditions can be easily overcome by switching to a container garden. Ready access to containers means that pest management is easier. Container vegetable gardening is a sure way to introduce children to the joys and rewards of vegetable gardening.



Small fruited tomato varieties make excellent hanging baskets.

CROP SELECTION

Almost any vegetable that will grow in a typical backyard garden will also do well as a container-grown plant. Vegetables that are ideally suited for growing in containers include tomatoes, peppers, eggplant, green onions, beans, lettuce, squash, radishes, and parsley. Pole beans and cucumbers also do well in this type of garden, but they do require considerably more space because of their vining growth habit.

Variety selection is extremely important. Most varieties that will do well when planted in a yard garden will also do well in containers. Some varieties of selected vegetables, which are ideally suited for these mini-gardens, are indicated in Table 1.

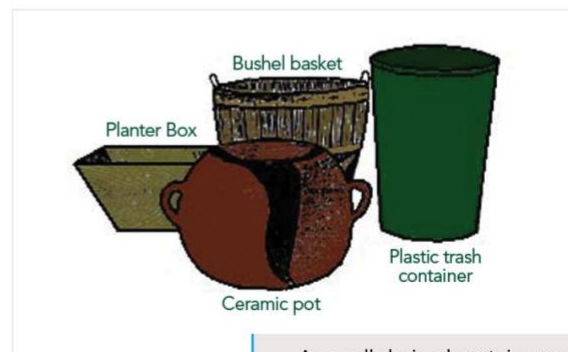
GROWING MEDIA

Any growing media must provide water, nutrients, and a physical support in order to grow healthy plants. A good growing media must also drain well. Synthetic or

soiless mixes are well suited for vegetable container gardening and may be composed of sawdust, wood chips, peat moss, perlite, or vermiculite. These are free of disease and weed seeds, hold moisture and nutrients but drain well and are lightweight. Many synthetic soil mixes such as Jiffy Mix®, Bacto®, Promix®, and Jiffy Pro® are available at garden centers. Soiless mixes can also be prepared by mixing horticultural grade vermiculite, peat moss, limestone, superphosphate and garden fertilizer. To 1 bushel each of vermiculite and peat moss, add 10 tablespoons of limestone, 5 tablespoons of 0-20-0 (superphosphate), and 1 cup of garden fertilizer such as 6-12-12 or 5-10-10. Mix the material thoroughly while adding a little water to reduce dust. Wet the mix thoroughly before seeding or transplanting. Soil mixes are made up of equal parts of sphagnum peat moss or compost, pasteurized soil, and vermiculite or perlite. Composted cow manure is then added to improve the soil's physical properties and as a nutrient source. Soil mixes tend to hold water better than soiless mixes.

CONTAINERS

Almost any type of container can be used for growing vegetable plants. For example, try using bushel baskets, drums, gallon cans, tubs, or wooden boxes. The size of the container will vary according to the crop selection and space available. Pots from 6 to 10 inches in size are



Any well-drained container can become a productive mini-garden.

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TABLE 1. VARIETIES FOR CONTAINER GROWN VEGETABLES

Broccoli (2 gallons, 1 plant)	Packman, Bonanza, others
Carrot (1 gallon, 2 to 3 plants. Use pots 2 inch deeper than the carrot length)	Scarlet Nantes, Gold Nugget, Little Finger, Baby Spike, Thumbelina
Cucumber (1 gallon, 1 plant)	Burpless, Liberty, Early Pik, Crispy, Salty
Eggplant (5 gallons, 1 plant)	Florida Market, Black Beauty, Long Tom
Green Bean (2 gallons minimum, space plants 3 inches apart)	Topcrop, Greencrop, Contender, (Pole) Blue Lake, Kentucky Wonder
Green Onion (1 gallon, 3 to 5 plants)	Beltsville Bunching, Cystal Wax, Evergreen Bunching
Leaf Lettuce (1 gallon, 2 plants)	Buttercrunch, Salad Bowl, Romaine, Dark Green Boston, Ruby, Bibb
Parsley (1 gallon, 3 plants)	Evergreen, Moss Curled
Pepper (5 gallons, 1 to 2 plants)	Yolo Wonder, Keystone Resistant Giant, Canape, Red Cherry (Hot), Jalapeno
Radish (1 gallon, 3 plants)	Cherry Belle, Scarlet Globe, (white) Icicle
Spinach (1 gallon, 2 plants)	Any cultivar
Squash (5 gallons, 1 plant)	Dixie, Gold Neck, Early Prolific Straightneck, Zucco (Green), Diplomat, Senator
Tomato (5 gallons, 1 plant)	Patio, Pixie, Tiny Tim, Saladette, Toy Boy, Spring Giant, Tumbling Tom, Small Fry
Turnip (2 gallons, 2 plants)	Any cultivar

satisfactory for green onion, parsley, and herbs. For most vegetable crops such as tomatoes, peppers, and eggplant, you will find that 5 gallon containers are the most suitable size, while 1 to 2 gallon containers are best for chard and dwarf tomatoes. Smaller container sizes are appropriate for herbs, lettuce, and radish crops. They are fairly easy to handle and provide adequate space for root growth.

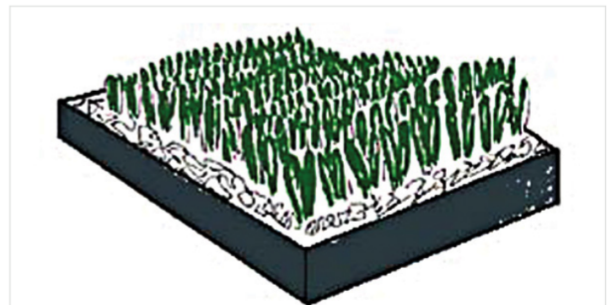
Container materials are either porous or non-porous. Glazed, plastic, metal, and glass containers are non-porous. Regardless of the type or size of container used it must drain adequately for successful yields. Adding about 1 inch of coarse gravel in the bottom of the container will improve drainage. The drain holes work best when they are located along the side of the container, about ¼-inch to ½-inch from the bottom.

SEEDING AND TRANSPLANTING

Vegetables that can be easily transplanted are best suited for container culture. Transplants may be purchased from local nurseries or can be grown at home. Seeds can also be germinated in a baking pan, plastic tray, pot, or even a cardboard milk carton. Fill the container with the media described above and cover most vegetable seed with ¼-inch to ½-inch of media to insure good germination. Another method is to use peat

pellets or peat pots, which are available from nursery supply centers. Landscape cloth or screen in the bottom of the pot will improve drainage and invigorate plant growth.

The seed should be started in a warm area that receives sufficient sunlight about 4 to 8 weeks before you plan to transplant them into the final container. Most vegetables should be transplanted into containers when they develop their first two to three true leaves. Transplant the seedlings carefully to avoid injuring the young root system. (See Table 2 for information about different kinds of vegetables.)



Green onions, radishes, or beets can be grown in a cake pan.

TABLE 2. PLANTING INFORMATION FOR GROWING VEGETABLES IN CONTAINERS

Crop	Number of days for germination	Number of weeks to optimum age for transplanting	General size of container	Amount of light* required	Number of days from seeding to harvest
Beans	5-8	-	Medium	Sun	45-65
Cucumbers	6-8	3-4	Large	Sun	50-70
Eggplant	8-12	6-8	Large	Sun	90-120
Lettuce, leaf	6-8	3-4	Medium	Partial Shade	45-60
Onions	6-8	6-8	Small	Partial Shade	80-100
Parsley	10-12	-	Small	Partial Shade	70-90
Pepper	10-14	6-8	Large	Sun	90-120
Radish	4-6	-	Small	Partial Shade	20-60
Squash	5-7	3-4	Large	Sun	50-70
Tomato	7-10	5-6	Large	Sun	90-130

*All vegetables grow best in full sunlight, but those indicated will also do well in partial shade.

FERTILIZATION

Available fertilizers will be either time-release or water soluble. Time-release fertilizer is mixed with the potting media at planting time. Osmocote® is a pelleted time-release fertilizer with 14-14-14 formulation. Water soluble fertilizers, on the other hand, are added to water and used when plants begin to grow actively. Peters® 20-20-20 or Miracle Gro® 15-30-15 are two examples sold in most garden centers.

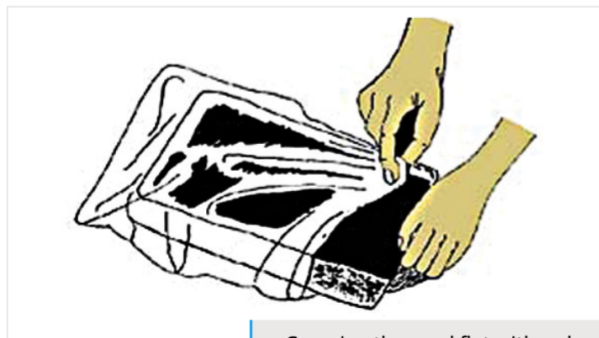
The easiest way to add fertilizer to plants growing in containers is to prepare a nutrient solution and then pour it over the soil mix. There are many good commercial fertilizer mixes available to make nutrient solutions. Always follow the application directions on the label. You can make a nutrient solution by dissolving 2 cups of a complete fertilizer such as 10-20-10, 12-24-12, or 8-16-8 in 1 gallon of warm tap water. This mixture is highly concentrated and must be diluted

before it can be used to fertilize the plants. To make the final fertilizing solution, mix 2 tablespoons of the concentrated solution in 1 gallon of water.

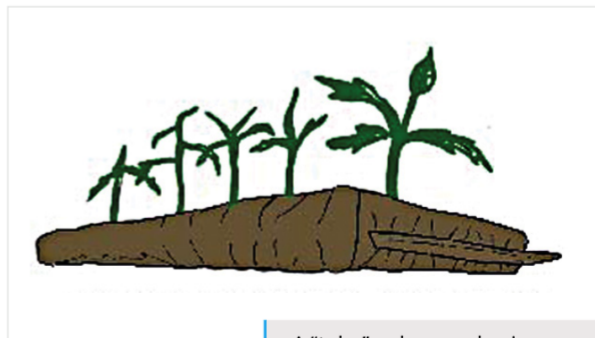
If you use transplants, begin watering with the nutrient solution the day you set them out. If you start with seed, apply only tap water to keep the soil mix moist enough until the seeds germinate. Once the plants emerge, begin using the nutrient solution.

While the frequency of watering will vary from one crop to the next, usually once per day is adequate. If the vegetable produces a lot of foliage, twice a day may be necessary. Plants require less water during periods of slow growth.

At least once a week, it is advisable to leach the unused fertilizer out of the soil mix by watering with tap water. Add enough water to the container to cause free drainage from the bottom. This practice will flush harmful minerals out of the the soil mix.



Covering the seed flat with a clear plastic bag will hasten germination.



A "tube" or bag garden is an easy method to grow vegetables.

It is a good idea to occasionally water with a nutrient solution containing minor elements. Use a water-soluble fertilizer that contains iron, zinc, boron, and manganese and follow the label directions carefully.

WATERING

Proper watering is essential for a successful container garden and one watering per day is usually adequate. However, poor drainage will slowly kill the plants. If the mix becomes water-logged, the plants will die from lack of oxygen. Avoid wetting the foliage of plants since wet leaves will encourage plant diseases. Remember to use the nutrient solution for each watering except for the weekly leaching when you will use tap water.

Water-holding gels are becoming popular for use in container gardening. These starch-based gels are called hydrogels. They absorb at least 100-times their weight in water and slowly release that water into the soil as it dries. To be effective, they should be incorporated in the soil mix before planting.

Mulches can also be placed on top of the soil mix to reduce water loss. Compost, straw, pine needles, grass clippings, shredded bark, and moss are examples of mulches and vary in their effectiveness.

LIGHT

Nearly all vegetable plants will grow better in full sunlight than in shade. However, leafy crops such as lettuce, cabbage, greens, spinach, and parsley can tolerate more shade than root crops such as radishes,

beets, turnips, and onions. Fruit bearing plants, such as cucumbers, peppers, tomatoes, and eggplant need the most sun of all. One major advantage to gardening in containers is that you can place the vegetables in areas where they can receive the best possible growing conditions.

HARVESTING

Harvest the vegetables at their peak of maturity when a vegetable's full flavor has developed. Vine-ripened tomatoes, tender green beans, and crisp lettuce will have the best flavor.

At the end of the harvest season, discard the plant and soil from the pot. Do not reuse the same soil for a second season of production. Infected soil or mix will spread disease into the second season unless it is properly composted. Properly composted planting media can be reused.

DISEASES AND INSECTS

Vegetables grown in containers are susceptible to the same insects and diseases that are common to any vegetable garden. You should check your plants periodically for diseases and for foliage and fruit-feeding insects. If you detect plant disease or harmful insects, use EPA-approved fungicides and insecticides in a timely manner. Contact your local county Extension agent for the latest information on disease and insect control on vegetable plants.

TABLE 3. COMMON PROBLEMS IN CONTAINER GARDENING

Symptoms	Cause	Corrective Measure
Plants tall, spindly, and unproductive	Insufficient light	Move container to area receiving more light
	Excessive nitrogen	Reduce feeding intervals
Plants yellowing from bottom, lack vigor, poor color	Excessive water	Reduce watering intervals; check for good drainage
	Low fertility	Increase fertility level of base solution
Plants wilt, although sufficient water present	Poor drainage and aeration	Use mix containing higher percent organic matter; increase number of holes for drainage
Marginal burning or firing of the leaves	High salts	Leach container with tap water at regular intervals
Plants stunted in growth; sickly, purplish color	Low temperature	Relocate container to warmer area
	Low phosphate	Increase phosphate level in base solution
Holes in leaves, leaves distorted in shape	Insects	Use EPA-recommended insecticide
Plant leaves with spots; dead, dried areas, or powdery or rusty areas	Plant diseases	Remove diseased areas where observed and use EPA-recommended fungicide

CONTAINER GARDENING SUCCESS

Container gardening can be successful if you follow guidelines above. Plant growth and vigor will vary depending on the location and attention you give your plants. The following guidelines are golden rules for any home vegetable garden:

1. Inspect your plants daily and, if necessary, water, trim, train or pruning.
2. Check your plants daily and remove of pests and weeds and treat diseases.
3. Continue your education by soliciting advice from experienced gardeners.
4. Make time to sit down and enjoy the fruits of your labor.



A potato bag is a unique way to grow potatoes.



"Cages" can be used with containers to support tomatoes, cucumbers and pole beans.

<https://cdn-de.agrilife.org/extension/departments/hort/hort-pu-090/publications/files/Vegetable-gardening-in-containers.pdf>

Texas A&M Recommended Vegetable Varieties for Wood County Texas

Variety	Days to Harvest	Variety	Days to Harvest	Variety	Days to Harvest
Asparagus		Lettuce		Spinach	
Apollo	300	Butterhead/Bibb		Bloomsdale	45
Atlas	300	Buttercrunch	70	Melody	42
Jersey Gem	300	Esmeralda	55	Space	40
Jersey Giant	300	Crisphead/Iceberg		Tyee	53
Jersey Knight	300	Prizehead	50	Squash	
Purple Passion	300	Looseleaf		Summer	
UC-157	300	Brunia Red	50	Ambassador (Zucchini)	51
Basil		Green Ice	45	Burpee's Butterstick (Yellow, Straightneck)	50
Spicy Globe	88	Red Fire	48	Conqueror III (Yellow, Straightneck)	45
Sweet	88	Red Sails	52	Dixie (Yellow, Cookneck)	45
Bean		Redina	55	Early Yellow (Crookneck)	42
Bush		Salad Bowl (green)	49	Eight Ball Tigress (Zucchini)	35
Blue Lake	60	Vulcan Red	52	Gold Rush (Zucchini)	52
Derby	57	Romaine		Goldbar (Yellow, Straightneck)	43
Dwarf French Tendergreen	55	Freckles	55	Goldrush (Yellow, Straightneck)	52
Early Contender	55	Giant Caesar	70	Horn of Plenty (Yellow, Crookneck)	41
Festina	56	Little Caesar	70	Lioness	50
Florence	60	Plato II	53	Magda (Zucchini)	45
Goldcrop Wax	55	Melon		Multipik (Yellow Straightneck)	50
Improved Golden Wax	52	Cantaloupe		Patty Pan (White, Scallop)	60
Jade	60	Ambrosia	86	Peter Pan (Green, Scallop)	50
Long Tendergreen	50	Caravelle	80	Prelude II (Butternut)	40
Maxibel	60	French Orange	75	President (Zucchini)	49
Nash	54	Magnum 45	80	Senator (Zucchini)	41
Tendercrop	54	Mainstream	90	Sunburst (Scallop)	50
Topcrop	50	Mission	80	Sundance (Yellow)	52
Lima		Perlita	85		
Florida Butter Pole	85	Sugar Queen	85		
Florida Speckled Pole	85	TAM Uvalde	85		
Fordhook	75	Honeydew			
Henderson Bush	65	Honey Girl	75		
Jackson Wonder Bush	65	Honey Star	76		
		Sweet Delight	90		
		TAM Dew	100		

Jackson Wonder Bush	65	TAM Dew	100	Sundance (Yellow)	52
King of the Garden Pole	90	Mustard		Sundrop (Yellow)	62
Sieva or Carolina	80	Florida Broadleaf	40	Sunray (Yellow Straightneck)	50
Pole		Savanna	35	Sweet Gourmet (Zucchini)	50
Kentucky Wonder	60	Southern Giant Curled	50	Winter	
Northeaster	56	Okra		Acorn Types	75
Purple King	75	Cajun Delight	49	Buttercup Types	100
Rattlesnake	63	Clemson Spineless	55	Cream of the Crop	75
Smeraldo	55	Emerald	58	Early Butternut	82
Beet		Louisiana Green Velvet	55	Spaghetti Types	100
Chioggia	54	Silver Queen	50	Sweet Mama Kabocha	85
Detroit Dark Red	56	Onion		Table King (Acorn)	75
Pacemaker II	50	Bulb		Table Ace (Acorn)	75
Red Ace	53	Bermuda	95	Sweetpotato	
Broccoli		Crystal Wax (Short Day)	60	Beauregard	150
Bonanza	55	Early Grano 502 (YWR, Short Day)	80	Centennial	150
Early Dividend	45	Granex (YWR, Short Day)	100	Jewel	150
Green Comet	40	Red Burgandy (Short Day)	110	Vardaman	100
Packman	50	Yellow Sweet Spanish (Long Day)	125	Swiss Chard	
Premium Crop	55	Yellow TX Supersweet 1015 (Short Day)	110	Bright Lights	55
Brussels Sprouts		Bunching		Bright Yellow	57
Diablo	110	Evergreen Long White	65	Fordhook Giant	50
Royal Marvel	120	Southport White	65	Rhubarb Red	59
Tasty Nugget	78	Parsley		Tomato	
Cabbage		Italian Flat Leaf	75	Large >12 oz	
Ace	78	Moss Curled	75	Better Boy (I)	70
Early Jersey Wakefield	53	Pagoda	75	Big Beef (I)	75
Ruby Perfection	75	Plain Italian	78	Big Boy (I)	78
Chinese		Triple Curl	75	Bush Beefsteak (D)	62
Brisk Green	50	Pea		Bush Goliath (D)	68
China Flash	75	English		Capello (I)	85
China Pride	85	Little Marvel	63	Carmello (Heirloom)	70
Jade Pagoda	65	Maestro	60	Sunny Goliath	70
Michihili	80	Mr. Big	60	Super Fantastic (I)	70
Carrot		Sugar Bon	55	West Virginia Sweet Meat (Heirloom)	80
Big Top	65	Sugar Mel	65	Medium 4-11 oz	
Bolero	78	Sugar Snap	72	Bush Early Girl (D)	54
Nantes Half Long	70			Carbon (I)	80
Purple Dragon	65				

Purple Dragon	65			Carbon (I)	80
Red Core Chantenay	70	Sugar Snap	72	Carnival (D)	70
Royal Chantenay	65	Sugar Sprint	62	Carolina Gold (D)	75
Scarlet Nantes	70	Wando	68	Celebrity (D)	70
Sweet Treat	70		Snap	Champion (I)	70
Touchon (Heirloom)	62	Cascadia	60	Dona (I)	65
	Baby	Sugar Ann	60	Early Girl (I)	52
Short'n Sweet	68	Super Sugar	65	First Lady (I)	66
	Processing		Southern	Golden Girl (Heirloom)	69
Danver 126	75	Blackeye #5	65	Golden Jubilee (I)	72
	Cauliflower	Colossus	65	Golden Sunray (Heirloom)	72
Alverda (Green)	68	Mississippi Silver	65	Heatwave (D)	68
Brocoverde (Caul/Broc)	68	Pink Eye Purple Hull	65	Husky Gold (I)	70
Majestic	66	Texas Pinkeye	60	Lemon Boy (Yellow, I)	72
Snow Crown	60	Zipper Cream	75	Miracle Sweet (I)	69
Violet Queen (Purple)	64		Pepper	Paul Robeson (Heirloom)	75
	Collards	Anaheim (Chile)	75	Porter Improved (I)	78
Champion	70	Cherry Bomb	65	Solar Fire (D)	72
Flash	55	Hidalgo Serrano	85	Solar Set (D)	73
Georgia Southern	75	Kung Pao	85	Sunmaster (D)	74
	Corn	Long Red Cayenne	65	Sweet Tangerine (D)	68
	se: Sugary Enhanced	Mexibell	75	Taxi (Heirloom)	65
Ambrosia (Bicolor)	75	Mucho Nacho Jalapeno	75		Paste
Kandy Korn (Yellow)	89	Super Cayenne	70	Classica (D)	75
Legend (Yellow)	65	TAM Jalapeno	70	Golden Rave (I)	67
Sugar Buns (Yellow)	72	Tequila	75	Roma (D)	75
Tendertreat (Yellow)	95	Vera Cruz Jalapeno	65	San Marzano (Heirloom)	80
	sh2: shrunken, supersweet, extra sweet		Sweet	Viva Italia (D)	75
Crisp-N-Sweet (Yellow)	85	Banana Supreme	65		Small <3 oz
Florida Staysweet (Yellow)	85	Big Bertha (Bell, Green)	70	Black Cherry (I)	65
Honey n Pearl (Bicolor)	78	Blushing Beauty (Bell, YOR)	70	Blitz	70
How Sweet It Is (White)	87	Cubanelle (Green/Red)	65	Cherry Grande (D)	74
Mirai	70	Early Sunsation (Bell)	70	Dasher	70
Summer Sweet	81	Fat 'N Sassy (Bell)	70	Dona (I)	65
	su: Normal Sugary	Golden Giant II (Bell)	75	Gold Nugget (Cherry, D)	55
Bonanza (Yellow)	82	Golden Summer (Bell)	65	Golden Gem (Cherry, I)	65
Merit (Yellow)	75	Gypsy (Bell, YOR)	65	Husky Cherry Red (I)	65
Silver Queen (White)	91	Jackpot (Bell)	75		
Sweet G-90 (Bicolor)	90				

Sweet G-90 (Bicolor)	90	Jackpot (Bell)	75	Husky Cherry Red (I)	65
Triple Sweet		Jupiter (Bell, Red)	75	Jolly (I)	70
Honey Select	79	Karma (Bell, Red)	68	Juliet (Grape, I)	60
Serendipity	82	Lilac (Bell, Lavendar)	70	Large Red Cherry (I)	75
Cucumber		Orange Sun (Bell)	80	Small Fry (D)	65
Pickling		Senorita (Mild Jalapeno)	80	Sugar Snack (Cherry, I)	65
Calypso	52	Summer Sweet (Bell, Yellow)	70	Sun Gold (Cherry, I)	65
Carolina	49	Sweet Pickle (OYR)	75	Suncherry (Cherry, I)	55
H-19 Little Leaf	55	Sweet Spot (Banana, Yellow)	75	Sunsugar (Cherry, I)	62
Sumter	50	TAM Mild Jalapeno	70	Sweet 100 (Cherry, I)	65
Slicing		Potato		Sweet Baby Girl (Cherry, D)	65
Diva	58	Irish		Sweet Chelsea (Cherry, I)	65
Spacemaster	55	All Blue	90	Vita-Gold (D)	68
Sugar Crunch	57	Caribo	95	Yellow Cherry (I)	70
Suyo	61	Desiree	95	Turnip	
Sweet Slice	62	Kennebec (White)	80	Royal Globe	45
Sweet Success	55	Norland (Red)	80	White Lady	40
Sweeter Yet	50	Red LaSoda	100	Roots & Greens	
Eggplant		Russian Banana (Fingerling)	90	Just Right	50
Fairy Tale	50	White Cobbler	80	Purple Top White Globe	50
Neon	65	Yukon Gold	90	Shogoin	42
Purple Rain	66	Pumpkin		Tokyo Cross	35
Oriental		Large		Watermelon	
Ichiban	61	Connecticut Field	120	Black Diamond	90
Pingtung long	65	Medium		Bush Sugar Baby	75
Garlic		Howden	105	Crimson Sweet	85
Elephant	120	Jack O'Lantern	110	Crimson Tide	84
Mexican Purple	120	Small		Desert King (Yellow)	85
New York White	120	Baby Boo	90	Golden Crown	80
Greens, Specialty		Jack Be Little	95	Jubilee	95
Cool Season		Small Sugar	95	Legacy 800	85
Joi Choi	50	Triple Treat	110	Mickylee	85
Pac Choi	50	Radish		Minilee	68
Kale		Champion	20	OrangeGlo	95
Dwarf Blue Curled Scotch	55	Cherriette	24	Starbrite	85
Dwarf Blue Curled Vates	55	Cherry Belle	22	Tendersweet (Orange)	85
Nero di Toscano	50	Easter Egg	25	Yellow Doll	68
Rebor	50	French Breakfast	25		
Kohlrabi					
Early White Vienna	55				
Grand Duke	45				

Early White Vienna	55
Grand Duke	45
Purple Danube	40
Leek	
American Flag	130
King Richard	80

French Breakfast	25
White Icicle	30
Rutabaga	
American Purple Top	90

Yellow Doll	68
Seedless	
Tiffany	85

Vegetable Garden Planting Guide

for the Tyler Area

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Asparagus												
Beans, Bush & Pole												
Beans, Lima												
Beets												
Broccoli (transplants)												
Brussels Sprouts												
Cabbage (transplants)												
Cabbage, Chinese												
Cantaloupe (muskmelon)												
Carrots												
Cauliflower (transplants)												
Chard, Swiss												
Collard/Kale												
Corn, Sweet												
Cucumber												
Eggplant (transplants)												
Garlic												
Kohlrabi												
Lettuce (leaf)												
Mustard												
Okra												
Onion (plants)												
Parsley												
Peas, English												
Peas, Southern												
Pepper (transplants)												
Potato, Irish												
Potato, Sweet (slips)												
Pumpkin												
Radish												
Spinach												
Squash, Summer												
Squash, Winter												
Tomatoes (transplants)												
Turnip												
Watermelon												

= optimal time to plant outdoors

= marginal planting time

Average last spring freeze date 3/15 - Average first fall freeze date 11/15

Plant seed unless otherwise noted