



Seed Workshop: Put a Spring in your Sprouts

Spring, 2023, Enoch Pratt Free Library - Canton, Baltimore, MD



TOPICS

- Materials
- Planning
- Sowing
- Harvesting
- Saving
- Sharing



Materials

- Little pots
- Larger pots
- Potting soil
- Seeds!

Optional: trowel,
loose paper, water dishes,
compost, mulch



All About Growing Pots

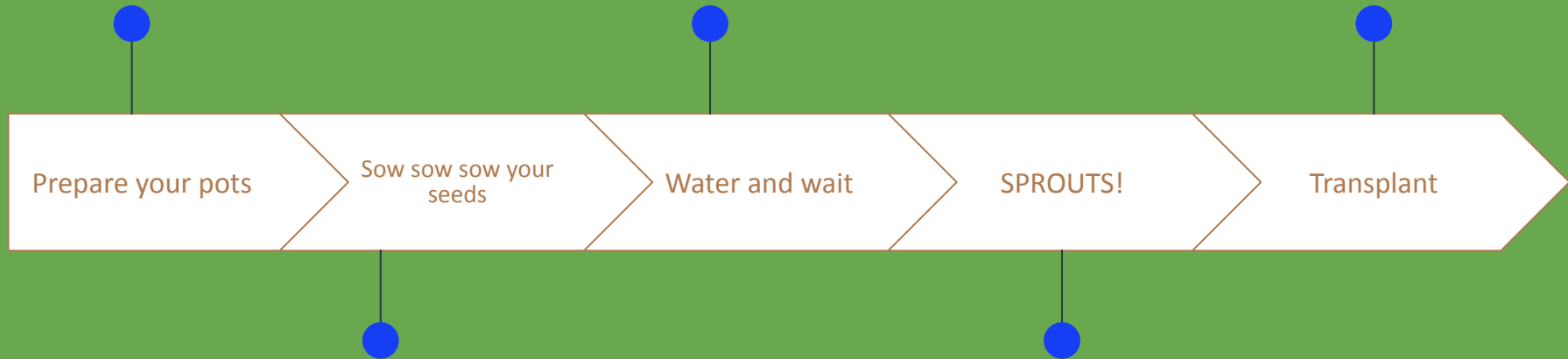
- Little Pots can be almost any small container.
- Larger Pots will be your plants' permanent home.
Choose carefully! It should be large and heavy enough to hold your plant. It can also be decorative!
 - Use taller pots for anything edible to keep away from rodents
- All Pots should have drainage holes, unless you're nesting pots or intentionally growing a bog.



All About Growing Pots - Pro Tips

- If you're reusing pots, bleach them before reuse. This prevents mold or other diseases from developing / spreading.
- If mold and damping-off is a recurring issue, make your own anti-fungal cinnamon spray





Soil for Seeds

Consider “Seed-Starting Mix” or “Germination Mix” soil. It’s a little more expensive, but it’s a finer / lighter mix for seedlings

- You can buy potting soil at most hardware stores, garden centers, etc.
- You can buy seeds at these same places, or peruse seed catalogues (see RESOURCES at end)
- Read the packets carefully to consider the size of the plant, its light and water requirements, and other handy details

PEEL BACK FLAPS
MORE INFO INSIDE



TOMATO *Glacier*



Seedling

Days to Emerge:
5 - 10 Days

Seed Depth:
1/4"

Seed Spacing:
A group of
3 seeds every 24"

Row Spacing:
36"

Thinning:
When 2" tall,
thin to 1 every 24"

Maturity:
55 Days from
transplanting

Date Seed Sown

"Glacier" will be one of your first ripe tomatoes of the season and one of your last tomatoes too! Particularly adapted to cooler climates, this 30" tall plant sets fruit earlier and in cooler temperatures than other varieties, and continues to produce 2" flavorful slicers throughout the season. Enjoy fresh garden tomatoes longer than ever! *This packet yields approximately 24 plants when started indoors.*

When to sow outside: For mild climates only: 1 to 2 weeks after your average last frost date, and when soil temperature is at least 60°F.

When to start inside: RECOMMENDED. 4 to 6 weeks before transplanting. Transplant when air temperature is 45°F or warmer, usually 1 to 2 weeks after your average last frost date. Ideal soil temperature for germination is 70°-90°F.



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AND
UNTREATED**



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GARDEN CHIVES *CEBOLLÍN JARDÍN*

This easy to grow, perennial heirloom grows in mounded clumps and can be tucked into any small space in the garden near the kitchen. Harvest the greens with mild onion flavor for use on baked potatoes, fish and egg dishes. The pretty purple flowers attract butterflies and bees.

Fácil de cultivar, este heirloom perenne crece en grupos con montículos y puede estar metido en cualquier pequeño espacio en el jardín cerca de la cocina. Los verdes de la cosecha con sabor a cebolla suave para su uso en las papas asadas, pescados y platos de huevo. Las flores violetas muy atraen mariposas y abejas.



Planting Time
(meses para plantar)



Sol Completo Moderada 1/8" Profundidad Espacio de 12" 75 Días Para Cosechar

This hermetically sealed packet contains moisture conditioned seed. *Este paquete herméticamente sellado contiene humedad de la semilla acondicionada.*

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ZINNIA *Giant Cactus Double Mix (Zinnia elegans)*

Rich colors of orange, red, white, pink, and rose with fascinating texture draw you to Giant Cactus Zinnia. Blooms reach 4" to 5" across. Zinnias are one of the easiest annuals to grow and attract butterflies. Outstanding in beds, borders, and containers, as well as being the perfect cut flower.

Garden Tip: Withstands the summer heat. Easy to grow!

Type	Planting Depth	Thin to	Sun/Shade	Height	Days to Germination
Annual	1/4"	6"	Sun	2'-3'	5-10 Days

Direct Sow	Start Indoors	Blooms
After Danger of Frost	3-4 Weeks Before Last Frost	Summer thru Fall

Bonus Pack
More seed for Less with Livingston Seed.
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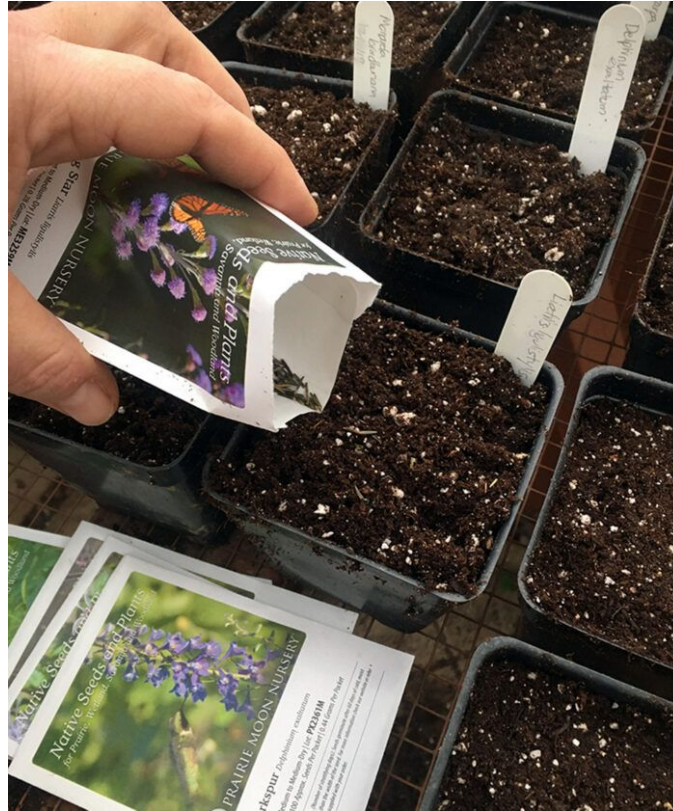
LOT
1-5

Plantation Products LLC, 202 S. Washington St. Norton, MA 02766

Touch the soil

Pot Preparation

1. Line the bottom of your pots with paper
2. Add potting soil and water it down
3. LABEL the contents of the pot.



Leave up to ~1 inch headspace. The soil will settle a bit more over time

No tamping necessary

Touch the soil

Sowing

- Seed packet will give advice on sowing
- Tiny seeds do not need to be buried -
In fact some need light to germinate!
- Poke little holes with your finger, or loosen
the top layer of soil to receive seeds
- Plant 2-3 seeds per hole.
- Give larger plants lots of space to grow into.
- Tiny seeds can be crowded



Water . Wait . SPROUTS!

- Give your newly planted pots a gentle watering. You don't want to move the soil about, so drip the water between your fingers or use a spray bottle to slow it down.
- From now on, keep the soil moist but not wet. It's ok if it dries out for a day or so between waterings. If mold starts to grow, water less. If the soil cracks, water more.
- Give the pots light and warmth - a window sill works, or under a lamp
- Some plants only take a week or two to sprout. Others take longer. The seed packet should give a good estimate.



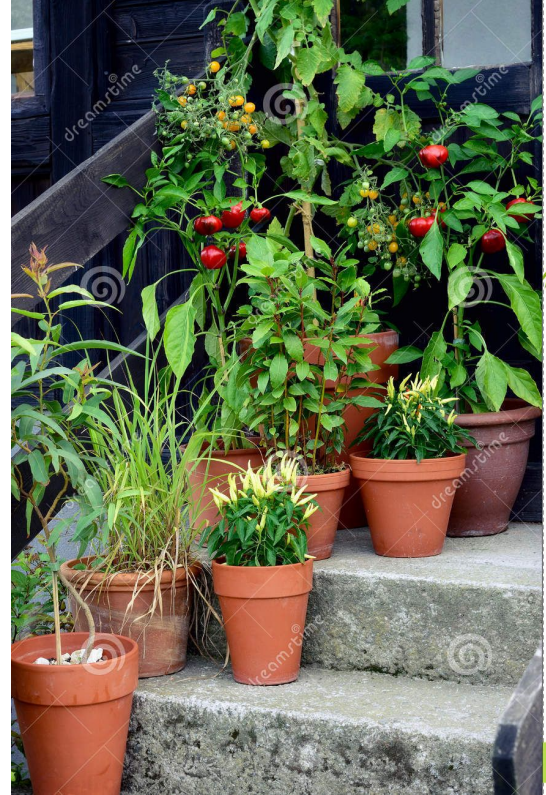
Tools of the Trade

Optionals

- Trowels are useful but not necessary. For example, I use a fork for small planting projects like transplanting seedlings.
- Loose paper (eg newspaper, paper towels) can be cut or torn to line the bottoms of your pots. This prevents soil from washing out when you water your plants
- Shallow dishes or bowls to catch extra water can keep plants hydrated in the hot days of summer. They sell them in garden centers or hit your local 2nd-hand shop

Planning for Plants

- Size of Plants
- Size of Pots
- Sun requirements
- Water requirements
- Indoor / Outdoor



Size Matters

Seed packets will tell you how big plants can get. Believe them! 6' is much bigger than 6"

Seed packets also recommend how far apart to plant seeds. You can crowd plants together to make a nice planter. Once they grow, this shades the soil to retain moisture.

You can safely reduce by $\frac{1}{3}$ for a year or two, but reducing by $\frac{1}{2}$ is too crowded.

Pots should be large / heavy enough to support your plant.

- Rule of thumb: try to provide as much root space below as the plant will grow above.
- If a breeze will blow it over, it's time to get something heavier
- Larger pots retain more moisture on hot days!!
- Avoid terracotta outdoors unless you're growing cacti
- Use mulch to retain moisture

Sun and Water

- “Full sun” means **at least** 6 hrs of direct sun daily
- “Partial sun / shade” means ~4hrs direct sun and lots of indirect sun
- “Shade” means <4hrs direct sun and lots of indirect sun
- “Wet” means it.
- “Moist” means the soil never really gets dry, feels damp
- Many plants like to dry out between waterings
- “Drought Tolerant” means they can tolerate dry conditions. *The hotter it is, the less tolerant they become*

You can always spend more time enjoying your plants,
but plan chores around your tight schedules.

Indoor / Outdoor

Indoor plants can freshen the air, moderate humidity, and brighten your day

- Choose a plant that suits your life and taste. Some popular indoor plants are very picky, never bloom, or grow lanky over time.
- Choose plants that suit your watering habits. Tend to over-water? Under-water?



Indoor / Outdoor

Outdoor plants must adapt to city life. Choose drought tolerant varieties when you're getting started. July is *brutal*.

Consider native plants to attract and feed butterflies, birds and other helpful critters.

Repel unhelpful critters through exclusion and garden hygiene. Never grow edible plants close to the ground or leave fallen food on the ground. Secure your trash. Use tall pots for anything edible.



Source: <https://bluewaterbaltimore.org/nursery/>

Transplant

You need to prepare your baby plants for the outside world. This is called “cold hardening”.

1. Light. If using a window sill, turn the plants away from the light daily so they grow up straight and tall. Lamps can prevent them from leaning one way or another. As they get bigger, expose them to more and more sunlight, starting with a cloudy morning or afternoon and working up to direct sun.
2. Wind. Strength training for your little stems! Use a fan, jiggle your pots, and/or blow on them to simulate gentle gusts of wind. If a stem crimps, tie to a little stake to support it until it heals.
3. Temperature. Once the daytime temps are >50°F, expose your seedlings to the rigors of the outside world. Start with a morning or afternoon on a cloudy day and work up to a gusty stormy day.

BEWARE of overnight freezing! Anything under 42°F will likely kill them.

Transplant

Once your seedlings have several sets of leaves and are about as tall as their baby pot, it's time to transplant!

- If they are outdoor plants, complete cold-hardening in their baby-pots and plant them outside.
 - If they are indoor plants, place them in a nice pot where they can live for the next 6-12 months (or longer if possible)
1. Let them dry out. Dig a hole larger than the incoming root ball in their new pot.
 2. Gently grasp the stem(s) near the soil and gently pull. If they are stuck to their pots, run a little water down the sides of the pot to loosen the soil and roots.
 3. Gently loosen the roots out of the shape of the old pot. Spread them so they grow outwards to colonize the new pot.
 4. Place them in the hole you've prepared and smooth the soil over them
 5. Water generously. They might wilt for a day or two, but fear not they should perk back up.
 - a. If they are wobbly, use a stake to anchor them.



Tend the Garden

Watch them Grow!

Rain has a better pH balance than tap water, so if you have the choice, let rain do the work.

Water not only nourishes, it cools. On very hot, dry days, give potted outdoor plants extra water.

In-ground plants can access moist soil deeper in the ground

Wilting leaves, crispy leaves mean you need more water!

Pro Tips:

A slow-release fertilizer only needs to be applied sparingly. Slow and steady nutrients are better than hot and fast.

A dish under the pot helps provide water, but let it dry out between waterings. This prevents mosquitoes and root rot.

Crop plants like fruit, veggies and cut flowers usually like A LOT of sun.

Optionals: Compost and Mulch

COMPOST is the broken down remnants of dead plant matter, animal waste, and organisms. It's proto-soil.

- Rich in nutrients, excellent structure, retains moisture - all improve your soil
- You can buy it or make it

MULCH is an insulating cover placed over the soil to protect plant roots from heat / cold, retain moisture, and improve soil quality.

- Can be made of any shredded plant material, including leaves and wood
- Eventually breaks down into compost
- Protects soil from the raw elements and slowly improves soil quality.



Harvest, Save, and Share

Harvest time!

Pick your fruit, eat that veggie right in the garden! Decorate with fresh cut flowers!

- Herbs taste best before they flower. Pinch off flower stalks to help the flavor linger longer.
- Some basic pruning techniques can bring in more harvest, or extend harvest farther into the season
- Choose plants that flower / harvest at different times so you have constant flowers or produce

UMD Agriculture Extension also has great resources and you can ask experts questions for free. They also have free webinars, workshops, and more! AND they're starting this month!

Every plant has its own personality in how it likes to grow.

You can learn exactly as much as you like and still reap a harvest.

Preservation

Save seeds from your best produce every year.

- Tomatoes and similar seeds have gel around them. You need to remove this before storing.
- DRY them out, store in a cool dark place
- Place in a sealed container. They will escape if they can!
- Put a scrap of cotton, paper, or similar in their container to absorb excess moisture

LABEL LABEL LABEL!

- **Type of plant, cultivar, and year harvested.**

Let's be honest, you're going to eat most of what you grow. It's so tasty! But just in case:

- Make dishes and sauces to freeze for easy preservation.
- Fermentation and pickling are easy and fun, but you'll need some supplies and know-how. Kits are available online, and lots of online resources exist.

Resources here in Baltimore!

Baltimore GROW Centers
publicworks.baltimorecity.gov/grow-center

Blue Water Baltimore's Herring Run Nursery
<https://bluewaterbaltimore.org/nursery/>

Baltimore City Farms
<https://bcrp.baltimorecity.gov/special-programs/farms>

PPNA/CCA Community Compost Initiative
sustainability@pattersonparkneighbors.org

UMD Extension - Home and Garden
<https://extension.umd.edu/resources#!/category/3>

Resources here in Baltimore!

Baltimore City Garden Clubs (FB group)

<https://www.facebook.com/people/Baltimore-City-Garden-Clubs/100064867893538/>

Canton Contained (FB group)

<https://www.facebook.com/groups/214603948733740/?ref=share>