

Planting Indirectly



(Seed starting, or planting into trays or “flats”)

TOOLS & SUPPLIES NEEDED:

Table to work on

Seed starting mix (*ie. JIFFY*)

Waterproof tub for mixing

Water & a pitcher

Trays with no holes in bottom

Masking tape

Sharpie or pen

Plastic wrap or plastic covers for trays

FOR CELL PACKS: cell packs for trays

FOR SOIL BLOCKS: soil block tool and a table knife

Optional:

Waterproof gloves

Vermiculite

THE GERMINATION STATION:

Shelves

LED shop lights & hangers

Heat mats for germinating heat loving plants: (tomatoes, peppers, squash, melons, eggplant, corn, etc.)

Power strip, preferably with 12 outlet positions

Small clip-on fans can improve strength of seedlings

Optional:

Timer



SOWING INTO CELL PACKS

1. Thoroughly moisten seed starting mix with water in the waterproof tub. Mix briefly and allow it to sit several minutes for the soil mix to fully absorb the water.
2. Lightly press soil into soil packs, leaving about $\frac{3}{4}$ " headspace. Soil should be semi-firm for good seed contact.
3. Put 1 or 2 seeds into 1" cells ("6-packs") or 1-2 seeds in two places for oblong 1 x 2.5" cells (3-packs).
4. Cover seeds with more seed starting mix to depth recommended on seed package, or with vermiculite. Do not fill to top of container! There must be air space between the surface of the soil and the top of the container for successful germination and watering.
5. After filling a tray with one, or perhaps two varieties of similar plants, use the Sharpie and masking tape to make labels. Write the following: The plant, the cultivar (variety), the current date, days to maturity, and your unique name or initials. Place tape on tray so it can be seen when the tray is on the shelf.
6. Cover the tray with a plastic cover or plastic wrap. Secure if necessary, with more tape so that the plastic does not touch the soil.
7. Record planting into our planting log, placing the date in the "indirect sow" column.
8. Place the tray on a shelf. It does not need light until it germinates, but it may or may not need heat. If it is a cool-loving crop do not place on a heat mat. If it is a warm loving crop place on a heat mat.
9. Check daily. Use a long nose watering can to water into the bottom of the tray. Tip the tray to be certain all parts of the cells can reach water.

10. When seeds start to germinate, (remove from heat mat and) move tray to a light source and remove plastic cover. Light should be close to the tops of plants but not touching. Group plants with similar height on shelves so they are all close to the light source. Move trays to another shelf with more room as they grow.
11. Plants must be “hardened off” before they are ready for all the effects of outdoor weather. A poly-tunnel, green house, or cold frame is sufficient protection for an in-between stage. In the first week bring indoors for extremes of weather, such as freezing temperatures (cold loving crops) or for warm loving crops if the temps fall below 55°F. Return them to the hardening off area after the weather extreme passes. After that they are ready to transplant.



SOWING INTO SOIL BLOCKS

1. Please note: Not all seed starting mixes work well for soil blocks. (A common mix is *JIFFY*). Thoroughly moisten seed starting mix with water in the waterproof tub. Mix briefly and allow it to sit several minutes for the soil mix to fully absorb the water.
2. Test your mix for correct moisture. Squeeze a handful. Water should drip from your hand as you squeeze. Open your hand and the soil should have made a cake that does not readily crumble apart. As needed, add more water or soil mix, mix and allow it to stand again, repeat until you get the desired results. Take time to do it right. If your soil cannot pack firmly into the blocking tool, you might get blocks, but they will erode with daily watering before the plants can be transplanted.
3. Using only the lower handle of the blocking tool, press into the wet soil in the tub, wiggle, repress, lift at a tilt and check the cells to see if they are fully and firmly packed. Repeat as needed. Use the table knife to scrape excess off the bottom of the blocking tool.
4. Position the filled blocking tool in a tray and using both the upper and lower handles, gently squeeze to push the soil blocks out of the tool, tipping towards the end to help a clean release. The blocks should be firm!
5. After filling the tray with soil blocks, check your seed packet for seed depth. Some tools create a ½” indent at the top of the block. If you are planting at ¼” you will need to fill this hole with ¼” of soil mix before placing your 1 or 2 seeds in each hole. (If these indenting pieces are not attached, create your own indent to the correct depth before placing your seeds). Incorrect seed depth is one of the two most common reasons for poor seed germination.
6. Cover seeds with seed starting mix or vermiculite.

7. After filling a tray with one, or perhaps two varieties of similar plants, use the Sharpie and making tape to make labels. Write the following: The plant (such as “tomato,” the cultivar (variety), the current date, days to maturity, and your unique name or initials. Place tape on tray so it can be seen when the tray is on the shelf.
8. Cover the tray with a plastic cover or plastic wrap. Secure wrap if necessary, with more tape so that the plastic does not touch the soil.
9. Record planting into our planting log, placing the date in the “indirect sow” column.
10. Place the tray on a shelf. It does not need light until it germinates, but it may or may not need heat. If it is a cool-loving crop do not place on a heat mat. If it is a warm loving crop place on a heat mat.
11. Check daily. Use a water pitcher or long nose watering can to water into the bottom of the tray. Tip the tray to be certain all blocks receive water.
12. When seeds start to germinate, (remove from heat mat and) move tray to a light source and remove plastic cover. Light should be close to the tops of plants but not touching. Group plants with similar height on shelves so they are all close to the light source. Move trays to another shelf with more room as they grow.
13. Plants must be “hardened off” before they are ready for all the effects of outdoor weather. A poly-tunnel, green house, or cold frame is sufficient protection for an in-between stage. In the first week bring indoors for extremes of weather, such as freezing temperatures (cold loving crops) or for warm loving crops if the temps fall below 55°F. Return them to the hardening off area after the weather extreme passes. After a week of hardening off they are ready to transplant.