



Transplanting Ginger

A Guide for Illinois Specialty Growers

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Transplanting Ginger In-Ground

When 50% of pre-sprouting ginger rhizomes have developed shoots 6 to 8 inches tall, it is time to harden off the rhizomes and transplant. Once hardened off for at least 7 to 10 days, here are the recommended transplanting and spacing guidelines for the best chance at optimal ginger crop development.

Materials and Equipment

- Trenching/potato hoe (hand scale); potato plow or trench digger attachment (tractor scale)
- 8 row marker stakes per planting row
- Rope, twine, or similar
- High-quality compost
- Tape measure
- Trays of pre-sprouted, hardened-off ginger rhizomes, ready-to-plant

Procedure

1. At the target planting area, high tunnel, greenhouse, or open field, measure out a planting bed width of 36 to 48 inches, and mark the corners of the bed with two row marker stakes.
2. With two more stakes, mark out two ginger planting rows within the planting bed, at least 12 inches in from the bed edge, and 12 inches apart between rows.

NOTE: It is ideal if planting beds are wider than 36 inches and if ginger rows are 16 inches apart. This supports optimal light exposure for developing plants and allows room to hill ginger.

3. At the opposite end of the ginger bed (25- or 50-foot-long rows are standard), repeat the planting stake marking process in Steps 1 and 2, using the remaining four row marker stakes.
4. To facilitate planting straight rows, cut sufficient lengths of twine or rope to tie off a straight line from one end of each row marker stake at the head of the bed to the end of it.

NOTE: Straight rows are especially important if mechanical cultivation of ginger rows is desired.

5. Using a trenching hoe or tractor implement (check spacing of attachments), dig shallow, 4- to 6-inch deep trenches the length of the two planting rows within the ginger bed.
6. Add 1 to 2 inches of high-quality compost to each trench. Add pelletized or granular slow-release fertilizer (~ 7-7-7 analysis) to the trench at a rate of 2.5 cups per 25 feet of trench. Mix with compost.
7. Gently remove ginger rhizomes from their pre-sprout trays, taking extra time to tease apart the roots if rhizomes were pre-sprouted close together in the trays.
8. Add rhizomes to the trenches that are 6 to 12 inches apart within a row. If spaced closer, the rhizomes will be difficult to separate, while spacing them farther apart will make it easier to separate them. Use the optimal spacing desired by the target market audience.
9. Add 1 inch of high-quality compost loosely on top of the rhizomes, then add native soil removed from the trench on top of the compost. Mix the compost together with the native soil if possible.

Additional Guidance

- It is important to begin hardening off before emerging roots grow together. Ginger rhizomes are like cucurbits, in that plant vigor and early growth will suffer if roots are damaged.
- It is common for uneven rhizome pre-sprouting to occur. Some plants have 6- to 8-inch green shoots, while other rhizomes have none. Plant the less active rhizomes anyway to catch up.



Sprouted hardened-off rhizome ready for transplant. Photo by Nick Frillman, University of Illinois Extension



Sprouted rhizome at a taller-than-ideal size, recently transplanted in compost. Photo by Nick Frillman, University of Illinois Extension

Transplanting Ginger in Grow Bags

A promising alternative method for ginger rhizome production in Illinois is grow bag culture — growing in non-woven polypropylene fabric bags.

This method is ideal for growers who:

- Cannot grow in soil due to soilborne pathogens, heavy metals, weed infestation, etc.
- Are seeking to maximize the use of marginal areas, like corners or alleyways of high tunnels
- Want the option to start ginger early or extend its growth later using protected culture

Here are recommended materials, equipment, and procedures for specialty growers who transplant ginger in grow bags, either in outdoor conditions or in protected culture, such as a high tunnel or greenhouse.

Materials and Equipment

- Polypropylene non-woven horticultural grow bags — a 10-gallon size is optimal for three rhizomes

NOTE: Initial results from the 2025 Illinois Ginger Growers collaboration indicate 10-gallon bags yielded more high-quality rhizome per plant than five-gallon bags at the same planting density. Five-gallon bags can be used for two rhizomes to be planted, not three.

- General-purpose, high-quality soilless media sufficient to fill grow bags 40% full
- High-quality compost sufficient to fill grow bags an additional 20% full
- Starter fertilizer (pelletized or granular slow-release fertilizer of choice at ~ 7-7-7 analysis)
- Trays of pre-sprouted, hardened-off ginger rhizomes, ready-to-plant

Procedure

1. At the desired permanent ginger grow bag location, fill each ginger grow bag to 40% capacity with general-purpose soilless media and moisten lightly.
2. Add high-quality finished compost until the bags are 60% full and mix thoroughly.
3. Add ½ cup pelletized or granular slow-release starter fertilizer and incorporate it in the top 4 to 6 inches.
4. Using hands or a planting trowel, dig three holes at 4 to 6 inches deep, at equal distances from each other within the bag.
5. Gently remove ginger rhizomes from their pre-sprout tray.
NOTE: It may be necessary to take extra time to tease apart the roots if rhizomes were pre-sprouted close together in trays.
6. Add one rhizome to each hole with shoots protruding above the soil line, but with the rhizome buried.
7. Place grow bags in their long-term growing location.
 - If outdoors, place on a shelf, bench, platform, etc., off the ground a few feet to avoid pest pressure and to receive optimal airflow. Place in full or near full sun.
 - If in a protected culture, as a greenhouse, high tunnel, etc., ensure that ventilation is an option during extreme hot temperatures.
 - Protected culture growers may need to install 30 to 50% shade cloth over the top of structures to avoid heat stress from June through September.
 - If soil temperatures are reaching above 86 F even with daily irrigation, use shade cloth — optimal ginger rhizome soil temperature is 78 to 86 F.
10. Water each grow bag well.



Ginger rhizome freshly planted in grow bags for a trial.
Photo by Nick Frillman, University of Illinois Extension

Additional Guidance

It is recommended to set up automatic drip irrigation, misters, etc., along with a timer.

- Ginger watering needs to be consistent, especially during hot, dry conditions
- See further guidance documents which detail water needs and delivery mechanisms

Ginger planted in grow bags still needs to be hilled, like ginger rhizomes grown in-ground.

- In grow bags, in situ hilling is achieved by adding an additional 10% potting mix and compost
- See further guidance documents which detail the hilling process



Ready to harvest baby ginger rhizomes in grow bags. Photo by Nick Frillman, University of Illinois Extension

Sources

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Modified March 2026



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