# **GARDEN RESOURCE PROGRAM** 2024 Cold Crop Transplant Instructions

### What are cold crops?

Cold crops are planted in the spring because they are cold hardy, frost-tolerant, and need time to mature before the weather becomes too warm. Hot weather can cause some cold crops (e.g. lettuce) to go to seed and become bitter. Many cold crops can also be planted in late summer if there is a long enough period for them to reach maturity before winter. Follow these steps for proper care and planting of your cold crop transplants.

### 1. Harden off your transplants

"Hardening off" is the process of letting your plants slowly get accustomed to the outdoors after being gently cared for in the greenhouse. To harden off your transplants, slowly expose your plants to the outdoors, setting them outside for a few hours on the first day and then bringing them back inside. On the second and third day, leave them out for an entire afternoon. For a few days after that, leave them out all day long, bringing them back inside or covering them with row cover each evening. They should be ready to plant after 5-7 days. Because the weather in spring is so variable, there is no exact schedule you need to follow.

### 2. Plant your transplants

It's best to choose an overcast day for planting. Choose a location where your plants will get 8-10 hours of sunlight a day. Before planting, loosen the soil of the area you are planting with a shovel. Then, make a small hole about the same size and shape as the soil bottom of the transplant. Carefully take plant out of its plastic tray, place it in the hole, and gently firm in the soil around it. Do not plant deeper than the existing soil level of the transplant. See transplant varieties below for spacing instructions. Plants that are placed too closely together tend to be stunted and prone to problems with pests and diseases.

### 3. Water your transplants

Water immediately after transplanting. Apply a generous amount of water to the soil just around the base of the plant. To ensure that you have watered enough, water the plant until you see the water glisten at the top of the soil, water the next plant the same way, go back to the first plant and re-water, then repeat for the second, and so on. As they establish themselves in the soil, check your plants daily to ensure that they do not dry out. If they look dry/thirsty, water them using the instructions detailed above.



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# **2024 COLD CROP TRANSPLANT VARIETIES**

### BROCCOLI

**Variety:** *Gypsy* heads are domed, medium-sized and medium green in color. These strong, stress-tolerant plants also have good side shoot production. **Spacing:** 18 inches between plants. One pack contains 4 transplants which will plant approximately a 3.5 foot by 3.5 foot area.

**Growing tips:** 58 days to harvest. Harvest when a large, tight head has formed, before buds have begun to stretch and separate. After the center head is harvested, smaller side shoots will continue to form and can be harvested the same way. Using row cover early in the season will help keep plants free from flea beetles. In order to minimize the chances of black rot on broccoli heads, avoid watering the crown or leaves, instead water at the base of the plant.

### **BRUSSELS SPROUTS**

**Variety:** Long Island produces uniform 1.5 in. sprouts that are dense, nutty, and sweet. Sprouts grow along the stalk of the plant at the base of the leaves. **Spacing:** 18 inches between plants. One pack contains 6 transplants which will plant approximately a 4 foot by 3 foot area.

**Growing tips:** 90 days to harvest. Cutting off the growing tip of the plant when the sprouts are present but immature may help the plant to put more energy into sprout production. Brussels sprouts are extremely hardy; harvest after the frost for extra sweet sprouts.

### CABBAGE

**Varieties:** Golden Acre has deep green heads with short, dense cores filled with tender, thin, crisp, peppery-sweet leaves. *Red Acre* is an early red cabbage with compact plants and solid, round 2-4 pound heads.

**Spacing:** 18 inches between plants. One pack contains 4 transplants which will plant approximately a 3.5 foot by 3.5 foot area.

**Growing tips:** 65 days to harvest. Cabbage heads are ready when they feel very firm and solid, with little to no space between leaves. Give them a squeeze to test if they are ready. To harvest, twist off central head and leave outer leaves and base of plant. After central head has been harvested, smaller mini cabbage heads will often form that can be harvested as well. To prevent flea beetles and cabbage loopers, place row cover over plants at planting until they grow a few inches.



### CAULIFLOWER

Variety: Self Blanching cauliflower is known for its bright white curds with a delicious flavor and self-wrapping leaves that help protect the white curds from sun (thus the name Self Blanching).
Spacing: 18 inches between plants. One pack contains 6 transplants which will plant approximately a 4 foot by 3 foot area.
Growing tips: The plant should be ready to harvest about a week or two after blanching. Harvest heads when desired size is obtained but before the curds becomes loose and bitter.

### CELERY

**Variety:** Tall Utah is a dependable celery variety for home gardens. This celery has dark green stalks and compact hearts.

**Spacing:** 6-8 inches between plants. One pack contains 4 transplants which will plant approximately a 2 foot by 2 foot area.

**Growing tips:** 80 days to harvest. This crop needs a consistent supply of moisture throughout the season for optimum flavor and yield. Cut stalks when they are of edible size (at least 8 inches). Blanching celery is optional. Blanching is done to get sweeter celery, but plants may be less nutritious at harvest. blanching should beginning two to three weeks before harvest. Simple use card board or paper to block light from reaching the stock of the plant. Don't cover the leaves.

### COLLARDS

**Variety:** *Champion* is a compact, rich, dark-green collard plant with long, broad, wavy, tender leaves; prefers cooler growing temperatures, but will produce good crops under warmer, summer conditions.

**Spacing**: 12-18 inches between plants. One pack contains 6 transplants which will plant approximately a 3 foot by 3 foot area. (See kale for growing tips)

### **CURLY AND DINO KALE**

**Variety**: Darkibor Curly kale is sturdy and fast growing with narrow, tightly curled leaves that are easy to de-rib. Vigorous plants will continue growing to produce leaves for successive harvests as the lower leaves are harvested. *Black Magic* Dino kale has dark green leaves, known for its high quality flavor. **Spacing:** 12-18 inches between plants. One pack contains 6 transplants which will plant approximately a 3 foot by 3 foot area.

**Growing tips:** 50 days to harvest. Kale and collards are among the hardiest of garden vegetables. Beginning about 2 months after planting, harvest by clipping individual leaves. Harvests can be extended through the whole season by harvesting the bottom older leaves and leaving younger top leaves to grow. Remove all yellow and dying leaves from the plant. Putting row cover over the plants early in the season will help keep your crops free from pests.

### LETTUCE MIX

Varieties: *Red Salad Bowl*, aka red leaf lettuce, has burgundy-red, deeply-lobed, delicate oak-like leaves; *Parris Island*, aka romaine, has thick tender dark green leaves; *Magenta*, aka summer crisp, has shiny, lightly puckered, red leaves. **Spacing:** 6-8 inches between plants. One pack contains 6 transplants which will plant approximately a 2 foot by 2 foot area.

**Growing tips:** 28 days to harvest. You can harvest whole heads of lettuce or pick larger outside leaves as the plant grows. It is best to harvest leaves early in the morning to avoid bitter-tasting lettuce. Pay attention to the plants as they get larger- if you see the center of the head begin to extend upwards, this is the beginning of the seed stalk and the lettuce should be harvested right away. The formation of the seed stalk is called "bolting" and is a natural part of the lettuce's life cycle. Hot weather encourages earlier bolting. Leaves will turn bitter once bolting begins.

### PAC CHOI

Variety: Joi Choi tall, broad, heavy plant with dark green leaves and thick, flattened white stalks. Tolerant to heat and cold.

Spacing: 1 ft. between plants. One pack contains 6

transplants which will plant approximately a 2 foot by 2 foot area.

Growing tips: 45 days to harvest. Harvest when plants get 10-12 inches tall.





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## **GARDEN RESOURCE PROGRAM** 2024 Cool Weather Seed Instructions

#### Plant seeds at the right time

The insert in your seed packet will give you one of these planting instructions: **"Sow in early spring <u>or</u> late summer/early fall"** means this crop likes cool weather and won't do well in the summer heat. Plan for two separate plantings and harvests. Some of these crops (such as carrots, spinach and collards) actually taste sweeter after a light frost.

"Sow in spring <u>through</u> late summer/early fall" means these seeds can be sown repeatedly throughout the summer for a continuous harvest. Pay attention to the days to maturity and allow enough time for them to grow before the first fall frost.

#### Prepare a proper seed bed

Make sure the soil is free of weeds that could compete with slower growing vegetables. Loosen the soil, remove any rocks, and use a rake to make it as smooth as possible. This ensures that all seeds are at the same depth, makes it easier to water evenly, and provides a smooth seed bed for consistent seed germination.



#### Maintain good moisture

Check the seeds daily to make sure they are getting enough water, but be aware that seeds do not need to be wet constantly. Watering in the morning to avoid fungal issues. Once plants have germinated keep a consistent watering schedule. One thorough watering per week is a good rule of thumb. This will provide enough water to keep the soil moist approximately 4 to 6 inches deep.

#### Don't give up!

Some crops can take a long time to germinate. Carrots are infamous for taking as long as three weeks. Don't give up and replant too soon! If you have done everything else right, it is often just a matter of waiting.

#### Thin crops that need to be thinned

Plants need room to grow! For some plants it is a good idea to plant too many seeds in case not all of them germinate. When they are baby-sized, the extras need to be removed, or "thinned", so that the others have room to mature. Gardeners are often reluctant to thin crops because they cannot stand killing their little babies, but if you do not thin them they ALL suffer.

#### **Rotate crops**

Moving crops to different places in your garden each year helps to keep insects and disease at at bay and soil from being stripped of its nutrients. Crops should be rotated along with other crops in their family.

#### Soak seeds before planting (optional)

Soaking seeds can help expedite germination for seeds that are big, slow to sprout, or have a hard seed coat (peas, beans and beets). You can also soak small seeds, like lettuce or all greens mix, but they are harder to handle when wet. Using enough warm water to cover seeds, soak smaller seeds for 2-6 hours and larger seeds no longer than 24 hours, then plant and water in as usual.

# **2024 COOL WEATHER SEED VARIETIES**

### **ALL GREENS MIX**

**Varieties:** *GRP Mix* is beautiful mix of greens including mizuna, red giant, scarlet frills, tatsoi, and red Russian kale.

**Spacing:** Gently shake the packet to mix the seeds. Sprinkle about 2-3 seeds per inch, 1/8 inch deep, in rows that are 4 inches apart.

**Growing tips:** 28 days to maturity. Harvest individual leaves when they are 3-4 inches tall, above the growing point for continuous growth.

### ARUGULA

**Variety:** Astro is a slightly heat tolerant salad green with a mildly spicy flavor. **Spacing:** Sow about 5 seeds every inch, 1/8 inch deep, in rows that are 2 inches apart.

**Growing tips:** 21 days to maturity for baby, 38 days for full size. Use fresh in salad, sandwiches, and pesto. Cook on pizza and in stir-fry. Excellent tossed into hot pasta. Flowers are edible!

### BEET

**Variety:** *Detroit Dark Red* is a classic red beet with good size roots and tasty greens.

**Spacing:** Sow 1 seed every 1 inch, ½ inch deep, in rows 4 inches apart. Thin to 1 plant every 3 inches. Sow every 2 weeks for a continuous supply.

**Growing tips:** 60 days to maturity. Beet greens are edible! Prepare as you would other greens like chard, kale, collards, or mustard.

### CARROT

**Variety:** Scarlett Nantes is an attractive, deep orange, uniform, almost coreless carrot. Old standard for sweetness, tenderness and crispy texture. Stores well. **Spacing:** Sow seeds 1 inch apart, 1/2 inch deep, in rows 18-24 inches apart. Thin plants to 1-3 inches apart. More space will produce bigger carrots. Sow every 2 weeks for a continuous supply.

**Growing tips:** 68 days to maturity. Carrots perform best in soil cultivated 6-8 inches deep. Make sure to cover the tops of carrot roots that are exposed with soil to keep the carrot root tops from turning green. Keep well weeded because carrots do not compete well with weeds.

### CILANTRO

Variety: Cruiser has large leaves and sturdy stems, ideal for market sales.
Spacing: Sow 2 seeds every 1 inch, ¼ inch deep. Thin to 1 plant every 3 inches, in rows that are 4 inches apart. Sow every 2 weeks for a continuous supply.
Growing tips: 50 days to maturity for leaves, 120–150 days for coriander seeds. To harvest leaves, cut straight across stems, leaving the growth point intact for regrowth. Harvest early to avoid plant going to seed, though it can also be grown for the cilantro seed, known as coriander.

### DILL

**Variety:** *Hera* has a uniform habit, is slow to bolt, and produces high yields of foliage.

**Spacing:** Sow 1 seed every inch, 1/4 inch deep, in rows 3 inches part.

**Growing tips:** 45 days to maturity. Foliage may be harvested once the plants have become established right up to flowering. Harvest seed heads just as the seeds begin to turn a golden brown. Foliage and seeds can both be dried and stored for future use. Dry foliage in the dark to preserve flavor and color.

### LEMON BALM

**Spacing:** Sow lemon balm seed ¼ inch deep; very light cover is all lemon balm needs for germination. Keep the seedbed moist until the seed germinates. Thin successful seedlings to 8 inches apart and later thin plants to 18 inches apart. **Growing tips:** Sow lemon balm in spring at about the average date of the last frost. Seeds can be slow to germinate. Also, sow seed in late summer or fall. Root divisions can be planted at any time during the growing season but will become established quicker in cool weather.

### LETTUCE MIX

**Varieties:** *GRP Mix* is a mix of lettuces in different colors and textures. including Outredgeous, Black Seeded Simpson, Parris Island, Red Salad Bowl, Flashy Trout, and Tango.

**Spacing:** Gently shake the packet to mix the seeds. Sprinkle about 2 seeds per inch, 1/8 inch deep, in rows that are 4 inches apart.

**Growing tips:** 28 days to maturity for baby mix, 55 days for full size heads. Lettuce seed needs sunlight to germinate, so cover seeds with only a very light sprinkling of soil.

### MUSTARD

**Variety:** *Red Giant* has large, purple- tinted leaves with a mild mustard flavor. **Spacing:** Sprinkle 2-3 seeds per inch, 1/8 inch deep, in rows that are 4 inches apart.

**Growing tips:** 21 days to maturity for baby leaves, 45 days for full size. Flea beetles are common pests of mustard greens. Using row cover can reduce damage.

### RADISH

**Variety:** *Easter Egg 2* produces colorful egg-sized radishes and is popular with youth.

**Spacing:** Sow 1 seed every inch, 1/4 inch deep. Thin to 1 plant every 3 inches, in rows that are four inches apart.



**Growing tips:** 30 days to maturity. Use row cover from sowing until harvest to protect against pest damage. As with all root vegetables, use a fork or shovel to loosen the soil before harvest, to avoid breaking the long, delicate roots. Trim the leaves about 2 inches above the top of the root, and store radishes unwashed in refrigerator.

## SALAD TURNIP

**Variety:** *White Egg* A staple of seed catalogs throughout most of the 19th century. Roots are egg-shaped and grow rapidly half out of the ground,

**Spacing:** Sow 1 seed every inch, 1/4 inch deep, in rows that are 4 inches apart. Thin to 1 plant every 3 inches.

**Growing tips:** 24-45 days to maturity. Ideal for early market bunching before they attain full size. The flesh is very sweet, so mild they can be eaten raw fresh from the garden, also good for pickling. Keeps well; flavor intensifies in storage.

### **SNAP PEA**

**Variety:** Sugar Snap A household name for its sweet, crisp pods. **Spacing:** Sow I seed every 3 inches, I inch deep, in rows I foot apart. Vines will grow to about 2½ feet and can be grown with or without the support of a trellis.

**Growing tips:** 58 days to maturity. This variety is a snap pea, meaning that the entire pea pod can be eaten. Wait to pick until the pods are nicely swollen, about 3 inches long.

### SPINACH

Variety: Seaside has upright, dark green leaves, that are somewhat spade shaped. Stays small, which extends the baby leaf harvest window.

**Spacing:** Sow 1 seed every inch, ½ inch deep, in rows that are 4 inches apart for baby spinach, or 1 foot apart for full-grown plants. Thin spinach to 3 inches apart. **Growing tips:** 39 days to maturity. Very cold tolerant. Plant as soon as the ground is workable.

### SWISS CHARD

**Variety:** Northern Lights produces an array of vibrant colored leaves and stems. **Spacing:** Each seed will sprout 1-3 plants. Sow 1 seed every 1 inch, ½ inch deep, in rows 6 inches apart. Thin to 1 plant every 3 inches, or 4-6 inches for larger leaves. **Growing tips:** 55 days to maturity. When harvesting, be sure to leave the growth point and enough baby leaves so that the plant can keep growing.

### TURNIP

**Variety:** *Purple Top White Globe* a classic turnip that can be grown for its greens or its root.

**Spacing:** Sow seeds 1 inch apart, 1/2 inch deep, in rows that are 6 inches apart. Thin to 1 plant every 3 inches for good sized roots. Do not thin if you only want to harvest for turnip greens.

**Growing tips:** 45 days to maturity. Flea beetles are fond of turnips; using row cover can help to reduce damage.



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