



# Columbia Nursery

## Brassica Planting & Care Guide: Broccoli, Cauliflower, Brussels Sprouts & Cabbage (Zones 3–5)

Brassicas are cool-season crops that thrive in USDA Zones 3–5 with the right care and timing. This guide covers the essentials for growing broccoli, cauliflower, Brussels sprouts, and cabbage successfully in short-season northern climates.

### General Growing Guidelines

- Sunlight: Full sun (6–8 hours daily)
- Soil: Rich, well-draining loam with high organic matter; pH 6.0–6.8
- Spacing:
  - Broccoli/Cauliflower: 18–24" apart in rows 24–36" apart
  - Cabbage: 18–24" apart
  - Brussels Sprouts: 24–36" apart
- Planting Depth: Set transplants just below the first leaves
- Support: Brussels sprouts and cabbage may benefit from staking or hilling in windy or loose-soil sites
- Protection: Use bottomless paper cups around young plants to deter cutworms. Cover with row cover or an old sheet if temperatures dip below 25°F.
- Brassica Botany Note: Broccoli, cauliflower, and Brussels sprouts are all modified flower structures, not traditional vegetables!

### Crop-Specific Notes

- Broccoli:
  - Central head is a flower cluster; harvest before it opens
  - Side shoots continue producing if central head is harvested promptly
  - Fertilize with fish emulsion or bone meal to encourage flowering
  - Keep evenly moist, especially during summer heat
  - For fall harvest: Start seeds mid-July, transplant in August
- Cauliflower:
  - One head per plant; blanching required for white heads
  - Tie outer leaves loosely over head with twine or rubber band when it reaches egg size
  - Check regularly and adjust as the head grows
  - Water at soil level to avoid rotting heads—never overhead
  - Start seeds indoors in peat pots or soil blocks to prevent root disturbance
- Cabbage:
  - Choose early, mid-, or late-season varieties depending on harvest window



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- Can split if overwatered after dry periods
- Keep evenly moist and use mulch to prevent fluctuations
- Brussels Sprouts:
  - Long season; best started indoors
  - Plant in mounds and/or stake as stalks grow heavy
  - Remove lower leaves late in season to promote sprout development
  - Harvest from bottom up once sprouts reach marble size
  - For storage: Pull entire plant and hang in a cool garage, picking off sprouts as needed

## Watering, Fertilizing & Mulching

- Watering: Keep evenly moist (1–1.5” per week); avoid overhead watering, especially for cauliflower
- Fertilizer:
  - Start with high-nitrogen fertilizer when transplanting
  - Side-dress with compost, bone meal, or fish emulsion mid-season
- Mulch: Use straw or compost to retain moisture, regulate temperature, and reduce weeds

## Tips for Zones 3–5

- Start indoors to extend your growing season
- Use row covers for pest control and frost protection
- Choose cold-tolerant, short-season varieties
- Rotate crops yearly to reduce soil-borne disease
- Mulch and monitor for moisture consistency to prevent cracking and bolting
- Harvest promptly for best flavor and texture

## Planting Timeline (Zones 3–5)

Activity	Zone 3	Zone 4	Zone 5
Start seeds indoors	Apr 1–20	Mar 15–30	Mar 1–15
Harden off transplants	May 25–June 1	May 10–20	Apr 25–May 10
Transplant to garden	After June 1	After May 20	After May 10
Direct seed (if used)	June 1–10	May 15–25	May 1–10
Second broccoli seeding	Mid-July	Early to Mid-July	Early July



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Second transplant set	Mid-August	Early to Mid-August	Early August
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## ⊘ Common Issues

Problem	Likely Cause	Solution
Yellow leaves	Nitrogen deficiency	Side-dress with nitrogen-rich fertilizer
Small heads	Overcrowding, low nutrients	Provide adequate spacing and feeding
Pest damage	Cabbage worms, aphids	Use row cover and handpick regularly
Bolting	Heat or stress	Start early and keep evenly watered
Head rot (cauliflower)	Overhead watering or poor air circulation	Water soil only; improve spacing and airflow