

Buying seeds and plants

Choosing and purchasing vegetable seeds and plants is one of the most enjoyable gardening pastimes. Thumbing through colorful catalogues, and dreaming of the season's harvest is one way to make winter seem a little warmer.

Start by making a list of all the vegetables you plan to grow, and estimating the number of plants you will need for each. Keep your list with you as you select seed or plants. It is very tempting to buy more than you need, but sticking with the basics will make the garden more manageable. There will be time to experiment with more types of vegetables and different varieties as you gain gardening experience!

Understanding plant names

Plants can be botanically classified into families, genera, and species based on similarities and differences of plant parts. These categories are arranged as a hierarchy: a family contains several genera, which contain several species. For example, the family Cucurbitaceae contains the genus Cucumis, and melon (*Cucumis melo*) and cucumber (*Cucumis sativus*) are species within the genus *Cucumis*.

When reading seed catalogues, you may come across the terms variety, cultivar, and hybrid. Variety indicates a group of plants that occurs naturally within a species but that has characteristics that distinguish it from the typical species. New plant varieties can arise through cross-pollination, mutation or adaptation. Variety names follow the species name and are always italicized; for example, *Brassica oleracea* var. *italica* is broccoli while *Brassica oleracea* var. *gemmifera* is Brussels sprouts.

Cultivar is short for 'cultivated variety' and indicates a human-made selection from within a species. Cultivars can be made by cross-pollinating different

species or by propagating a mutant specimen. Hybrids are a type of cultivar and occur when plant breeders cross two genetically different plants. Because of the mixed genetics, the offspring of hybrid plants are unpredictable so you will have to buy new hybrid seed each year rather than trying to save your own seed. Cultivar names come after the species name and are enclosed in single quotes (e.g. *Cucumis sativus* 'Sweet Slice').

Buying seed

Seed purchased from a dependable seed company provides a good start toward a bountiful garden. Buying from a local company that grows its plants under similar climatic conditions is even better. (**See below for some seed companies in Atlantic Canada.**)



Purchase seed from a dependable seed company and keep notes about how the crop performs.
© Desiree Jans, Dalhousie.

Keep notes about the seeds you purchase: germination qualities, vigour of plants, tendencies toward insects and disease, etc. From this information, you can determine whether a seed source is suitable for your needs, or whether the cultivars you have chosen are unsuitable for your area or gardening style. For example, if powdery mildew is a big problem on squash plants in your area, you might look for mildew-resistant cultivars the next year.



TABLE 1. VIABILITY OF VEGETABLE SEEDS (Average number of years seeds may be saved)			
Vegetable	Years	Vegetable	Years
Asparagus	3	Kohlrabi	3
Bean	3	Leek	2
Beet	4	Lettuce	6
Broccoli	3	Mustard	4
Brussel sprouts	4	Onion	1
Cabbage	4	Parsley	1
Cantaloupe	5	Parsnip	1
Carrot	3	Pea	3
Cauliflower	4	Pepper	2
Celery	3	Pumpkin	4
Chinese Cabbage	3	Radish	5
Collard	5	Rutabaga	4
Corn	2	Spinach	3
Cress, water	5	Squash	4
Cucumber	5	Sweet corn	2
Eggplant	4	Tomato	4
Endive	5	Turnip	4
Kale	4	Watermelon	4

Viability of seed

Stored seed has a limited life span (Table 1). Check the date on seed packets and only buy fresh seed. Seed ordered from a dependable seed company should be this year's seed. Mark the year on the package if it's not already dated.

Heirloom vegetable seed

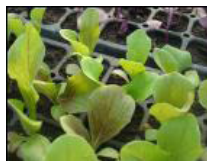
Heirloom vegetables have been grown and preserved by gardeners for decades. They are often better adapted to local conditions than newer, commercially bred cultivars. Heirloom vegetables are open pollinated (i.e. non-hybrid) and will breed true to the parents from one generation to the next. However, due to uncontrolled pollination by wind or insects, they can be somewhat variable.

Some seed companies offer heirloom vegetable seed. You might also try asking other gardeners in your area if they have any heirloom crops from which they have been saving seeds or check for seed swap events.

Many heirloom varieties have interesting stories behind their development. Be sure to record as much information about these varieties as possible and pass them on if you find them successful in your garden.

Buying plants

When buying seedlings, look for healthy, green, stocky, full plants. Stay away from tall, leggy seedlings. For most vegetables, there should be only one plant per pot or cell. Crowded seedlings can be damaged when you try to separate their roots for transplanting. Check for signs of insect pests or disease. Look for ragged holes, spotty leaves, or fine webs. You may want to ask how the seedlings were grown and what pest control products were used.



These healthy lettuce seedlings are green and stocky. One plant per cell makes for easy transplanting.
© Desiree Jans, Dalhousie.

Ask the greenhouse grower if the seedlings have been hardened off (acclimatized to outdoor conditions). If the seedlings have been in a warm greenhouse, they will need some time to adjust before transplanting (see 'Starting seeds indoors').

Ten 'easy to grow' vegetables

All vegetables require some care but the following vegetables are relatively reliable producers and good choices for the novice gardener:

- Beans (bush and pole)
- Beets
- Cucumber
- Garlic (plant in fall to harvest next summer)
- Lettuce (especially baby leaf blends)
- Peas (especially short varieties that don't need a trellis)
- Pumpkin
- Radish
- Tomato
- Zucchini

Also look for easy-to-grow varieties of each type of vegetable.



Activity

Make a list of cultivar attributes.

Most vegetables have many different cultivars to choose from. Have a look in a seed catalogue (some of the websites below have on-line seed catalogues). Select a vegetable and make a list of some of the available cultivars. For each cultivar, note appearance, size, yield, days to maturity, uses (e.g. freezes well), and any other special characteristics. Deciding which characteristics are most important to you will help you make the best choice.

SEED COMPANIES BASED IN ATLANTIC CANADA

- **Hope Seeds**, Nova Scotia
www.hopeseed.com
- **Veseys Seed**, Prince Edward Island
www.veseys.com
- **Halifax Seed Company**, Nova Scotia
www.halifaxseed.ca
- **Annapolis Seeds**, Nova Scotia
www.annapolisseed.com
- **Incredible Seeds**, Nova Scotia
www.incredibleseeds.ca
- **Mapple Farm**, New Brunswick
www.mapplefarm.com

