

# Planting outdoors II: Transplanting

**Most gardeners use transplants at some time or another**, either to give long-season plants a chance to grow to maturity under their preferred weather conditions or just to lengthen the harvest season. In many parts of Canada long season and/or warm season crops would not be viable unless transplanted to the garden.

## Crops suited to transplanting

Not all crops are suitable for transplanting (Table 1). For example, the seeds of beans, peas, and most root crops should be sown directly into the garden. Some crops, like cucurbits (cucumbers, pumpkin, squash and melons) require special care. Any damage to the roots or stem will result in a later and lower harvest.

TABLE 1: EASE OF TRANSPLANTING		
Easily survive transplanting	Require care in the operation	Not successfully transplanted by usual methods
Broccoli	Celery	Bean
Brussels sprout	Cucumber	Carrot
Cabbage	Eggplant	Corn
Cauliflower	Melon	Pea
Chard	Onion (tends to bolt)	Rutabaga
Chinese cabbage	Peppers	
Lettuce	Pumpkin	
Tomato	Squash	

## Annual plants

Vegetable and flower transplants should be stocky, healthy, free from disease, and have good roots. They should not be too small or too mature (tomatoes will transplant all right with fruits already on them, but many other plants will drop flowers or fruit after transplanting). Be sure plants have been hardened-off so that they will easily adapt to environmental change. However, they should not be so hardened that they are woody and yellow. Successful transplanting is achieved by interrupting plant growth as little as possible.



*Transplants should be stocky, healthy, free from disease, and have good roots.*  
© Desiree Jans, Dalhousie.

Have garden soil prepared before transplanting. All additives that require time to break down, such as manure, limestone, rock fertilizer, and green manure, should be incorporated several weeks before planting. Lime, fertilizers and well-decayed compost may be added just before planting, but ensure they are also well incorporated.

Transplant in late afternoon or early evening on a cool, overcast day to prevent wilting. It also helps to water the plants several hours before transplanting. When using bare root plants, such as onions, soak the roots thoroughly an hour or two before setting them out in the garden. They should not be allowed to dry out completely at any time. Handle plants carefully. Avoid disturbing the roots or bruising the stems.

Dig a hole large enough to hold the roots of the plants. Tap the plant from the container and set it slightly deeper than it was in the pot and at recommended intervals. Tomatoes are an exception to the rule of how deep to plant: they will develop roots all along the stems, and you can plant deep enough to leave only two or three sets of leaves exposed. Press soil firmly around the roots of transplants. Pour about 250 mL (8.5 ounces) of starter solution around the plant. Use a solution of about half the strength recommended for that type of plant during the normal growing season. Fish emulsion or dilute compost tea may also be used.



*These colourful lettuce seedlings were transplanted in the late afternoon. They will need extra care for a few days.*  
© Desiree Jans, Dalhousie.

For a few days after transplanting, you can protect the plants from wind and sun by placing wood shingles or cardboard on their south sides or by covering with baskets or flower pots. Water once or twice during the next week if there is insufficient rain.

Tender crop transplants such as cucumber, eggplant, pumpkin, pepper, squash, and tomato may need protection against late spring frosts.

## Perennial plants

When buying small fruit plants and perennial crowns such as asparagus, order early or buy from reliable local outlets. Discount department stores often allow plants to dry out, so watch for this, especially if you are buying sale plants. Select cultivars that will do well in your growing conditions. For perennial plants, it will pay to do some research to find out what the major disease and insect pests are and to buy resistant cultivars.

Dormant, bare root plants and 1- or 2-year-old crowns are preferred. Look for roots that are full, slightly moist, and have colour. Roots that are dry brown or soggy black are indicative of poor storage and will probably not give good results. Check crowns for signs of viable buds. Inspect plants for signs of insects or disease. If you receive plants by mail that are not satisfactory, do not hesitate to send them back.

Once you have the plants, keep the roots moist (but not soaking wet) by misting occasionally, and do not allow them to freeze or be exposed to high temperatures. If it is necessary to keep the crowns for more than a few days, place in cold storage (not freezing) or else heel in a trench of moist soil in a shaded location. Pack soil firmly against roots to eliminate any air pockets.

Transplant crowns according to directions, digging holes large enough to give the roots plenty of room to spread. Remove any discoloured or dried roots. Perennial plants appreciate a dose of compost mixed into the bottom of the hole. Once transplanted, shade the plants if necessary and water when needed. Extra care at the beginning of their growth will result in productive, healthy plants.



---

# Activity

## **Tomato search.**

Tomatoes are probably the most popular transplant crop. Contact one or two local nurseries to find out what varieties of tomato transplants they will be offering for sale. Also find out how much they will cost. Compare the choice of ready-to-plant transplants to what is available in a seed catalogue. Decide if it's worthwhile to start your own tomato seedlings.

