

# Cool and Warm Weather Crops

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Vegetable gardens can be loosely divided into two categories regarding soil temperature and planting time. Vegetables that require cool soil in which to germinate and cool air conditions in which to grow are called hardy or 'cool weather' crops. They can tolerate light frost and may be planted when the soil temperature has warmed to 40-45 degrees F; this is usually about mid-April in our area. Examples of cool weather crops are peas, radish, spinach, garlic (can be planted in the fall), onions, rutabagas, turnips, and most cole crops. Cole crops are those belonging to the Brassica (cabbage) family and are usually planted as transplants. In addition to cabbage, some other cole crops are broccoli, kale, kohlrabi, and Brussels sprouts. Cauliflower, also a Brassica, is considered half-hardy and should be planted more towards the end of April. Semi-hardy or half-hardy plants are those requiring cool soil for germination, but need warmer air temperature in which to grow. They are less tolerant of a frosty night than hardy plants. Other half-hardy plants are potatoes, lettuce, beets, carrots, celery, chard, Chinese cabbage, endive, parsley, parsnip, and salsify. Perennial flowers, as well as perennial fruits and vegetables such as strawberries, rhubarb, asparagus and horseradish are considered cool weather crops.

Tender or 'warm weather' crops are very frost tender, require a warm soil temperature (minimum 60-65 degrees F) for germination, and hot days for growth. Planting time for warm weather crops is normally mid-May in our region. Some, such as tomatoes, pepper and eggplant are better planted to the garden as transplants. Others, such as green beans, corn, cucumber, melons, squash and pumpkin are usually planted from seed. Some varieties of melons, squash, and other crops requiring a longer growing season can be planted as transplants to ensure ripening. (The number of days to ripening begins at the time of planting into the garden, not when seeds are started indoors). Annual bedding plants are considered to be warm weather crops. Don't be deceived into believing they are hardy just because they are available at the local nurseries and garden supply centers early in the season. Warm weather crops will not survive air temperature below 45 degrees F. and most will succumb even to a light frost.

Transplants should be 'hardened off' before permanently planting them into the garden. Hardening off is the practice of placing plants outdoors protected from direct sun and wind, for a few hours each day then bringing them back indoors at night. Gradually increase the number of hours plants are left outdoors until they can safely be left out overnight. This can take up to a week to ten days. Once plants are properly hardened off they may be planted into the garden. Use hot caps, cloches or plastic milk jugs with the bottoms cut off to cover and protect young transplants from cold nights. Be sure to remove the coverings during the day. Planting in the evening or on an overcast day will help the plants get established with minimal stress. The young plants are shallow rooted and will need to be watered often to prevent drying. Provide shade if the weather turns hot.