

# Winter Gardening Newsletter

by Linda Gilkeson

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## What Vernalization Means to Your Vegetables

Despite our persistent snow storms, many gardeners are starting their favourite vegetables indoors, so I thought it was time to mention the vernalization problem—or why some plants mysteriously go to seed in the summer when they shouldn't....

Vernalization is a plant response to exposure to low temperatures 5-10°C (40-50°F) that results in premature flowering. A plant can only respond this way if it is old enough to have enough food reserves to support flowering. The older a plant is, the more prone it is to vernalizing as a result of a spell of cool weather. Summer broccoli and cauliflower varieties need very little chilling for vernalization to cause premature, small heads. Beets, cabbage family, onions and celery are also readily vernalized by cool temperatures.

This is relevant to seed starting, because plants don't actually have to be very large to send up flower stalks. If we try to get too much of a head start on the season by starting seeds too early, we can end up with transplants that are old enough to go to flower if they experience a couple of weeks of late, cool weather. It would be better to start seedlings later and have smaller plants to set out that can weather a cold spell. It would also be a good idea to avoid buying overgrown transplants as they could be old enough to vernalize.

Some guidelines: The stem of cabbage family transplants should be no larger than the diameter of a pencil when they are set out. Larger plants will have enough food reserves to produce seed stalks if they are subjected to low temperatures for 3 or 4 weeks. Although onions are vernalized if they experience just 2 weeks at 5-10°C, it is not a problem because sets and seedlings are so small they don't have enough food reserves to become vernalized. Planting small onion sets (about 1 cm or ½ inch in diameter) is a better bet than planting large sets, which are more likely to send up seed stalks in the summer.

So, avoid formation of early, small heads or flower stalks, don't start seedlings too early or hold them too long before transplanting them outdoors. If you do end up having large seedlings, it might be better to pot them on and hold them in the greenhouse or cold frame until the weather is warm and stable as they are the ones most at risk of going to seed.

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Check out my web site: [www.lindagilkeson.ca](http://www.lindagilkeson.ca)

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