

# Growing vegetables from seed (1)

## Soil preparation and crop rotation

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Growing your own vegetables from seed has a number of benefits. With careful planning you can have freshly harvested vegetables every week of the year for very little cost. Of course, economy isn't the only benefit of growing your own vegetables. Freshly harvested crops not only taste a lot better than shop bought produce, they have more in the way of vitamins and minerals since they haven't had to be packed, transported and stored at various stages before use. Also, a gardener can use as many or few chemicals as they choose and restrict the use of sprays to those based on natural ingredients - this decision isn't left to someone else. With regard to both vegetables and ornamental plants, the range from seed far exceeds that which is available from either garden centre plants or shop produce, so there is much more choice

### The importance of crop rotation

Adhering to a few fundamentals is important and will help to ensure that your crops grow well and that pests and diseases are kept to a minimum. One of these fundamentals is crop rotation. It is important to avoid growing the same crops on the same areas of ground year after year as over the years, there is likely to be a build of soil borne pests and diseases of that particular type of crop. Also, each type of crop will have a preference for a particular nutrient or range of nutrients, so an imbalance of nutrients will occur over time. Crop rotation involves dividing crops into ROOT CROPS (beetroot, carrot, parsnip, potato etc), BRASSICAS (broccoli, Brussels sprout, cabbage, cauliflower, kale, pak choi, radish, swede, turnip) and LEGUMES/OTHERS (beans, peas, celery, courgette, endive, leek, lettuce, marrow, onion, spinach/leaf beet, sweet corn etc) An ideal crop rotation set up would be along the lines of the following:

<b>ROOTS</b>	<b>OTHERS</b>	<b>BRASSICAS</b>
<b>BRASSICAS</b>	<b>ROOTS</b>	<b>OTHERS</b>
<b>OTHERS</b>	<b>BRASSICAS</b>	<b>ROOTS</b>
Year 1	Year 2	Year 3

Even if you decide not to stick to a rigid crop rotation scheme such as the one outlined above, you should still take care to try and alternate crops and avoid growing them in the same place for too long a period of time.

By adhering to these rotation guidelines you can also prepare the ground in a way that will give each type of crops the very best environment in which to flourish. All crops will benefit from having a general purpose fertiliser such as Growmore or Blood, Fish & Bone raked into the soil a couple of weeks before sowing or planting, but then their preferences get a bit more specific.

For **root crops**, do not apply either manure or lime. Root crops prefer a free-draining soil so if the soil is on the heavy side it would be beneficial to dig in some horticultural sand/grit sand in the autumn. To increase yields of root crops, apply a high phosphate fertiliser as directed (eg Superphosphate) **Brassicas** will benefit from having the area where they are to be grown treated with lime, unless the soil is already alkaline (this can be checked with a pH test kit). If manure is also being applied to the area (which would be beneficial in most cases) it is best to wait until February to add lime, as it is best applied on its own. Brassicas also benefit from the incorporation of some well-rotted manure/organic matter in the autumn. To increase yields of brassicas, apply a top dressing of high nitrogen fertiliser as they are developing, according to directions (eg Sulphate of Ammonia).

Good preparation of the soil is very important prior to sowing seed. The soil should be roughly dug over in the autumn and in early spring, once the soil is workable (ie dry on the surface). Remove large stones and weeds (see our factsheet on weed control) and rake down to a fine tilth before sowing seeds. Sow seeds according to pack instructions. For tips on what vegetables to grow and how to get the best results, refer to our factsheet 'Growing Vegetables from Seed – getting the most from your vegetable plot'

Many vegetables may be sown direct into the ground, either in seedbeds, for transplanting later, or in their final positions, according to the type of vegetable being grown. The soil should be prepared in the usual way and the seeds sown in drills. Straight lines make for easier maintenance in the vegetable garden - they are easier to hoe. Sowing and aftercare is similar to that already outlined for other plants. Planting distances and sowing times will vary and full details are given on seed packs. Sowing depths for vegetables do not always fit in with the general rule of sowing to twice the depth of the seed - it's important to check with the directions given.

Some vegetables need to be started off (or kept) under glass. With others, this may be desirable in order to produce an earlier crop.

### Using space effectively in vegetable plots

Encourage customers to plan their vegetable plots carefully - by choosing different varieties of vegetables and/or doing successional sowings you can extend the season and availability considerably. Details of whether a crop may be sown in succession will be given in both seed catalogues and on the seed packets. For a first time vegetable grower it can be difficult to remember what should be sown in succession and when it should be done. It is useful, therefore, to keep a diary of when the next sowing should go in as a reminder. Any seed saved for successional sowings should be stored in a cool, dry place. A tupperware container may be used for storing seed packs - a pantry or garage is a good place to keep this, as both tend to be cool, as well as dry.



Catch crops and succession crops also help to use space efficiently in the vegetable garden. Catch crops include quick-growing vegetables sown in the early part of the season, before a main crop is sown or planted in the plot. A catch crop of salad onions, for example, can be sown in March in the brassicas plot before winter cabbage is planted out in July. Catch crops may also be grown in-between rows of slower growing vegetables and lifted before the slower ones need more space. For example, lettuces, radishes or summer spinach can be grown between rows of peas - or summer turnips between rows of beans.

Succession crops are those that are grown after a main crop has been cleared. A main crop of spinach, for example, sown in February and picked after two months, can be followed by lettuces, sown from April to July.

Another factor to consider is that some varieties are better for freezing than others - this may be an important consideration for some gardeners. Others aren't so bothered and prefer to eat only produce fresh from the garden.

Some varieties are noted for their flavour, others for their yield, and some for novelty value or other facet - eg baby vegetables. Look through the catalogues and list one or two varieties of each crop with particular attributes. This will enable you to give excellent customer service.