

Sowing vegetable seed – step by step.

Get a wider choice of varieties and save money by sowing your own seed.

In Scotland, we sow most of our hardier vegetables in late March and April. You'll find it's perfectly straightforward to 'grow your own' by following some easy steps and not being put off by glib phrases you don't understand. Seed packets and gardening books often advise you to sow 'in a seed bed', 'a nursery bed' or 'in well prepared ground', but they don't explain how to get the ground ready. This is the most important first step in growing any plant.

You'll produce seed-friendly soil by digging to a spit's [spade's] depth, breaking up clods of earth as you dig. Spread a barrowload of well-rotted compost over each 10m² area, or a scattering of pelleted chicken manure if you don't have enough compost. Rake over several times to break up any small lumps. While doing this, be sure to use the rake to draw out small stones or woody sticks. Before too long you'll have good, friable soil.

You may want to use a rotavater. It breaks up any lumpy soil and produces finely textured ground with tiny soil particles. This allows germinating seed to push up to the surface without twisting round lumps or stones. But this airy soil may dry out quickly and it will only be as deep as the rotavator's tines. After an easy start in life, seedlings then have to struggle, forcing roots down through the much denser ground that your spade would break up.

Seed only germinates well in warm soil, so don't be too impatient. Old-fashioned gardeners reputedly dropped their breeks before sitting on the ground to check it out, but laying a forearm on the soil is just as effective. When the soil passes the skin test, sow root crops, like carrots, parsnips, radishes and beetroot, directly in well-prepared open ground because roots won't tolerate being transplanted and will often bolt. Do not add compost or any nutrient to the ground before sowing as roots will fork in rich soil.

You sow seed in one of 3 ways. Direct sow in 'well prepared ground' and thin out the seedlings to end up with the correct spacing between the growing plants. 'Station sow' in well-prepared ground, sowing several seeds at intervals, thinning the seedlings, and leaving one to grow on in its 'station.' Sow in lines in a 'seed bed', also sometimes called 'a nursery bed', and then transplant the seeds to a final position somewhere else.

'Station sow' in well-prepared ground, and then thin the seedlings, leaving one to grow on in its station. Sow two or three seeds every few centimetres or where one final plant is intended.

For some crops, like carrots, lettuce and chard, prepare the ground as for a seedbed. Use the edge of a hoe to draw out a drill, or channel, 1cm deep. After removing the watering can rose, water along the drill and thinly sow the seed. As a general rule, you cover the seed with a depth of soil that's equal to the size of the seed itself. The larger the seed, the more it's covered. Then tamp down with the flat of a rake. Watering before sowing prevents the seed from being washed more deeply into the soil. The dry covering of earth acts like a mulch and inhibits evaporation. Use a fine watering can rose to keep the soil moist afterwards.

Seedlings start by growing a pair of cotyledon leaves. These first leaves are different to the later more familiar 'true' leaves. Once these second leaves are forming, start removing some seedlings, and progressively thin till you have the spacing recommended for your variety. Give the ground a good soak before thinning to prevent the roots from being disturbed and cover carrots with fleece to ward off carrot root fly.

Some roots, like parsnips, beetroot and neeps [or Swedes] should be 'station sown' in 'well prepared ground'. Sow 5 or 6 seeds in 'stations' along a drill. The easiest way to do this is to use a stick to mark out the distance between the stations. You then get the right space between the stations where you'll sow the seed. Thin the seedlings to one plant per station once they've produced 2 or 3 sets of true leaves.

Start leeks and brassicas, like Calabrese and Romanesco, in seed or nursery beds. Sow in rows as you would root crops, leaving 15cm between each drill. This gives enough space to hoe weeds between the rows. Keep the soil moist and thin the brassicas once the true leaves are growing. Even small plants can be attacked by cabbage root fly, so cover the seedbed with fleece to prevent the fly from laying eggs near the young plants.

The larvae eat the roots, and so kill the plants. I had thought the root fly wouldn't be interested in small plants, but learned the hard way that no brassica is too small for them. Some years ago, when moving young plants from the nursery bed to their final position, I carefully transplanted an army of munching larvae as well as their hosts. In no time at all, my prize cabbages keeled over and died. The leek bed needs lots of water, but no fleece. These plants look like blades of grass and grow painfully slowly. Once they are around 15cm tall, they are transplanted to their final position.

Peas and broad beans

Peas grow much more quickly than most vegetables. Draw out a 7cm wide, 2cm deep drill with the side of a rake, water and sow a double row, leaving 2cm between each pea. Put a row of small twigs along each side of the drill to give the seedlings a small climbing frame. Just as importantly, the twig forest prevents birds from tweaking out any emerging seedlings, as they look for insect larvae.

An alternative approach is to sow peas in small sections of old plastic guttering filled with compost. The guttering should be no longer than 60cm as this lets you slip the growing peas into a prepared drill without causing any damage to the plants. Slide one-half into the drill, turn round and then put the other half in. Water the drill, not the gutter, before planting, as it's almost impossible to slide freshly watered peas along a gutter.

I like to sow a row of dwarf broad beans at the edge of a pea row to make good use of my raised beds and I find germination rates for beans can be low. So I start the seed in a bowl of water, cover with damp kitchen towel and after they've germinated, I plant out 20cm apart.