

Growing instructions

The following brief instructions will help you to grow your HSL varieties. For more organic growing advice, visit www.gardenorganic.org.uk/expert-advice.

Achocha (*Cyclanthera pedata*)

Sow seeds into pots under glass or on the windowsill in April/May and plant out when all danger of frost has passed; or grow under glass. Warmth (rather than heat) and humidity are what achocha likes best. It is reputed to be more cold-tolerant than cucumber, but will still be cut down by frost. Prolific and very vigorous so will need support, preferably with netting as it has tendrils that can grip. Will not cross with cucumbers or squashes and is self-fertile.

Amaranth/Callaloo (*Amaranthus* spp.)

Direct sow in late May or early June, when the soil is warm, in rows 30cm apart, aiming for about 0.5g of seed per 1m. Alternatively, sow into modules in early May, then transplant at a distance of 30cm within the row. Leaves can be continually harvested and plants cut down to 30cm and allowed to re-grow. Eventually produces long tassel-like flowers; the seeds can be collected in mid-October. Remove plants before September if you want to avoid self-seeding.

Aubergine (*Solanum melongena*)

Also known as the eggplant, aubergines are members of the Solanaceae family, which includes peppers, tomatoes and potatoes. Aubergines are grown not only for their colourful fruits, but also for their pretty foliage and flowers. Needs some protection for reliable cropping in the UK. Start seeds with some warmth and pot on as necessary. Be patient as they can take a long time to germinate. Aubergines need fertile soil, warmth and humid conditions and ideally temperatures over 18°C. The flowers self-pollinate, but if saving seeds grow a single variety, as some crossing may occur between varieties.

Beetroot/Mangel (*Beta vulgaris*)

Beetroots do best in light, rich soils in an open, sunny site. The 'seeds' of older varieties are actually clusters that contain three or four seeds. Earliest sowings can be made into modules under glass in February or March, harden off at 3-4 true leaves and plant out. Alternatively, direct sow from late March to June and thin to around 10cm between plants. The leaves, as well as the roots, are good to eat. Varieties cross easily, so grow only one variety for seed at a time.

Broad Bean (*Vicia faba*)

Broad beans can be sown in late autumn for cropping early the following year, to avoid the ravages of blackfly; or in early spring. Sow direct, 5cm deep, in free draining, fertile soil, spacing at 25cm in the row, 60cm between rows. Water only if conditions are particularly dry when the pods begin to mature. Tall varieties will need staking with canes and string. Harvest from May onwards when the young, immature pods can be cooked whole. Dried beans also store well. To save your own seed grow a single variety only.

Brussels Sprout (*Brassica oleracea* Gemifera Group)

A hardy, cold weather crop for autumn and winter harvest. Sow into modules, harden off and plant out six weeks after sowing; or sow directly 50cm apart with 75cm between rows (for ease of picking) from mid-March to mid-April. Stake well on windy sites. Harvest from the bottom of the stem first. To save seeds, grow only one *Brassica oleracea* variety into its second year and allow plenty of plants (at least 24) to mature.

Cabbage (*Brassica oleracea* Capitata Group)

Always a reliable standby, cabbages grown in the garden are often tastier than those bought in the shops. Do not over-fertilise or growth will be soft and attractive to pests. Sow direct 7cm apart, or in modules, and transplant/thin to 30cm apart when plants have five or six true leaves. To save seeds, grow only one *Brassica oleracea* into its second year and allow plenty of plants (at least 24) to mature.

Carrot (*Daucus carota*)

Carrots prefer a deep, friable soil, without large stones to prevent forked and stunted roots. Sow in-situ into rows 15cm apart and thin/transplant to 10cm in the row. Water frequently to prevent roots from splitting. Sowings can be timed to avoid carrot fly, but a surer way is to use barriers. Carrot fly numbers are at their lowest by mid-June. To save your own seed, grow a single variety and make sure there are no wild carrots (or another carrot in flower) within 500m. Crosses with carrots are easily identifiable as the thin, white root will be dominant.

Cauliflower (*Brassica oleracea* Botrytis Group)

Cauliflowers need deep, rich soil; good moisture retention is essential for best results. Too much nitrogen can compromise the production of good curds. Sow in March and April into modules, harden off and transplant around 6 weeks after sowing. Allow at least 50cm between plants and protect against wind and frost. Hoe regularly and water well when curds start to form. Fold the leaves over the developing curds to prevent sun, rains and frost damage. To save seeds, grow only one *Brassica oleracea* variety into its second year and allow plenty of plants (at least 24) to mature.

Celery (*Apium graveolens*)

Traditional trench celery requires a long growing season and fertile soil. Prepare a trench 40-45cm wide and 30cm deep, mix soil with lots of compost or manure, then return it to the trench. Any remaining soil can be used for blanching. Sow onto the surface of compost in trays or modules in March and early April. Germination can be erratic. Prick out single seedlings and pot-on individually as soon as possible. Plant out into your prepared trench after last frost, cold conditions can cause bolting, and protect with cloches if necessary. Water frequently and remove any discoloured outer leaves. Blanch stems by wrapping with straw and earthing-up with surplus soil/compost mix.

Chard (*Beta vulgaris*)

Chard is the same species as beetroot and is generally grown for its leaves and stems. Chard does best in light, rich soils in an open, sunny site. Earliest sowings can be made into modules under glass in February or March, harden off at 3-4 true leaves and plant out. Alternatively, direct sow from late March to June and thin to around 10cm between plants. Varieties cross easily, including with beetroot, so grow only one variety for seed at a time.

Chop Suey Greens (*Chrysanthemum coronarium*)

Native to the Mediterranean and the Middle East, so not frost hardy in the UK climate but enjoys a sunny site with good drainage. Germination in two weeks or less in temperatures of 10°C/50°F, the plants then grow rapidly. Harvest leaves as soon as they are large enough to pick, or use thinnings for an early harvest. Blanch and use in stir fries, or add the distinctly aromatic leaves to salads.

Cress (*Lepidium sativum*)

Also known as garden cress, this 'easy to grow' annual herb has a hot, peppery flavour and can be eaten both raw and cooked. Young leaves are used in the traditional 'mustard and cress' way, though it can be grown to maturity and added to salads. Prefers moist conditions with a little shade to prevent bolting. Sow in rows 7-10cm apart from early April, thinning to 20-30 cm apart. Sow every 2-3 weeks for a regular supply of leaves.

Cucumber (*Cucumis sativa*)

A tender crop requiring a heated glasshouse for prolonged fruiting, though some varieties (ridge cucumbers) can be grown for a limited period outdoors. Frame cucumbers have a smoother skin, longer fruit and are generally heavier cropping. Ridge varieties must be pollinated to set fruit, while the fruits of frame varieties become bitter and misshapen if insects pollinate their flowers. Raise both types with heat; sow ridge varieties in mid-May for planting out in a sheltered spot after the last frost. Plant on a mound or ridge to avoid root rot, and mulch well. Allow 60cm between plants, less if trained up supports. Water throughout the

growing season; irregular watering leads to misshapen or aborted fruits. Indoor cucumbers need high humidity but good ventilation to prevent fungal problems, and will enjoy as much heat as you can give them. Cucumber varieties will readily cross with each other.

Dudi, Calabash or Bottle Gourd (*Lagenaria sicceria*)

Dudis need plenty of space in a sunny, sheltered position. Start off in modules or pots in mid-April to May, and plant out in late May to early June allowing at least 2m between plants. They will climb but need a high solid support such as a strong fence or sturdy shed to keep the fruits off the ground. The young fruits are the most tasty, but will only store for a week in the fridge; the smooth-skinned, mature fruits have better storage capabilities but are less palatable.

French Bean (*Phaseolus vulgaris*)

For an early crop start the seeds in individual pots or in seed trays, harden off the young plants and plant out 20-25cm apart. Sow direct from late April (at the same spacing) with protection, or after the last frost. Climbing varieties will need support; a wigwam of canes is ideal, or grow them up a wall or fence where they will benefit from the extra protection. Mulch well and add plenty of organic matter. Harvest green beans from the end of June; early sowings can be grown on for drying. Dried beans can contain a toxin (lectin) that may cause stomach upsets. This toxin is destroyed by proper preparation. First soak the dried beans overnight, drain and rinse. Cover with fresh water then boil vigorously for at least 10 minutes. The beans will then be safe to use. French beans seldom cross-pollinate, but leave at least 3m between varieties if seed saving.

Kale (*Brassica oleracea* convar. *acephala* and *Brassica napus*)

The hardiest of brassicas. Sow into pots in May, planting out into final positions in July or August at a spacing of 45cm for dwarf varieties, 75cm for taller varieties. Kales need little attention apart from aphid and cabbage white butterfly control, and grow well in most garden soils. Harvest in winter by removing a few leaves from each plant. Some

varieties of kale (*Brassica oleracea*) will cross-pollinate with each other, as well as with cabbages and cauliflowers. Others are of the species *B. napus* (as indicated). These will cross-pollinate with swede and oilseed rape.

Kohl Rabi (*Brassica oleracea* Gongylodes Group)

A small, fast-growing (sow to harvest 5-9 weeks) member of the brassica family is grown for its round, swollen stems which should be picked for eating at tennis-ball size. Sow in modules from late February to August, planting out when 4-5 cm tall; or direct sow at 18cm in rows 30cm apart from March to August. Can become woody if left to stand, so successional sowings will ensure a tasty crop throughout the season. Water well in dry weather. Tends to be trouble-free, but can attract the same pests as other brassicas, such as flea beetle and aphids.

Indian Mustard (*Brassica juncea*)

Indian mustard can be sown throughout the summer and into autumn for an early winter crop. It will withstand some cold but will be killed off by a hard frost. Sow into modules then transplant at a spacing of 50 cm within the row and 50 cm between rows.

Lablab Bean (*Dolichos lablab*)

Relatively unknown in the UK, this Asian favourite can be bought frozen in most Indian supermarkets. Lablabs need protection so grow in a polytunnel or cool glasshouse for best results. Sow with heat during April and plant into final positions once the danger of frost has passed. Plants climb, so support with a wigwam of canes, as for French beans. Pick pods as soon as they reach eating size and treat as mangetout, or if seed saving leave on the plant until brown and dry.

Leek (*Allium porum*)

Sow in a seedbed (or a wooden crate) from March to May, transplanting seedlings to their final positions in June. Dibble holes into the ground, drop seedlings into them and 'puddle' in with a watering can – soil should not be firmed around the roots. Space at 15cm in rows 30cm apart, or in beds equidistantly at 18cm. As the plants develop earthing-up

ensures a longer blanched stem. Very hardy, leave in the ground all winter and harvest as required. Let some go to seed in their second year, but only one variety as they cross-pollinate readily. Leeks do not cross with onions.

Lettuce (*Lactuca sativa*)

Sow loose-leaf varieties in early spring and harvest the leaves a few at a time as needed. Successional sow all others and harvest through the season. Most are pretty hardy and can be grown throughout the year with minimal protection. Some of the older varieties offered will over-winter without protection in a sheltered spot (except in the harshest weather). Sow into seed trays, pots or modules under protection in February, harden off and plant out in March with protection. Direct sow (with a little protection) in early spring in rows 30cm apart, thinning to 25cm within rows. Give larger varieties a bit more space. Lettuce seed will not germinate at soil temperatures above 25°C so keep the seedbed cool for at least 24 hours, shade if necessary. Water liberally to ensure tender leaves with less bitterness and to reduce the risk of plants running to seed, though too much water and humidity can lead to rotting. Watch out for aphids and slugs, as all lettuces are susceptible to these pests.

Melon (*Cucumis melo*)

Grow melons as you would cucumbers (trailing or grown up nets); they enjoy heat and humidity and thrive under glass or in a cold frame. Best grown on a mound, as they don't like to get their stems wet. Remember to prune; any good gardening book should tell you how to do this. Supply copious amounts of water when the fruits are forming. If seed saving, grow only one variety to maintain purity.

Onion (*Allium cepa*)

Onions grown in the UK are sensitive to day length; spring sowings will only produce foliage until the longest day. As the days shorten energy goes into producing bulbs. Sow in modules with protection in late winter and early spring, or directly into the ground in mid-spring at a depth of 1cm in rows 30cm apart. Thin or transplant to about 4cm if you want

medium-sized bulbs; 7-10cm for larger onions. Hoe regularly when the plants are young. Water only in the driest weather and not once bulbs have formed to ensure good ripening. Bending tops over prematurely damages the bulbs and impairs storage – instead cure the bulbs in the sunshine after lifting. All tops and skins should be rustling and dry before placing in net sacks or stringing into ropes and storing in a dry, frost-free place. If seed saving, replant at least 16 bulbs the next spring, but only grow one variety into its second year as they cross readily. Onions do not cross with leeks.

Parsnip (*Pastinaca sativa*)

Direct sow in mid to late spring as germination can be a problem in cold soils. Sow thinly in shallow drills, or station sow, three seeds per station, thinning to one per station. Root size depends on spacing so for small roots space 10-15cm apart or for larger roots 20-30cm in rows, or alternatively plant in blocks at 15-20cm spacing. Keep seedlings weed-free until established. Frost improves flavour; lift as required when leaves start to die down. Harvest by late winter, as older roots will develop a hard core. To save your own seed, grow a single variety.

Pea (*Pisum sativum*)

Direct sow at a depth of 2-5cm, spaced 5cm apart in a wide drill, though you may well need to protect against rodents - we tend to sow into modules, transplanting seedlings at around 5cm tall. Sow round peas from late winter, switching to wrinkled varieties after late March for a succession of fresh pods. Dwarf varieties need support from twigs inserted into the row when the seedlings are young. Most old varieties are very tall and need to be supported on netting, strings or a structure of canes or trellis and sown in single rows or at stations along their supports. These tall varieties crop for longer if picked regularly. Peas do not readily cross-pollinate, but leave as much space as possible between varieties if seed saving.

Pepper (*Capsicum spp.*)

Cultivation requirements are similar to tomatoes and aubergines, but peppers need a little more light, a fertile and moisture-retentive soil and a long period of warmth to mature fully. We recommend growing in a greenhouse or tunnel to guarantee a good crop. Seeds need temperatures of over 21°C to germinate. Peppers form a small bush and can often be grown in big pots. Use a pot of at least 25cm in diameter and water well to avoid blossom end rot. They are self-fertile, but cross-pollination readily occurs, so isolate if growing more than one variety for seed saving. Remember to wear rubber gloves when removing seeds for saving from hot varieties. It's best to save seed from a fully ripe pepper (when the skin starts to wrinkle).

Radish (*Raphanus sativus*)

Sow thinly in drills 3cm deep and 6cm apart, or sow in modules and plant out once the plants have three true leaves. They are fairly hardy, so sow with protection in January/February, or without in March. Flea beetle may be a problem, so if you want to avoid 'holey' leaves, cover with fleece. Only grow one variety to seed at a time as radishes cross-pollinate readily.

Runner Bean (*Phaseolus coccineus*)

A tender crop that is perennial if the roots are lifted and stored like dahlias, but treated as an annual as the plants grow so quickly (do not eat the tubers!). Sow seeds individually in pots under protection in mid-May and plant out hardened-off plants after the last frost; or direct sow into warm ground about 5cm deep on sturdy supports (canes, netting or strings). Allow at least 15cm between rows. Adequate soil moisture is vital for a good crop. Harvest pods before they are over-mature to avoid stringiness, and pick frequently to encourage more to form. Leave some on the plant to mature if you wish to save the seed. Runner beans readily cross-pollinate and need at least 1000m between varieties.

Shark's Fin Melon (*Cucurbita ficifolia*)

A rampant grower, which needs full sun and relatively infertile soil to crop. Sow two seeds per pot under cover in late April to May, removing the weaker seedling. Harden off and plant as for squash, allowing a minimum 1m between plants. They will climb and can be trained over a (very) substantial support. Flowering starts in mid-July and fruits should develop shortly afterwards: place a board underneath fruits to prevent rotting. Leave fruits on the plant until the skin is hard to touch and sounds hollow if tapped. Seed continues to mature for several months after the fruit has been picked so don't remove seed for saving until December or later from an autumn harvest.

Sorrel (*Rumex spp.*)

This hardy perennial is usually classed as a herb, but is actually more like a vegetable. The sharp, lemony leaves can be harvested early in the season and may stay green through the winter. Sow direct in spring or autumn, or into trays for transplanting out at around 30cm between plants. It also scatters self-sown seedlings if allowed to. Divide plants every couple of years.

Spinach (*Spinacia oleracea*)

This quick-growing, leafy crop does best in cooler temperatures. Prefers light shade in the summer and a fertile soil that does not dry out. Sow direct in early spring or autumn under cloches or in an unheated greenhouse or tunnel. Outside sow thinly into drills 30cm apart in late spring, late summer and early autumn. It may run to seed in hot weather.

Squash (*Cucurbita maxima* and *C. pepo*)

The common-name classification of squashes, pumpkins, gourds, marrows, etc. is fraught with difficulties. Essentially, summer squashes are good fresh and do not store. Winter squashes and pumpkins (*Cucurbita maxima*) will store well, particularly if allowed to cure in a warm place, but can also be eaten immature in summer. All can be sown individually into pots (with warmth) in late May, planting into their final positions when danger of frost has passed. Sow at least three seeds to ensure that if one plant is mainly producing male flowers, there is a

higher probability that there will be a female flower on another for pollination. Placing seeds on their edge may help to avoid rotting. Can also be sown directly once soil is warm and danger of frost has passed. Allow lots of space (1-1.5m, more for trailing types) and incorporate plenty of organic matter. Pollination is required for good fruit set, and can be done by hand if insects are scarce. Hand-pollination is essential if seed saving. On winter squash do not allow too many fruits to develop, as the plants need to put their energy into ripening fruit for storage. Summer squash can be allowed to produce lots of fruit and harvested when ready (it should still be possible to penetrate the skin with a thumbnail). Water well throughout the growing season. Harvest winter squash when the vines have been cut down by frost. Allow the fruits to ripen further in the sun for several weeks after harvest for maximum storage time. Varieties within one species cross readily.

Swede (*Brassica napus*)

A hardy root with delicious orange-yellow flesh requiring cool, damp conditions to flourish. Sow in an open site into fertile soil that does not dry out, but is well drained. Sow finely into 2cm deep drills 38-40cm apart during May and June. Thin to 25cm once seedlings reach 2.5cm high. Harvest as soon as roots reach the required size, usually mid to late autumn.

Sweetcorn (*Zea mays*)

This half-hardy grain crop is easy to grow in a warm, sheltered spot with well-drained soil in a good summer. Sow in April into degradable pots or root trainers as plants resent root disturbance; or direct into soil warmed under cloches or black plastic. Sweetcorn is wind-pollinated so sow in blocks with 35cm between plants. Will need support on exposed sites and always hand weed, as hoeing will damage the shallow roots. Harvest the corn when 'silks' turn brown and a milky juice is produced when a thumbnail is pressed into the kernels. Grow only one variety if seed saving, as sweetcorn varieties will freely cross-pollinate.

Tomatoes (*Solanum lycopersicum*)

Grow under unheated glass or outdoors in a sheltered spot. Sow for the glasshouse in late February/early March and outdoor varieties in late March. Sow seed shallowly in pots with some warmth and pot on as necessary until ready to be transplanted to final positions after the last frost, or earlier if protected by cloches or fleece, 35-45cm apart. 'Determinate' varieties form a natural bush and cannot be trained as a cordon. A layer of straw underneath them will keep the fruits clean. Most varieties are 'indeterminate' and may be trained as a cordon. Support these with stout canes or up strings, as they can easily grow to 1.5m. Remove side shoots regularly, and the growing tip once four to five trusses have set fruit, to encourage ripening. These varieties can also be allowed to ramble if given space (at least 1m²). This is recommended for smaller-fruited varieties, where cordoning may reduce yield.

Turnip (*Brassica rapa*)

Turnips for storing over winter are usually sown in July or August and thinned to about 15cm between plants. Earlier in the year, they can be sown closer together and harvested when young, but a steady supply of water is important to prevent woodiness. Watch out for flea beetles early on, and cabbage root fly later. Biennial, they form flowers in their second year, which are insect-pollinated, so crossing will occur with other turnips and with some oriental greens and fodder crops.

Vietnamese Mustard (*Brassica juncea*)

Vietnamese mustard can be sown throughout the summer and into autumn for an early winter crop. It will withstand some cold but will be killed off by a hard frost. Sow into modules then transplant at a spacing of 50 cm within the row and 50 cm between rows. It will bolt more quickly from early summer sowings, so these are good for collecting seeds. Isolate from other oriental brassicas if you want to save seeds.

Vietnamese Watercress (*Nasturtium officinale*)

This sprawling plant likes damp conditions and produces lots of small, peppery leaves that taste great in a salad. Sow in modules in March-April and plant out after May at a spacing of 30cm. If seed saving allow to mature and flower, though collect any seed heads as soon as you see them as the pods will burst naturally and spread the seeds.

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