Tips v. 11.01.23

ACHOCHA. Vigorous climber and good yields.

Available from the Heritage Seed Library.

Eat raw or stir-fried when young (i.e. size of a 5p or 10p piece). Use in same way you’d use green peppers in cooking.

From South America. Flavour is a cross between minty cucumber and a green pepper.

Sow from early March indoors or direct by early May. Grow once danger of frost gone.

Warmth (rather than heat) and humidity are helpful.

More cold-tolerant than cucumber but will be destroyed by frost.

Needs support – ideally netting because it has grippy tendrils.

When mature, fruits are more hollow with tougher skin, so stuff with meat etc and bake. Remove seeds from mature fruit.

Can be pickled and use as a base for chutney.

Self-fertile to some extent, but two or more plants will give better yield per plant.

Needs 90-110 days to reach maturity.

Plants can reach 10ft by end of summer. Use large trellis or arch for them to scramble over.

‘Fat Baby’ is the most reliable variety by far in the UK climate. It produces golfball-sized fruit.

To cook cut open and remove seeds (saving the seed for replanting).

ALFALFA. Grow this to accumulate minerals including calcium from deep in soil, and to fix N. Drought-resistant due to deep roots. 3 cuts per year to use leaves as mulch (but only 1 cut in first year). Final cut in 3rd week of August, so plant can build up its reserves to survive winter. Only lives for a few years. Is a perennial legume. Purple flowers.

Alfalfa roots can reach 38 metres! (John Jeavons)

Growth slowed significantly by weeds.

Shoots taste good in stir-fry.

Useful for producing biomass for compost.

ALLELOPATHY. Notice which plants never seem to need weeding – those are the ones engaging in allelopathy. Sunflowers are problematic for this.

Bob Flowerdew has an ebook, ‘Really Help Your Plants’, which is about allelopathy.

ALLIUMS inhibit peas and beans.

AMARANTH grain. Plant 30cm apart. Cook the seeds or they’ll inhibit nutrient absorption.

Plant is beneficial to sweetcorn and onions.

Amaranth is a good host plant for ground beetles.

To cook, boil for 20 mins max, or a little less. Use 3x as much water as amaranth.

Harvesting: shake the spikes to see whether grains are ready to drop, usu early September onwards. On a warm dry day, line an old tomato box with newspaper. Cut off the fruiting stalks and lay them in the box, then leave the box in a warm place to dry, turning the stalks occasionally. The seeds fall out onto the newspaper and can be collected when fully dried. Eat within 6 months. Leave some plants for the birds over-winter.

ANTS. Spearmint and tansy repel them. Sticky barrier of Vaseline stops them climbing.

APHIDS: repelled by tansy. It’s invasive and poisonous, so grow in pots. Ladybirds love it.

Repelled by wormwood tea. (But wormwood is allelopathic to surrounding plants.)

Repelled by nettles, garlic, spearmint.

Sow thistle (Sonchus oleraceus) attracts birds such as finches that eat aphids.

Fresh (steeped for one day) nettle tea spray is effective because it retains stinging substance.

Aphids overwinter on brassica stalks.

Wilted plants are vulnerable to aphid attack.

Use SB Invigorator for greenfly and blackfly.

Barrier of Vaseline stops the ants climbing plants to farm aphids.

APPLE, and other fruit trees. For this and similar, if growth is weak, apply some chicken manure pellets in spring.

Temps for frost damage. (Similar for other fruit trees):-

Green cluster (flowers still in bud): -3.5c.

Pink bud: -3.0c.

Full bloom: -2.0c.

Petal fall: -2.5c.

Fruitlet: -1.0c.

Critical time for watering: flowering and near harvest.

Thin blossoms at flowering to prevent biennial bearing.

For dwarf trees in containers, from mid-Jul to early Sept, perform light summer pruning. When you cut back new shoots, a new relationship occurs between living material of tree and the nourishment it has in storage. By removing the summer’s non-fruiting wood, you encourage the development of more fruit-bearing sites for next year’s crop.

Like soil pH 6-7.

Give apples and other fruit trees some wood ash in spring to help disease resistance.

Apple scab overwinters in leaves on the ground, so compost the leaves or move them elsewhere.

Apples and pears: vertical stems grow fast and produce little fruit. Horizontal stems grow slowly and produce lots of fruit. Prune back to buds that are facing the direction you want. Don’t let branches get too long because modern fruits are heavy. Learn to distinguish between fruiting buds and vegetative (i.e. leaf) buds.

Pruning for apples and pears: reduce vertical shoots to short spurs unless you want to keep any to help the tree grow taller in future. Reduce these latter ones by half in length. Then create a leading shoot at the end of each branch that will give horizontal growth. Pick a shoot or 2 near end of branch and prune it back by about a third to a half, to a bud on the underside of the shoot. This will grow in the direction it’s facing, giving a downward-facing shoot that will then naturally curl upwards to produce a horizontal branch.

Branches should be as close to horizontal as possible, to enable maximum fruiting.

Feed with potassium in early March to help ensure good fruit set.

Using Rootgrow (i.e. mycorrhizal fungi) can mitigate effects of replant disease.

ASPARAGUS. Sprinkle BFB in early spring. Don’t fork it in because roots are shallow.

To harvest, start cutting when spears appear in April. Finish in 3rd week of June, so plant has time to strengthen itself for next season. Don’t let spears get too long because that will curtail the crop.

Remove female plants that produce orange berries, because their yield will be lower than males. Or leave them to self-seed.

Interplant with strawberries.

ASPIRIN. For antibacterial protection, see under ‘fungicide’.

ASTURIAN TREE CABBAGE. Very good for hungry gap.

AUTUMN SOWINGS. Many veg can produce another crop if sown on the 4th July, eg dwarf bean Safari, beetroot Boltardy, carrot Early Nantes.

BABINGTONS LEEK = perennial leek. Harvest from year 2. Garlicky taste. Harvest in hungry gap.

BASIL. Pinch tip of stem at 15-25cm to create bushy growth.

Hates cold.

Propagate by keeping 10cm shoots in water until shoots appear.

Greek basil is a small-leaved variety that’s happy in pots.

BAY. Clip to shape in early spring before growth starts.

BEANS TO DRY. With Greek Gigantes beans, cut down to 4-6” in winter and mulch. Or dig them up and store. They’ll come back even more vigorously next year.

Mash them and use instead of potato.

Do NOT soak them before sowing or they’ll turn to slime.

Soak Greek Gigantes overnight then boil for ten minutes.

To test whether they’re dry, press your nail into the bean: if no mark is left, they’re ready to store.

Overwintered been plants: new shoots may not appear until June, i.e. rather late. Original plant: 1 stem. 2nd year plant: 3-ish stems.

‘Blue Lake’ produces haricot beans.

Variety ‘Tepary’ is known for drought tolerance. Phaseolus acutifolius latifolius.

BEES like blue flowers (eg comfrey). You can keep bees on a flat roof.

BEETROOT. Soak seeds for an hour before sowing.

Growth slowed significantly by presence of weeds.

Turns tough when too big or when short of water. Harvest when tennis ball sized.

‘Tankard’ varieties (i.e. cylindrical rather than round) don’t go woody, unlike round types.

Copes well with drought. Leaves go limp but they do perk up again.

Golden beetroot tastes less earthy than red varieties.

Stores in ground.

Only water when soil is severely dry, otherwise you’ll just encourage growth of leaves at the expense of roots.

Early sowings should be of bolt-resistant varieties, otherwise a cold snap could trigger bolting.

BIOCHAR mops up toxins in the soil. = a very pure, high-carbon form of charcoal that improves the structure, aeration, water-holding capacity, and nutrient retention of soils, whilst providing permanent refuge for beneficial microbiology. Carbon Gold’s biochar is enriched with fungi, trace minerals, and beneficial bacteria.

Research by Oxford Biochar: beetroot, radish, pepper, potato, and onion thrive when there’s biochar in the soil, but leafy greens and green beans show no increase in productivity.

For Carbon Gold 10% discount at Garden Organic, use code CGOW10.

BIODIVERSITY. Plant biodiversity is highest where nutrient levels are medium to low. (Where nutrients are plentiful, nobody has a competitive advantage for nutrients, so a few fast-growers just take over.) Biodiversity is good because each plant has a slightly different niche, so lots of species means efficient use of resources.

BIOINTENSIVE method. (John Jeavons). Grow 60% carbon-and-calorie crops, i.e. crops that provide loads of carbon for compost and calories in food. Eg amaranth, quinoa, corn, sunflowers, grapes (eaten as raisins), broad beans.

Root growth stimulated during 3rd quarter of moon, and leaf growth during 2nd quarter.

BIRDS. Good King Henry seeds are good.

Sunflower hearts = best bird food. Popular with finches and tits.

Goldfinches love verbena bonariensis seedheads over winter.

Teasels attract finches.

Put peas in oven for 5-10 mins at medium heat to dry/firm them, then feed to birds.

BLACKBERRIES can be propagated by layering. Peg down tips and they’ll root.

Fruit on 1-y-o canes. Prune out canes that have fruited. Tip-prune 1st-yr canes by 3-4 inches to encourage branching, which leads to more fruit.

Top-dress container-grown fruit in May.

Grow thornless varieties up forest garden trees.

BLACKCURRANTS: Plant very deep to encourage new shoots. = “stooling”. Prune out old stems that have fruited. Responds well to mulching with home-made compost. Need a richer soil than redcurrants or gooseberries.

Pruning is different from other currants, because for blackcurrants, new shoots grow from below ground each year.

Most fruit on last year’s shoots, and some on 2-y-o shoots. Prune to remove older shoots close to the base, to encourage new shoots. After harvest and in winter, prune back sprawling branches. In winter prune out a quarter to a third of the branches to 2.5cm from ground. Focus especially on old, weak, darker-coloured, low-lying, and unproductive branches.

Rejuvenate old bushes by cutting all but the youngest/strongest branches to 2.5cm. Thin out subsequent new growth to 12 shoots.

Prune when leaves have fallen. Cut out any stems that are more than four years old. Cut each of these right down to base. Maintain a balance between 1st, 2nd, and 3rd year wood by taking out a quarter to a third of the older wood each year. New wood has a light, sandy-brown colour and is usually the thickness of a pencil. Older wood is much darker, almost black-purple, and the stems are thicker. Remove damaged/diseased stems, and low-lying stems that would trail on the ground whilst fruiting.

To rejuvenate an old neglected bush, cut back *all* stems to just above ground level and give it a good feed with well-rotted manure or compost.

Fruit is ready to pick a week after it has turned dark blue-black.

Shallow-rooted.

Likes potash-rich soil. Can crop for 20 years. Self-fertile. Can grow in pots (30-40cm diameter).

More nutritious than blueberries. Cassissima is tasty.

BLACK HUCKLEBERRY (Gaylussacia baccata) = like blueberries but better. Difficult to obtain.

BLIGHT-resistant tomatoes include Mountain Magic, and Crimson Crush. Or v early-maturing varieties such as Red Alert.

Survives on living material, so be careful about composting tubers or seeds from potatoes and tomatoes.

BLUEBERRIES. Tea leaves = slightly acidic so good mulch. Or pine needles. Or apple cider vinegar. (Not green tea cos alkaline.)

Once max pot size reached, top-dress in early March. Mix composted bark with ericaceous compost. Feed with half-strength tomato feed as fruit ripens. Ideal soil pH is 4.3-4.8.

Don’t need much pruning. Once plant is 5-6 years old, every late winter (Feb to mid-March), select a piece of the oldest, thickest, wood and prune back to a few cm above soil level. This opens up the plant.

Can be propagated by layering. Will take one year to do.

Vaccinium corymbosum ‘Sunshine Blue’ is tolerant of higher pH than most.

Duke, and Bluecrop don’t require cross-pollination and are very reliable.

Need free-draining conditions. Never let them get waterlogged.

Won’t ever recover if allowed to dry out completely.

Protect flowers from frost using fleece.

Vine weevil is big problem. Treat twice a year with nematodes.

Max cropping at 5-10 years old.

Pot needs to match height and width of the plant. (Same applies to other fruit.)

Thrive in poor soil, so don’t overdo the fertilizer.

Can mulch with leaf mould or pine needles.

They fruit on wood that is 3 or more years old. Prune out wood that is over 6 years old.

Repot until plant is in a 60cm diameter pot.

Pick when there’s no sign of pink o stem or fruit.

Feed in spring with a slow-release ericaceous organic fertilizer, but NEVER with a high potash tomato feed. (Other source says you CAN use tomato feed.)

Don’t let plants go short of water in peak growing season, or next year’s crop will be poor.

BOLTING can be triggered by dry soil. Or poor quality soil. Or stress of temperature swings or pathogen attacks.

BORAGE. Can cut down to use as mulch.

BRASSICAS. Plant firmly and deep (over the cotyledons), because wind-rock damages root hairs.

Brassicas like having wet leaves. Growth slowed significantly by weeds.

Presence and extract of peppermint and thyme reduce infestations of clubroot.

Mixing brassicas with clover or birdsfoot trefoil reduces aphid attacks and maintains yields.

Cabbage white butterflies are discouraged by the taste of bugle (ajuga reptans) extract.

Interplanting brassicas with French beans significantly reduces pest levels on both.

Cut plant off just below soil level to prevent regrowth.

Dill deters cabbage white.

If brassicas fail to mature within the year of planting, leave them in the ground until next year: you’ll get a bumper crop.

BROAD BEANS. When planting out, bury the stems a little to reduce wind-rock. Don’t multisow because of tillering. Growth suppressed by nearby marigolds. Note cool germination temps under ‘seeds’. Grow under fruit trees.

Critical times for watering: pollination and pod development. Irrigating in dry spells once beans have flowered greatly increases yield.

Chocolate spot = a fungal disease, particularly problematic for overwintered crops in wet seasons. Worse if inadequate airflow around plants.

Pea/bean weevils leave notches on the leaves of young plants.

Successional sowing in spring will give constant pickings from spring to midsummer. Sow the next batch when preceding ones are 8cm tall.

Best yields are on heavy soils. But early crops do well on lighter soils if adequately watered when in flower.

Dwarf types are best for late harvest.

Can sow outdoors in late winter if the ground isn’t waterlogged and if the temp is at least 5˚C.

Overwinter crops may be lost in severe weather. Can use fleece.

In warmer areas, can sow from Feb under cover or sow direct from March to early May.

Pinch out tips once lowest truss of blossom has formed small pods.

Luz de Otono crops in Oct/Nov.

Plant summer savory nearby to deter blackfly.

Don’t sow before November, or they’ll reach flower before winter.

Put Tabasco sauce on seeds as you sow them so that mice won’t eat them.

Growing early in season helps prevent blackfly problems.

BRUSSELS SPROUTS. Stir-fry or steam leaves of the plant. Sow a mix of early, mid, and late-season varieties. Stake them, because wind-rock leads to ‘blown’ sprouts.

Cut off head of plant to encourage all sprouts to ripen at once.

Transplant deeply, ie cover cotyledons, otherwise plant will bend over and will develop a tough neck that will reduce quality and size of crop.

Brassicas like having wet leaves.

BUCKWHEAT. White flowers. Seeds nutritious. Attracts hoverflies and bees. Suppresses weeds. Adds bulk for compost. Is a fast-growing semi-succulent plant. Is a seed not a grain, so it doesn’t contain gluten. Is very high in protein.

Deters pests if grown within 6m of crops. Grow amongst potatoes, or near strawberries, broc, or green beans.

Grow it around other crops.

In good weather, can go from seed to bloom in just over a month. Sow anywhere bigger than a dinnerplate that’s bare for a few weeks. Shallow roots – easy to pull up.

Accumulates phosphorus.

Quickly killed by frost, but does like cool temperatures.

Harvest when ¾ of the grains are mature, before they fall out. Lower leaves of plant will have fallen off. It may still be flowering. Cut down the stems and hang them somewhere dry. Then thresh them inside an old pillowcase or on old sheets. Use a fan to winnow.

Most people prefer the taste of the flour if you remove the dark brown hulls. To do this, lightly grill them, or cook in hot frying pan, or hot oven. Then grind the toasted groats to remove the hull. The resulting coarse-ground buckwheat will still have some bits of hull in it, but these can be sifted out. It can then be cooked as is as a grain, or ground into flour.

Can cook the seeds like rice if you break them a bit.

Buckwheat is a ‘phosphate pump’.

Plant is indeterminate, i.e. kernels ripen at different times.

Can grind it to use as flour, or use as cooked grain.

BUTTER BEANS = Czar runners.

When pod rattles, they’ve finished drying. Also when you can’t stick a fingernail in.

To use, soak overnight and then cook for half an hour. Can be used in hummus.

CABBAGE. Critical time for watering: early in head development. Too much water later leads to head splitting.

Transplant deeply, ie cover cotyledons, otherwise plant will bend over and will develop a tough neck that will reduce quality and size of crop.

Brassicas like having wet leaves.

Spring cabbage: grow only 10cm apart, then harvest every other plant as spring greens, leaving the rest to heart up. When cutting heart, leave stem/roots and they’ll resprout, giving 2 or 3 mini-cabbages.

Can store hanging in netting in shed.

Cabbage is ready when inner heart leaves are a different colour from the outer leaves, and the heart is firm.

Savoy is a winter cabbage. Is particularly hardy, and copes well on poor soils.

Hardy winter cabbages can stay in the ground until needed.

Benefit from a single watering 2-3 weeks before harvest.

CABBAGE WHITE BUTTERFLIES. Spray a mix of wormwood, nettles, gentian root, and horsetail on plants.

Unopened packs of bacillus thuringiensis can be kept for 2-3 years.

Leave one leafy brassica outside your netting. The butterflies will go for this rather than trying to find any tiny hole in the net.

CALABRESE: Space at 50cm for huge heads.

Only sow one seed per module, because any shock during transplanting or a lack of water at any stage will trigger bolting.

Tastes better if grown in partial shade.

Critical time for watering: early in season to prevent buttoning. Benefit from a single watering 2-3 weeks before harvest.

After cutting main head, cut a deep cross in stem to stimulate growth of smaller heads. Cover with leaf to prevent rotting.

Transplant deeply, ie cover cotyledons, otherwise plant will bend over and will develop a tough neck that will reduce quality and size of crop.

Brassicas like having wet leaves.

Most of what we buy in shops as broccoli is Marathon F1, which needs more nitrogen than other brassicas if it’s to produce large heads.

Sow birdsfoot trefoil around broccoli if cabbage root fly is a problem.

The seedlings are very hardy, so can sow them in January.

CAPE GOOSEBERRIES and tomatillos are related. Larger, tarter, and more citrussy than ground cherries. Ground cherries and cape gooseberries are both types of physalis.

Ground cherries often fall from the plant before they’re ripe. Harvest and leave them to ripen inside husk. When they’re ready, husk will look straw-coloured and papery, and the fruits will be yellow to gold.

Can store for 3 months in a mesh bag or a basket with husks intact. They freeze well too.

To save the seeds, mash a few fruits in a bowl of water. Swirl vigorously and mash the flesh gently with your fingers to separate seeds from fruit pulp. Let the mixture sit so that seeds fall to bottom. Pour off the water/pulp/skin. Rinse seeds in sieve. Lay on kitchen towel to dry. Store once dry.

60-80 days to maturity from transplanting. Great in containers.

Plants can grow very wide!

If you’ve overwintered the plant, cut stems back to 6 inches in early spring. This encourages new growth and keeps plant under control.

Fruit that drops in winter will germinate.

Only eat when the fruits are orange, not when they’re green.

Does well in pots.

CARROT. Alliums repel carrot fly.

Sow when soil is 7˚C or above. To grow straight long roots, before sowing push a stick into ground and wiggle it around. Fill hole with sieved soil. Then sow 2 seeds. Later in growth, can earth up a bit to prevent shoulders turning green.

Early/forcing types: One of these terms is often in the variety’s name. Can be sown indoors from Feb onwards. Flyaway F1 is an early Nantes type. Amsterdam varieties.

Maincrop tend to be bigger. Store better. Slower growing. Berlicum and Autumn King.

Small round varieties are good for containers and for poor soils.

Carrots exude a substance that helps peas to grow.

Carrots need low nitrogen levels, or you’ll get lots of leaves and no root.

Need steady watering throughout season – no particular critical times. Too much water leads to lots of leaf growth but little root growth. Roots are sweeter in dry conditions. In very dry weather, give them a very good soaking once per fortnight.

Avoid sowing or touching carrots when cow parsley is in flower, because this is peak time for early carrot root fly problems.

Tolerate drought, but hate weeds.

Taste improves after frost. Cover with shredded leaves or straw to store in ground for later.

To harvest, push downwards before pulling upwards.

Use carrot tops to replace coriander/parsley.

Variety ‘Eskimo’ is cold-tolerant.

CAUCASIAN SPINACH = climbing perennial spinach. *Hablitzia tamenoides*.

CAULIFLOWER. Curds go brown in cold wet weather.

Drying out at any stage will lead to small curds.

Benefit from a single watering 2-3 weeks before harvest.

Romanesco is easiest to grow, but slugs can be a problem.

Exhibits autoallelopathy, so you can’t grow it in same place twice.

Critical time for watering: early in season to prevent buttoning.

After cutting main head, cut a deep cross in top of stem, to stimulate growth of smaller heads. Cover with leaf to prevent rotting.

Transplant deeply, ie cover cotyledons, otherwise plant will bend over and will develop a tough neck that will reduce quality and size of crop.

Brassicas like having wet leaves.

Can sow under cloches in November.

Needs consistent conditions to grow. “Andromeda” is a new variety that crops well even in fluctuating conditions.

There are three types of cauliflower: summer, autumn, winter. Summer: sow indoors in Jan or outdoors in April, and harvest Jun-Aug. For autumn types, sow mid-late spring under cover and plant out late spring to early summer, harvesting late summer to autumn. For winter types, sow late spring, plant mid-summer: they take the longest to mature and will be ready the following spring, 46-50 weeks after sowing (c/w 21-23 weeks for autumn types).

Spacing: for summer types, 50cm each way, autumn: 60cm, winter: 63cm.

Romanesco = cross between calabrese and cauliflower. Harv Nov-Jan. It’s treated as an autumn cauli type.

All types of cauliflower germinate best at 21˚C. Should be transplanted within 6 weeks of sowing. 2 weeks hardening off. If transplanting is delayed, you’ll get small, deformed curds. (Ditto dry periods.)

CAVOLO NERO. Plant between flowers in flower beds.

If you cut horizontally with scissors, you don’t need to remove the central stem.

‘Raven’ = improved variety. More compact, lots of leaves.

CELERIAC. Can stay in the ground until you need it, esp if covered with straw for frost protection. Frost enhances flavour. Plant out when apple blossom falls.

Is a bog plant so needs loads of water. Bolts if gets frosted.

Not suitable for container growing.

Make sure that the seedlings / young plants are not exposed to cold snap. Even one dip below 10 ˚C can trigger bolting.

Sow 10 weeks before last frost. Keep compost at about 15-18˚C. Only cover seeds very lightly if at all, because they need light to germinate.

Germination is slow and erratic. Space 35-45cm each way. Don’t bury the crown. Feed with a N-rich fert (eg chicken manure) in Jul/Aug. As plant grows, remove older outer leaves, always leaving 5-ish central leaves, to encourage development of the bulbous stem. Discarded leaves can be used as flavouring.

CELERY. If it gets chilled, it’s more likely to bolt. Can grow in containers (3 in large tub). Water at base to prevent crown rotting. Don’t over-feed with nitrogen or you’ll get heart-rot.

Bog plant so needs loads of water.

Plant 23cm apart.

Can be perennialized by cutting to ground at harvest, from where it’ll regrow.

Is very hardy. Can be grown from seed outdoors in March. Even if weather damages leaves, it’ll regrow.

Leave it in the ground at the end of the season. It’ll die down after frost and then regrow early in spring.

CELERY, LEAF/CUTTING, i.e. Apiaceae var. secalinum. Hardier and can self-seed. Low maintenance.

CHAMOMILE grown with sick plants helps them recover.

CHARD. Like beetroot, seeds are actually clusters.

CHERRY TREE. Critical times for watering is at flowering and near harvest. Need excellent drainage.

Prune in early June.

Morello cherry grows in dry shade.

To prune sweet cherries: these fruit at base of 1-y-o wood, and on older wood. So you can prune lots of new growth back in mid-summer, yet still leave plenty of potential for fruit next year.

Early spring, apply Q4 or BFB.

To protect ripening cherries from birds, cut top and bottom off 2-litre plastic bottle. Slit down side, then place the plastic sleeve around a fruiting branch. It helps to ripen the fruit too.

Feed with potassium in early March to help ensure good fruit set.

Using Rootgrow (i.e. mycorrhizal fungi) can mitigate effects of replant disease.

CHICKPEAS. Drought-tolerant, pest-free. Do best on a poor, roughly-cultivated soil. Can tolerate a little frost. (They’re from the Middle East, where temperatures can dip below freezing at night.)

Just sow supermarket dried seeds. Sow direct outside from April to June. Space 15cm each way.

Plants look like a vetch, and sprawl along the ground. White or purple flowers develop into small pods, which contain 1-3 beans each.

Fresh green chickpeas are delicious. If you wait until the pods have turned slightly yellow, they can be roasted, the peas inside make a delicious snack.

CHILEAN GUAVA. Top-dress container-grown fruit in May.

CHOP AND DROP. Can use small amount despite slugs. Can definitely use around fruit bushes, trees, and other perennials that aren’t susceptible to slugs/snails/woodlice. Eg wood chippings, grass clippings, autumn leaves.

CLAYTONIA aka MINER’S LETTUCE. Cover in winter.

CLEANING TOOLS. Add water to bicarb of soda and mix to paste. Spread on metal parts of tools. Leave to dry. Then remove. Use metal wire brush to finish.

CLUBROOT in brassicas causes purplish leaves and stems.

COLD FRAMES. Use upturned clear plastic crates. Brick on top so they won’t be blown away.

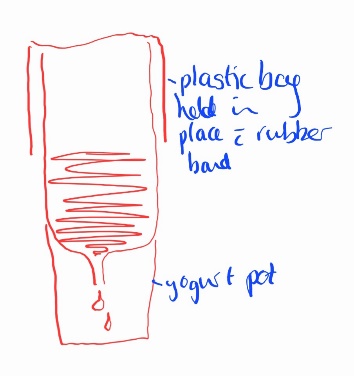
Line base of cold frame with bubblewrap or polystyrene to keep in warmth.

COMFREY. Bocking 14 has higher nutrient content than other types. High in potassium. Steep leaves for 6 weeks. Keep tea in dark. Dilute 1:10 for use and use weekly. Or chop up leaves and scatter as 5-10cm layer around plant you’re feeding, especially tomatoes. They can sometimes take root if you do this, but allowing them to wilt first will prevent this.

Don’t cut in first year, After that, cut to a minimum of 5cm above ground, 3x per year. Give the plant a break after September, before it hibernates.

You can remove flower stems to encourage leafy growth, but bees *love* the flowers.

Roots can reach 8ft down.

For fruit: 1kg leaves in 15l water. Steep 2 weeks. Apply undiluted.

Divide roots in late summer. Or spring. Or autumn… depending where you read!!

High pH, so don’t use regularly on blueberries. To make fertilizer, when 60cm high, cut to about 5cm above ground. Put in container eg plastic bottle with top and bottom removed. Place a jar under to catch the liquid that will drip after 2-3 weeks. Dilute 1 part to 10-20 parts with water to use. Feed tomatoes etc 3x per week once fruit has set.

To make less smelly comfrey tea, keep comfrey leaves in a garden sieve over a container.

Useful as a compost accelerator.

How to make comfrey concentrate. It can keep for up to a year. 🡪

Dilute concentrate 1:10-1:20, depending on how thick and black it is.

COMPANION PLANTING. Some plants are generally beneficial to those around them, eg lemon balm, oregano, nettles, valerian, chamomile, dandelion, oak, sow thistle.

Chamomile contains a growth hormone. Its tea is good against damping off.

Companions vs antagonists acc to John Jeavons:-

Plant Companions Antagonists

Asparagus Tomato, parsley, basil

Beans Potato, carrot, cucumber, cauli Onion, garlic.

cabbage, most herbs.

Bush beans Potatoes, cucumber, corn, Onions, garlic

strawberries, celery

Climbing bean Corn, sunflowers Onion, beets, kohlrabi,

cabbage

Beetroot Onion, kohlrabi Climbing bean

Brassicas Aromatic plants, potatoes, celery, dill, Strawberries, tomatoes,

chamomile, beets, onions climbing bean

Carrots Peas, lettuce, chive, onions, leek, tomato Dill

Celery Leeks, tomato, bush bean, cauli, cabbage

Corn Potato, peas, beans, cucumber, squash.

Cucumber Beans, corn, peas, radish, sunflower, lettuce. Potato, aromatic herbs.

Fennel Disliked by most plants!

Grapes Hyssop

Leeks Onion, celery, carrot

Lettuce Carrots, radish, strawberries, onions, cucumber.

Onion/garlic Beets, strawberries, tomatoes, lettuce, leeks Peas, beans

chamomile

Parsley Tomatoes, asparagus.

Peas Carrots, turnip, radish, cucumber, corn, beans. Onion, garlic, potato.

Peppers Basil, okra.

Potato Beans, corn, cabbage, horseradish. Squash, cucumber, tomato

raspberry, sunflower.

Raspberries Garlic

Soybeans Grows with everything and helps everything!

Spinach Strawberries

Squash Nasturtiums, corn

Strawberries Bush beans, spinach, borage, lettuce, onions. Cabbage.

Sunflowers Cucumbers Potatoes.

Tomatoes Chives, onion, parsley, asparagus, marigold, Kohlrabi, potato, fennel,

carrot, nasturtium cabbage

Turnips Peas

COMPOST. Docks excellent for compost.

Crops that provide lots of carbon-rich compost material: amaranth, wheat, corn, quinoa, broad beans, sunflowers, grapes, alfalfa.

Holds 6x its own weight in water.

Add soil to heap, because it includes microbes that’ll help decomposition, it includes bacteria that help with N-fixing, it helps produce lots of compost, it helps pile hold moisture better, it holds on to nutrient-laden ‘juices’ so they don’t leach out. A good recipe is 10% soil, 45% green, 45% brown. Add at least 3 different types of crops because this ensures microbe diversity.

Compost materials cure to approximately ¼ to 1/3 of original volume.

Loosen soil under where you’re planning heap, to aid drainage.

Cold composting generates much higher yields than hot composting. Hot composting can ‘burn off’ vital organic matter.

Compost tea may be as effective as compost itself. Fill an old pair of tights with compost and suspend it in waterbutt. Replace with fresh compost after one month.

Composting lots of nettles makes a lovely peat-like compost.

Leafmould contains antagonist fungi that compete against fungal diseases.

Ask breweries whether they have any spent hops available.

Plants grown in organically composted soils take up less lead and other urban pollutants.

For every 10˚C increase in composting temperature, the rate of decay doubles. Hot composting at 60˚C is 32 times faster than cold composting at 10˚C. Hot composting can yield compost in 30 days. Cold composting takes 12-18 months.

Commercially available compost activators are just nitrogen in concentrated form, often from chicken manure. There isn’t much nitrogen in urine, but it’s useful if your heap is too dry. (Source = Soilfixer bloke.)

To warm your compost heap and get bacterial activity going in winter, fill a plastic bottle (but not coke type as it’ll melt) with boiling water and place in centre of heap. Heat will warm centre of heap for a couple of hours – long enough to get bacteria going. Once going, they’ll generate their own heap.

Cut woody brassica stalks vertically with a knife. Much easier than cutting horizontally.

You can compost cotton, denim, wool.

You can use pure leafmould as a seed compost – no need to add anything.

Ben Raskin’s book, *The Woodchip Handbook*, explains how to use woodchip.

COMPOST (BOUGHT). CD uses Moorland Gold.

Differences with peat-free compost (c/w peat), with solutions:-

1. Often dries out fast. Peat composts often include a wetting agent, peat-free usually don’t. So add a few drops of washing up liquid to each bag. And water more.

2. Often low in nutrients, because no fertiliser is added. So add a small amount of (ideally slow-release) fertilizer to each bag. This is especially helpful for young plants.

3. Most is made from garden/kitchen waste. Content varies by time of year (autumn leaves vs summer grass etc). In winter it’s mostly food waste.

4. Wood fibre is used a lot. It can lock up nitrogen so plants are starved of nitrogen.

5. It contains green waste, so may contain weedkiller residues. Some manufacturers no longer use green waste.

6. Add liquid feed if growth slows down after 3 weeks. Dose weekly.

7. Peat-free composts deteriorate in quality if kept for too long. Keep in cool dry place. If left out in rain or sun, it won’t be fit for use after three months.

Compost made from course wood fibre lacks nutrients, releasing nutrients only slowly. (Green waste compost.)

Consider mrmulch.co.uk for bulk compost/manure.

Seed compost: low nutrients, fine texture. Potting compost: high nutrients, water retention, coarse particles. Multi-purpose = half way between these extremes.

If buying green waste compost, ensure it’s certified PAS100 to guarantee quality and minimal contaminants.

Peat-free compost is much more sensitive to storage conditions than peat. Doesn’t keep for as long. Water seed trays from below to reduce risk of seed being stuck in a dry spot in peat-free compost. If your seedings don’t progress in peat-free, start feeding when they’ve produced 2-3 true leaves. Surface of peat-free can be dry whilst underlying compost is wet. Peat-free needs watering more.

CONTAINERS that are in contact with the soil are good, because fungi can enter the pot, leading to better growth.

COURGETTE. In pots, min 20l but 30-50l is better. Can grow 4 plants in a 1m2 builder’s bag.

Can use old compost but add some BFB first.

Grow more than one plant to ensure pollination.

Powdery mildew affects vigour of plant. (Use milk solution on leaves.) Less likely to occur if plenty of organic matter dug in and plant is well-watered.

Yellow varieties tend to crop better. For yellow varieties, the early leaves are often yellow, too. This isn’t a problem!

Green variety suited to poor weather in UK = ‘British Summertime F1’.

Variety ‘Parthenon’ will set fruit without pollination (so can be grown under cover).

COVER CROPS. Climate change 🡪 prolonged winter rain 🡪 nutrients lost from soil. So it’s even more important now to avoid leaving bare earth in winter. Concentrate on perennials which have more substantial root systems.

COVERS FOR CROPS. Veggiemesh is cheaper than Enviromesh. Or use net curtains.

With fleece, use 30gsm (works to -6c), not cheaper 17gsm (works to -3c). Can increase frost protection further by covering fleece with anti-insect mesh.

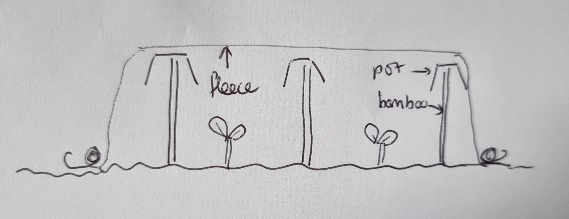
Enviromesh is fine enough to keep out whitefly.

Old thin pillow case to keep frost off plant in pot.

Fitted sheets for raised beds!

Never leave fleece on crops when temp is above 20c.

4mm high tensile steel for hoops.

Mesh is good against wind.

Fleece is good in spring (light surplus, heat deficit), but not autumn (reverse).

Fleece. Can support like this: 🡪

Instead of insect mesh, use dressmaker’s tulle. It’s cheaper, and you can put it in the wash.

CRANBERRIES. Moist, acidic soils. Do well in containers.

CROPPING duration. Short-season crops are only available for a brief time, eg sweetcorn, asparagus. Long-season crops can be:-

* Different varieties mature at different times, eg cabbage, cauli.
* Can stand in ground on maturity, eg leeks, parsnips, celery.
* Quick-maturing, so suitable for succession growing, eg lettuce, radish.

CROWDER PEAS (Black-eyed peas.) Can cope with hot weather. Critical watering: flowering and pod-formation. Also called cowpeas. Climbing species have no tendrils, so tie them in.

CUCAMELON. When vine reaches 6’, cut top so that it forms side-vines. It’s a perennial. Before winter, cut down to 1-1 ½’. Keep fairly dry over winter in a pot.

Feed as for tomatoes.

CUCUMBERS need nitrogen and humidity. Fruit will taste bitter if you don’t water them enough, or if too many surrounding plants are competing for nitrogen.

Remove lateral branches from bottom 18” of plant. This delays and reduces early yields, but results in bigger yield over whole season.

Like pH 5.5-6.8. Bark mulch leads to increased yield. Cucumbers grown vertically produce twice as much fruit as those allowed to sprawl. 50 days before first frost, pinch off all blossoms and immature fruit.

Do well next to grapevines.

Grow one plant of small-fruited variety in hanging basket.

1 plant needs 22l pot.

Don’t overwater young plants: it’s later that they need more water.

Cucumbers can go bitter if stressed by extreme heat.

DAIKON RADISH. Also called mooli radish.

Doesn’t like heat. Tends to bolt in hot weather. Likes pH 5.8-6.8.

Can grow in partial shade.

Thin to 4-6” apart. 40-70 days to maturity, depending on variety.

Harvest when leaves are 20cm long. Part of root may be above ground – that’s OK.

Can get oblong, tapered, and round varieties.

‘Japanese Minowase’ = heirloom variety with roots up to 24”! Adaptable to sun and shade.

Var. ‘Long’ = up to 14”. Var. ‘White Icicle’ is only 5” but is ready in a month.

Top of root is sweeter and can be eaten raw. Lower down is better for cooking. Absorbs flavours from whatever it’s cooked in.

Grows best when allowed to mature in colder weather. It’s a winter radish.

Sow seeds 2 months before *first* frost date.

To store for several weeks, don’t wash it but do cut off leaves. Put in fridge.

Slice raw and dip into hummus. Or make turnip cake. The leaves are nice in Thai coconut curries.

Or cut into ½-inch cubes and sauté with garlic and ginger for a few mins. Then toss with rice noodles, soy sauce, sesame oil, and chilli.

Best sown in April in the UK. Best sown when soil is 10-20˚C. May be able to germinate all winter if temps are a few degrees above freezing.

Can be used to improve soil. Leave in ground to rot (rapidly). Farmers do this.

DAMPING OFF. Use weak chamomile tea solution. Or spread thin layer of sand or vermiculite over surface.

DANDELIONS are high in calcium.

DILL. Grow around fruit trees to attract pollinators. Sow direct every 3 weeks after last frost. Is a growth-enhancing companion for brassicas, onion, lettuce.

DIVIDING PLANTS. If a plant flowers before the end of June, divide it in autumn. If it flowers from start of July onwards, divide it in spring.

DOCK is high in potassium.

DRYING HERBS. Harvest in morning in sun after dew has dried for max flavour. For herb seeds, collect when seed heads are turning brown and hardening, but not brittle and ready to shatter. Dry in a warm (21-33c) dark and dry place with good air circulation, eg airing cupboard, attic. Darkness prevents loss of flavour. Tying tightly and hanging is good for herbs with less moisture, such as thyme, sage, rosemary. Bundles must be very small. Drying takes from a few days to a couple of weeks. Try hanging bunches from a wire coathanger. Or freeze ice cubes of herbs.

Microwave. Put 4-5 sprigs between kitchen roll and cook on high for 2-3mins. Must NOT be wet beforehand. Result should be dry and brittle.

DWARF BEANS. Sow in July for crop in Sept/Oct. Specifically 4th July! Growth suppressed by nearby marigolds. Critical times for watering: pollination and pod development.

Sow 15-20cm apart, in blocks so that they can support each other.

‘Delinel’ is good for reliability. ‘Purple Queen’ (Real Seeds) is a heavy cropper.

DYNAMIC ACCUMULATORS. Sow thistle (Sonchus oleraceus) brings up nutrients from subsoil.

EDAMAME BEANS. Silverlea is suitable for cold climates. Ditto Green Shell. Growth suppressed by nearby marigolds. Fiskeby is good in cool climates with short growing season. Critical times for watering: pollination and pod development.

ELDERBERRIES can be grown as bushes under other fruit trees. They’re shade-tolerant. They’re mildly allelopathic, mostly to brassicas.

Always cook the berries before eating. The leaves are poisonous, so never eat them.

ENDIVE and other bitter-tasting leaves such as chicory are beneficial for hepatic health.

Good for autumn harvests.

ERICACEOUS conditions. Leaf mold, pine needles, and sawdust lead to acidic compost.

F1 varieties do offer ‘hybrid vigour’, which leads to high yields. Plants uniform in size and shape. All ready to harvest at same time. Expensive. F1 hybrids first appeared about 60 years ago.

FENNEL. (Esp bronze fennel) = good for ladybirds and lacewings to overwinter if you leave it in place.

Less likely to bolt if you don’t sow until mid-June.

Can be cut down to ground and allowed to regrow again and again.

When sideshoots come out from the base, the bulb is ready to harvest.

FERNS. Ostrich fern aka fiddleneck fern = perennial edible. Young curled shoots taste like a cross between asparagus and green beans.

FERTILIZER. Nitrogen (N) for leaves. (Nettles, chicken manure, grass clippings.) Steep nettles for 2 weeks.

Phosphorus (P) for roots and stems. (Chicken manure.)

Potassium (K) for fruits and flowers. (Comfrey, sheep manure. Banana skins. Wood ash.)

Too much nitrogen in soil leads to too-fast breakdown of organic matter.

Dried crushed eggshells especially good for brassicas. Helps break up clay and release nutrients held in alkaline soils.

Dilute home-made plant foods to colour of weak tea.

Nitrogen deficiency: veins of leaves remain green, but areas in between turn yellow.

Phosphorus deficiency: purple leaves.

Potassium deficiency: similar-looking to nitrogen deficiency, but K is less mobile in plant, so new leaves show the problem (whereas if just old leaves show the problem, it’s a N deficiency). Can also cause dead brown patches at edge of leaf.

Potassium in wood ash = 1-10% and is available for 6 months. Wood ash very alkaline. Exposure to air destroys much of its nutrient value.

Crushed granite = 3-5% potassium, available over a period of 10 years. Use 1.5-8.5lbs per 100sq feet.

Fermenting plant food leads to higher mineral concentrations than making tea. Use organic brown sugar.

Comfrey and nettle teas need 6-8 weeks to mature. Compost tea only needs 1-2 days. Young nettle leaves contain more nutrients.

Wood ash is good source of potassium.

FIELD BEANS. Good alternative to chickpeas in hummus and falafel. Widely used for this in north Africa.

Fuego is a tasty variety.

Yield more per plant than broad beans. In GO experiment, field beans yielded over twice the quantity produced by the broad bean crop. Grown overwinter, they crop earlier than broad beans.

Harvest early or they can taste bitter.

Better cold tolerance than broad beans.

FIG. Need a pot diameter 38-60cm long-term.

Pinch out growing tips of new shoots in June to create a bushy habit once fruits have started to form.

Figs in pots are thirsty.

Give a weekly/fortnightly potassium feed to help fruits develop from July.

Thrives in poor soil. Likes having its roots restricted.

Young fruit are vulnerable overwinter so use fleece, or straw under netting. Move container figs undercover until spring.

Cover tips during frost to protect buds and ensure a strong fruit set.

Pruning: cut out damaged and diseased branches in Feb to early spring, along with any longer branches and some of the older wood. Once summer arrives, new growth needs cutting back to encourage bushier development and new fruits to form, ready for next year. Any figs your tree produces in spring won’t ripen in time for autumn. If you’ve got an established tree, November is the time to remove slightly larger fruit. But leave the smaller, pea-sized fruit to overwinter, so they’ll ripen by next summer.

Alternative view on pruning: prune in November when tree is dormant. Create an open network, cutting out dead, damaged, diseased, and crossing growth. On the tree, reduce the lowest side shoots, pruning back to the main stem to form a single leg. Trees fruit on 1 and 2-year-old wood, so prune main framework branches by half to encourage new growth and the development of side shoots on the remaining older wood. During the summer (by end of June), pinch out tips of young green side-shoots at 5-leaf stage to encourage embryo fruit buds that will crop in Aug/Sept next year. As you establish the framework, begin to prune every other side shoot back to one bud on the main branches to help future fruiting. This creates a 50-50 cropping-growing regime.

Another view on pruning: In early March of the year after potting, prune back the central stem to encourage new bushy growth (otherwise it’ll become long and leggy). In future years, prune back some of the oldest wood quite hard, to encourage new growth, and leave some untouched for fruit production.

Harvest figs when they begin falling under their own weight, or they come away from the branch easily. They should be full-coloured, have a slightly soft texture, and be starting to point downwards. Often, a tiny bead of nectar will appear at the end of the fruit, indicating readiness for harvesting.

Provide chicken manure pellets in spring. Light mulch of compost too.

Top-dress container-grown fruit in May.

Pinch out the growing tips of the shoots each summer to encourage fruit production.

The fruit forms in the axils of leaves near the tips of young shoots growing in summer. These pea-sized embryo figs overwinter to produce a crop the following year. Trees often try to produce a second crop of figs, which never ripen in the UK.

Figs produce 2 crops per year, a ‘breba’ crop which begin to appear in late summer, overwinter, and then ripen in early summer, and a later maincrop that ripens in autumn. In most of the UK, the breba crop will be killed by frost, so remove any fruits that are bigger than a pea in September. (Or Nov according to different source.)

Repot in November. 45x45cm pot, using 50-50 mix of John Innes No. 3 and compost. Build a framework of canes to support the plant.

Self-fertile.

Protect embryo fruits in winter by bringing pots somewhere frost-free. Or protect pot and plant with fleece or bubble wrap.

Don’t allow soil to dry out, especially whilst fruits are swelling in early summer. Watering can then be reduced as harvest approaches. Do not overfeed, or they’ll produce lots of foliage at the expense of fruits.

Net the bush against birds.

Figs are ready to harvest when they hang down as the stalks soften. The skins may start to split. Can be dried in an airing cupboard. A drop of nectar at the base of the fruit is a sign of ripeness.

FLEA BEETLES. Bits of tomato leaf repel flea beetles.

FLOWERS. Sow annuals in Feb so they’ll be ready for crops.

Mint – flea beetles.

Borage attracts bees and pest-eaters. Adds trace elements to soil around strawberries.

Nasturtium attracts pests away from crops.

Plant crimson clover with broccoli because it attracts spiders.

Poached egg plant attracts hoverflies.

Nettles. Ladybirds lay eggs here, and hibernate in hollow stems. Like yarrow, marigold, fennel, dill.

Nettles contain potassium as well as nitrogen, so are a good mulch around fruiting crops.

Nettles attract aphids away from crops.

Nettles contain calcium so help with blossom end rot.

Tansy repels aphids. It’s invasive and poisonous so grow in pots. Ladybirds love it.

Cosmos and alyssium attract pest-eaters.

Flowers etc for poor soil: most perennials, also lettuce (if watered), yarrow, perennial sunflower. If soil is especially bad, choose beach sunflower (helianthus debilis) and dry-loving wild bee balm (monarda fistulosa). Also big-leaved periwinkle (ground cover), rose of Sharon, rudbeckia (can tolerate drought once established), butterfly weed (asclepias tuberosa – is drought-tolerant). Vernonia noveboracensis (likes damp), sedum (tolerates extreme heat), coreopsis (tolerates drought, needs full sun), echinacea purpurea (somewhat drought-tolerant once established).

FOREST GARDENING. Aim for multiple layers of vegetation. Aim towards closed system. Include plants that draw nutrients from deep in earth. Mulch to create deep rich soil. Include perennial plants. Grow strawberries and low perennial herbs (thyme, basil, oregano, tarragon) around tree trunks.

Plant veg in drifts, not completely mixed up. In nature, plants do like growing near their own kind.

FRENCH/CLIMBING BEANS. Growth suppressed by nearby marigolds. Critical times for watering: pollination and pod development. Pick beans slightly immature because fully-ripened beans tell the plant to stop flowering.

Growing them with strawberries enhances both.

Grow up stems of sunflowers.

Spacing: 2 per pole of tepee if canes are 30cm apart, or 1 per cane if they’re 20cm apart.

Put Tabasco sauce on seeds as you sow them so that mice won’t eat them.

To maximise yield, only water them when wilting before flower initiation. Once flower initiation starts, water well.

Helda = a bean that’s a cross between a runner and a green bean. Flat but stringless.

FROST damage is far worse if rapid thawing in morning sunshine.

Damage is worse to wet leaves and if wind is present. Wind in general leads to much lower yields.

FRUIT TREES. In April, start feeding container-grown fruit trees a balanced feed fortnightly.

Remove suckers from below the graft, because they’re from the rootstock species and will weaken the tree.

Grass is the worst competitor for young trees (up to about 5 years). Other ground cover (eg herbs and veg) is much better.

Thin out crops of apples, pears, and plums in June.

FUNGICIDE for mildew etc. In 4.5 l warm water, mix 1tbsp baking soda and use the solution in a sprayer. Soak the whole plant and allow it to drip down and drench the soil around the plant. Can use foliar spray of 20% diluted milk on courgettes. Helps grow strong plants with good yield.

Dissolve 1 or 2 aspirins in 4.5 l water and spray on plants every 2-3 weeks: helps plants fight off bacterial infections and insect infestations.

FUNGUS GNATS on seedlings. Use 3% hydrogen peroxide, 1tsp in 4tsps water, and spray on dry soil. This treatment can also help prevent damping off.

Fungus gnats particularly harmful to leek/onion seedlings.

Yellow sticky traps help.

Vinegar trap. Doesn’t work particularly well.

Sprinkle cinnamon on surface (also helps with damping off).

“Gnat Mix” bacillus thuringiensis.

“Mosquito Bits” effective. Soak bits 1tbsp per litre for 6 hours and use strained water. Effective for up to 2 weeks.

GARDEN SORREL is a perennial. Use in soups, salads, and sauces.

GARLIC. Don’t plant where recently manured. In Jan, scatter BFB and wood ash.

Undersow with clover.

Can be grown under dwarf fruit trees.

CD recommends harvesting in June, before leaves have changed colour much at all. If left too long, papery outside degrades.

Softneck stores better, hardneck (inc elephant) is hardier.

Sow red clover once garlic is established. Reduces weeds and fixes N.

Solent Wight = best variety for storage, taste and appearance when plaited. Harvest mid-July.

Will go dormant and not crop to a good size if there’s drought, so keep it watered.

Flower stems don’t produce flowers or seed. Instead, tiny bulbils appear, either at the top of the stem or sometimes, out of the side of the stem a few inches above the bulb. The bulbils can be planted. They’ll tend to produce a single undivided bulb in the first year. Replant this and you’ll get a proper divided bulb.

Harvest garlic when lower half of the leaves on each plant have turned brown, but some are still green. If you leave it later, the outer wrapper may split. Dry bulbs in the sun for 1 day then cure in warm dry conditions for 2-4 weeks but shade from strong sunshine to avoid ‘greening’ of the cloves.

Rust will not affect the quality of garlic bulbs. “Rust, like all diseases, is more likely on soils that are too rich in nitrogen, and low in potassium.”

White rot is a big problem. First symptom = browning of leaves. Tops may fall over. Cloves rot. White mould with tiny black poppy seed-like sclerotia in it. Can survive for 100 years in soil.

Green garlic. Use stem and bulb. Sow 2 inches apart. Harvest alternate ones as green garlic and leave the rest to mature. Green garlic is a good hungry gap crop.

Only water if >10 days without rain. Stop watering 2 weeks before harvest.

Hardneck varieties develop scapes. Softneck varieties only produce scapes if stressed. Hardneck has stronger flavour and bigger cloves but only stores until mid-winter.

Only plant the outer cloves from bulb. The small inner cloves never produce great bulbs. Grow the small inner bulbs, 5 to a 5” pot on the windowsill, and keep chopping the greens to add to cooking.

Plant between mid-October and end of November. Plant so that 2.5cm is above the tip.

Rust is an increasing problem.

GERMINATION. See ‘Seeds’.

GINGER. Place root in a plastic sandwich bag and leave in a sunny, warm, spot. Plant when growth can be seen.

GLOBE ARTICHOKES. Cut off first head when quite small, so that the plant produces LOTS more.

Cut down to ground level after cropping each year. Plants are typically productive for several years, after which they can be divided and planted elsewhere.

On a mature plant, pull off ‘offsets’ (baby plants) from side of main plant, with as much root attached as possible. Trim larger leaves down so that it’s 15-20cm tall. Don’t damage the small, immature leaves in centre. Pot up the offset. After 2 months, you should have a healthy plant ready to go in the ground.

Gather flowers from when they are golfball-sized to when they are nearly ready to open. Boil until tender, then eat the softened flower base and base of the outer flower sepals with vinaigrette. 10 heads per plant is typical.

Can be seed-raised or vegetatively propagated. Seed-raised ones vary, with a high proportion of thin spiky flower buds, but also some good quality heads. These can be selected to replace the inferior ones over time.

No significant pests or diseases.

GOOD KING HENRY seeds can be used like quinoa. See vid by Tycho Holcomb of Myrrhis Permaculture for how to process seed to remove the saponins.

GOOSEBERRIES. Recommendations for dessert types:-

\*Golden drop. Amazing flavour but not a good cropper. Thin-skinned.

May Duke. (red)

\*Rokula. Red, mildew-resistant, good cropper, easy to grow.

Leveller. Big fruit. Yellow.

\*Martlet. Red, easy to grow, mildew-free, heavy crop.

Whinhams Industry. Easy to grow. Vigorous. Productive. Red berries. Berries can remain on bush for some time without deteriorating.

Hedgehog. Red Perfect dessert flavour. Quite upright.

White Lion. Easy. Vigorous. Largish white-green fruits. Late season. Thin-skinned.

Older (sweeter) varieties have a bit less vigour.

Space 5-6 feet apart.

Can cope with some shade but greater risk of mildew. More sun = sweeter berries.

Normally ripe 7-10 days after turning colour.

They like pH 6.0-6.5.

Prune them first in winter: fruits form on 3-4 year-old branches so cut back older unproductive stems. Then cut back again in spring, removing half the fruits to enable the other half to ripen. In June, prune sideshoots back to 5 leaves. Mulch with bark chips in summer to keep moisture in.

Best sweet varieties: Golden Drop, Captivator, Langley Gage.

GRAPES. In spring, pinch out a third of tiny clusters of grapes at immature stage. This helps good crop and healthy vine.

Summer pruning: on stems that are fruiting, cut 2 leaves after the fruit. Also, cut non-fruiting new stems back to a couple of leaves from the main woody stem. If >1 bunch on a spur, remove all but 1, or grapes will be small.

Winter pruning (in dead of winter): Cut back sideshoots to 2 buds. As weather warms, growth will start from these short side spurs. Normally they produce 3 or 4 leaves and then a truss of flowers. Once the grapes have set, let a couple of leaves develop plus an extra inch to allow for dieback, before pruning the tip of the side branch. This stops the vine putting wasted energy into new growth, and instead concentrate on the fruit. You need to do this every few weeks in summer as the plant will continue to try to grow.

Fruit ripens when the weather turns in autumn.

Like pH 5.5-5.7, so mulch with bark.

Critical times for watering: early in season when shoots develop, and again in midsummer before canes harden off.

Straw mulch increases yields.

Light pruning combined with cluster thinning can produce crops up to 50% larger than those resulting from heavy pruning.

Grapes are ripe when stem browns and shrivels.

A mature vine can produce 9-45kg of fruit.

Hyssop is an excellent companion to grapes.

Vines should be 1.2m apart.

Thin fruit once fruitlets have set. Remove entire bunches so there’s no more than one bunch per 60cm. As summer progresses, you can thin fruit within individual bunches. This allows remaining fruit to get big, and reduces risk of mildew. Remove up to half the fruit when they’re pea-sized. Try not to touch the other fruits, as they’re easily bruised. OR just pick individual fruits as they ripen.

Need a couple of doses of blood-fish-bone in summer.

Thrive in poor soil.

Stop watering as fruit ripens.

Powdery mildew affects the vines when roots are too dry.

Botrytis (or grey mould) is worse in damp, cold conditions. Newly opened buds and young shoots turn brown and dry out. Some leaves may develop brownish-red large patches, usually before the flowers open. Can cause small white raised spots on whitened bark. Grapes have brown-grey furry mould and may burst, or – if dry – shrivel. To reduce risk, prune vine to allow air circulation. Remove dense foliage. You can compost infected material.

Need a minimum of 18˚C for crop to set.

“A vine over five years old growing outside should not be expected to produce more than ten bunches a year.” !!!! Overcropping = ‘shanking’.

Variety ‘Flame’ = excellent variety, suitable for outside and under glass. Often found in supermarkets. Seedless and sweet.

GRASS. Mowing should be done in a way that mimics grazing. Some short (favours daisies), some longer (favours critters). Mowings should be removed so that nutrient levels in the grass don’t increase. Fungal network under lawns where grass cuttings are removed will be stronger and more effective, supporting more species above ground. A lawn not cut at all until late July (as in a traditional hay meadow) will favour the greatest variety of flowers. But cut it short in autumn so that mushrooms can fruit (i.e. regular mowings from August onwards).

GREEK GIGANTES BEANS: See ‘beans to dry’.

GREENHOUSE. Polytunnels need more ventilation than greenhouses.

To prevent fungal build-up, ventilate on mild days in winter.

GREEN MANURES compatible with no-dig: field beans (cut off at ground level in spring), sinapsis alba, caliente mustard, crimson clover (all die back in winter).

Don’t let green manures get beyond 10-50% flower. Leave roots in ground. Plant clover under other crops in pots.

Instead of buying new compost each year for potato/tomato pots, put chopped leaves from end of crop at bottom of pot under the compost, and use grazing rye as green manure on top. Dig it back in in spring.

Overwinter green manures must be started by August. Can start them under existing crops.

Don’t compost N-fixing roots because N will leak out. Instead, leave them in ground.

Buckwheat and leafy mustards accumulate phosphates, which are essential for fruits.

Grazing rye overwinter gives N in soil for spring.

Don’t let nitrogen-fixers set seed, because 90% of the N stored in root nodules ends up in the seed. Check roots for nodules, to see whether the right kind of bacteria for that plant are in your soil.

You can tell whether nodules have fixed nitrogen by cutting one open with a fingernail. If pink inside, they have.

Leave roots in soil and put plant on compost: this is a more effective use of crop than leaving in situ. Also means that the bed is ready to use sooner. Do this when crop is at 10-50% flower.

For no-dig green manures, use synapsis alba (white mustard) because it conveniently drops dead at -5c!

Daikon radish as green manure. Cut off tops and leave root in soil to rot. Rotting is quick.

Most green manures need 6 weeks to establish before first frosts. If sowing green manure in October or November, use field beans.

Use crimson clover rather than perennial clover which can become a weed problem.

Choice of cover crop. Vetch and grazing rye contain a germination inhibitor so should be left to break down for 4 weeks before sowing anything. That said, it’s only a real problem for small-seeded crops such as carrot. Rye grass is different from grazing rye, and doesn’t cause the same problem.

If sowing before early Sept, vetch is good. It grows fast. Can be chopped up in mid April ready to plant hungry crops in May. Field beans and grazing rye can germinate in late Sep. Chop up field beans before they get tough and fibrous. For short gaps in summer, use buckwheat or phacelia because fast. Low-growers eg yellow trefoil or white clover can grow under tall crops such as French beans. Sow as you plant the beans out.

White mustard.

Dig green manures in during March.

Field beans like heavy soils. Crimson clover likes light, sandy soil. Field bean, winter tares, and grazing rye are fully hardy. Crimson clover and phacelia may not be fully hardy but can supply nutrients even if killed by frost. Decomposing grazing rye can inhibit germination in subsequent crop, so don’t direct sow seeds after it. Dig in green manures at least three weeks before crops are to be sown/planted. Dig in before it flowers.

Grazing rye is excellent for soil structure and soil organic matter. Sow Aug-Oct so it can overwinter. Hardy. Suits most soils. It’s an annual, so is not problematic like rye grass (which is perennial).

Green manures dramatically reduce soil nitrogen loss over winter compared with bare soil (97% in the case of grazing rye).

Winter tares. Nitrogen fixer. Sow July and August so can overwinter. Hardy. Avoid dry soil.

Field bean. Hardy. Sow Sept-Nov to overwinter. N-fixer. Sow 10cm apart. Prefers heavy soil.

Crimson clover. May not be fully hardy. Sow Jul-Aug. N-fixer.

Sow clover early spring to late summer. Prefers light soil.

Mustards: sow from early spring to late summer. Suits most soils.

Phacelia. May not be fully hardy. Sow Aug-Sept.

Poached egg plant is an excellent green manure to dig into sandy soil.

Persian clover = excellent green manure. Lots of biomass.

Fenugreek can be green manure for late summer, because it grows fast. Buy seed in Asian supermarkets. Fixes nitrogen. Use leaves and stems as herb. Half hardy annual so light frost only. Needs ground at least 15˚C. Sow March-August.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | N | | P | K | Biomass | | Notes |
| Buckwheat | \* | | \*\* | \*\* | \* | | ½ hardy annual |
| Dandelion | \*\* | | \*\* | \*\*\*\* | \* | | Perennial |
| Dyer’s woad | \*\*\*\* | | \*\*\* | \*\*\* | \* | | Brassica |
| English plantain | \* | | \* | \*\* | \*\*\* | | Perennial |
| Evening primrose | \*\* | | \* | \* | \*\* | | Biennial |
| Fodder radish | \*\* | | \*\*\* | \*\* | \*\* | | Brassica |
| Garden sorrel | \*\* | | \*\*\*\* | \*\*\* | \* | | Perennial |
| Phacelia | \* | | \*\* | \*\*\* | \*\*\*\* | | Annual |
| Rape | \*\*\* | | \*\*\* | \*\*\* | \*\*\*\* | | Brassica |
| Red clover | \*\* | | \* | \* | \*\*\* | | Perennial |
| Salad burnet | \* | | \* | \* | \*\*\* | | Perennial |
| Stinging nettle | \*\* | | \*\*\* | \*\* | \*\*\* | | Perennial |
| Yellow lupin | \*\*\*\* | | \* | \* | \*\* | | Annual |
|  | | All-purpose plant food\* | | Comfrey concentrate\*\* | | Urine | |
| N: g/litre | | 25 | | 1.1 | | 7.5 | |
| P: g/litre | | 4 | | 0.6 | | 0.8 | |
| K: g/litre | | 33 | | 5.5 | | 1.6 | |
| \* = lower when diluted as instructed. | | | | | | | |
| \*\* = i.e. liquid produced from decomposed leaves without added water. | | | | | | | |

GROUND CHERRIES. See cape gooseberries.

GROW LIGHT. E27 LED bulb (£22) turns any lamp into a grow light. 400k. twowests.co.uk

HAMBURG PARSLEY. Roots are similar to parsnip in shape/size and taste like a parsnip with a hint of celery. Foliage can be used as parsley. Germination slow and irregular. Can be sown in spring, or in midsummer to overwinter and give an earlier crop next year. Can grow in semi-shade. Ready from late summer.

Petroselinum crispum var. tuberosum.

Scrub roots before cooking – they discolour if peeled. Can be chipped, roasted, mashed, esp with swede.

HANGING BASKETS. 14” basket holds 2 cherry toms (+ marigolds) or 3 strawberries, or 5 leafy herbs. Can also grow cucumbers, dwarf beans, salad leaves.

HARDENING OFF should be done in the shade, especially at first.

An alternative to hardening off is called brushing. Toughens plants up in same way. Use card to brush seedlings for 1 minute per day. Technique was developed in Japan. Continue for same duration as normal hardening off.

HARICOT = dried French bean seed.

HEAT. When temps exceed about 29-32˚C, many plants struggle. Some, like tomatoes, cope by rolling up their leaves to reduce water loss. Many fruiting plants, including tomatoes, peppers, beans, may also drop flowers or stop producing new ones. Stop fertilizing, because plants will then need even more water to process all that fertilizer. A sudden flush of nutrients also signals to the plant that it’s time to grow – not ideal in the heat! Harvesting promptly in the heat also helps, because the plant no longer needs to ‘service’ that fruit.

HERBS do best with little water. Wait until they start to wilt.

Divide perennial herbs every 3-4 years to renew vigour.

Southernwood cola (artemisia abrotanum) is a herb with leaves that smell of cola when crushed. Put in summer drinks or under a joint of meat when roasting.

HONEYBERRY / HASKAP BERRY (Lonicera caerulea) boosts runners’ speed! Grows best where there’s half a day of sun, preferably in the morning. Hardy to -40˚C. Don’t like summer temps to be frequently above 30˚C. Russian types bloom earlier than Japanese types, which are often called haskaps. Spacing = 1.5m each way. 2 compatible types needed for good pollination. Will need support. Fruit from year 2.

Pruning: take out oldest branches. Prune as for blackcurrants.

Fruits are ripe 7-10 days after turning blue, but tend to drop off when ready.

Good new varieties: Aurora (very sweet), Boreal Beauty, Boreal Blizzard.

Mulch is important, as for all berries.

Plant deep (15cm below soil in pot) to stimulate more branches to form.

Jugana (Russian type) and Boreal Beast are good for freezing.

Pruning similar to blueberries. Prune out crossing branches or dense tangles. Can take right out or prune back to an upward-facing bud. Cut out weak, spindly growth. Do this in winter when not in leaf. Remove up to a third. Aim for a goblet shape.

Harvest: don’t pick as soon as they’re blue. They won’t be sweet yet. Leave them on the bush until they’re softer, detach from stem more easily. Can put a tub under, shake the bush, and the ripe berries will fall off.

Can freeze them.

HOPS are perennial. From rhizome, lots of new shoots are sent up in spring. These can be poached in lemon water and served like asparagus.

Good in shade.

Nectar source for comma butterflies.

HORI HORI knife. Best one is Nisaku NJP801.

HORSERADISH. You can eat the young leaves. Steam them or add to salad.

HOUSEPLANTS. Repot in Feb.

HUGELKULTUR: Can use in large pots. Logs then twigs then grass then compost.

INDOOR GROWING. Self-watering windowsill container. 🡪

INTERCROPPING leads to higher overall yields.

Interplant lettuce, onions, carrots, because different extents both above and below ground.

Or sprouts, parsley, spinach, and onions. Different heights/depths and different nutrient needs. Spinach and onions will be ready before sprouts.

Leeks with celeriac.

Garlic and summer lettuce.

Lettuce with any slow-growing brassica.

Beans with celery.

Beans with sweetcorn.

Beans with tomatoes.

Brassicas with carrots.

Sweetcorn with lettuce.

Leeks with carrots.

Cabbage with squash or sweetcorn or tomatoes or onions.

Sweetcorn with potatoes.

Leeks with parsley.

Plant root crops (carrots, parsnips) or vining plants (eg squash) under dwarf fruit trees.

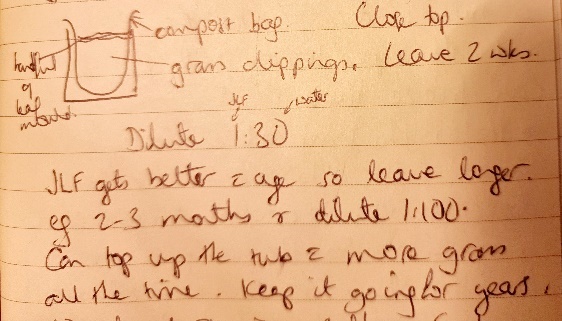
Root depth (for interplanting considerations):-

Shallow (18-36”): brassicas, celery, corn, alliums, potatoes, parsley, lettuce.

Medium (36-48”): Beans, carrots, mustard, peas, peppers.

Deep (>48”): Artichokes, asparagus, lima beans, parsnips, winter squash, tomatoes.

Plant herbs that like shade under big crops.

JADAM JLF. 🡪

JAPANESE WINEBERRIES like shade and are very sweet.

JERUSALEM ARTICHOKES. Good for biomass production for compost.

Removing flowers and watering will lead to rapid development of bigger tubers.

Drought-tolerant. Watering is unnecessary, although see point above.

KALE. The flower shoots are delicious.

Transplant deeply, ie cover cotyledons, otherwise plant will bend over and will develop a tough neck that will reduce quality and size of crop.

Daubentons perennial kale: lives 5-6 years, but towards end of life, stems arch over and root as a new plant!

KIDNEY VETCH = sole source of caterpillar food for small blue butterly.

KIWIS produce fruit on 1-3-yr-old wood, so treat them like a grapevine. Prune all new growth back every 6 weeks in growing season to keep them under control and increase yield. Every few years, take out some of the oldest wood in early spring.

KOHLRABI. Harvest young, 2-month-old, tennis ball size. Can grow in pots.

Likes temps 4.5-23.9˚C.

Peel before eating.

KUMQUAT: Hardier than most other citrus.

LABELS for plants. Need a UV-resistant pen (i.e. not just a normal Sharpie). The Garden Marker is good. China marker. Paint marker. Nail polish.

LAMB’S LETTUCE. Can be grown in unheated greenhouse in winter.

LEAF MOULD can be used as seed compost on its own.

LEGUMES after legumes do not do well.

Only fix nitrogen when soil is >8˚C.

LEEK RUST. To reduce problems with this on leeks and garlic, avoid giving too much nitrogen. Use high-potassium feed.

LEEKS. Only need to blanch 2-3 weeks before harvest.

Intensive spacing: 2-6 inches. Partial shade ok. Grow with brassicas, carrots, parsley.

Can be perennialized by cutting down to ground level.

Can bolt if planted too early.

Apply a thin layer of grass cuttings 2-4 times during the season, to suppress weeds and feed the plants. (Champion growers do this.)

Don’t need heat to germinate.

Leek moth: Cut plants back to ground at first sign of trouble and dispose of foliage. They will regrow and can still achieve a fairly decent size.

Allium leaf miner is a big problem. Cover crop with fine mesh from Sept to early spring. The pest causes distorted leek plants, then stem collapse with stem riddled with small maggots and brown pupae. The cream-coloured maggots look different from the leek moth caterpillar, as the latter has a brown head.

If the tops are dark green, the plant is still growing.

It’s OK to compost leeks that are infected with rust.

LEMON. Citrus don’t cope well with fluctuating temperature.

Lunario aka 4-seasons is fairly well-suited to our climate, and flowers multiple times per year, so you have fruit at various stages of development year-round.

In winter, they’re happy indoors somewhere cool, ideally without central heating. Compost should be barely damp over winter.

Move trees outside in June. Acclimatise to light by putting them in shade for first two weeks.

Terracotta pots best to ensure drainage and aeration.

Hate cold damp soils, so use a compost with plenty of added grit or vermiculite.

You must let all citrus dry out between waterings, to the extent that pot feels light, leaves have lost a bit of sheen, and fruit is softening. At this point, water thoroughly, but don’t leave standing water.

Use high-N feed in summer and high-potash feed (eg tomorite) in winter.

They love humid conditions. (Keep in bathroom?)

Choose an Amalfi variety, rather than the common-but-tricky Meyer.

Repot citrus before spring growth starts. Most need repotting every 2-3 years. Use ericaceous compost.

LEMON VERBENA. Leaves = clothes moth deterrent. Tea has mildly sedative effect.

LENTILS like sandy soil in a warm, sheltered place.

LETTUCE. Sow winter varieties in August. Germination is better when it’s cool.

Hearting types will bolt if planted too close, ie <25cm apart.

Good companion for sweetcorn and garlic.

Harvesting individual leaves means plant never has enough leaves to bolt.

To stagger a harvest, sow all, then replant some seedlings, which will temporarily slow those ones down.

Transplant deeply, ie cover cotyledons, otherwise plant will bend over and will develop a tough neck that will reduce quality and size of crop.

Fleece winter lettuce when temps drop.

Winter lettuce: sow by end of Aug for starting to harvest mid-Nov, and by mid-Sep to begin harvesting in Feb.

Cut-and-come-again gives max yield per unit area. Also, young leaves are most nutritious.

If you cut lettuce down to a stump, it’ll regrow.

Variety ‘Bronze Arrow’ is much less susceptible to slug damage than other varieties.

LOGANBERRIES. Peg down tips and they’ll root.

Prune after fruiting. Prune out canes that have fruited, right to ground. The previous year, mark stems with freezer bag ties. Then after fruiting, cut all market stems. Add ties to remaining stems, ready for next year’s pruning.

Fruit best on 1-y-o wood.

Thornless varieties crop poorly and lack vigour, with the exception of ‘LY654’.

LOVAGE tastes gorgeous as a herb in stock.

MANURE. Horse and other manures are high in nitrogen, but very low in phosphorus and potassium.

MARIGOLD, FRENCH. Scent repels whitefly, greenfly, thrips. Use older, fragrant, varieties, not modern F1. Eg ‘Defender’.

Mexican marigold (Tagetes minuta) has root secretions that repel bindweed, couch grass.

Marigolds suppress growth of peas and beans.

At the end of season, rake remains into soil so benefits of their repellent qualities continue.

MEDICINAL. Wild bee balm (monarda fistulosa) has leaves that are good for a cold-fighting tea.

Raw potato juice is an anti-inflammatory – excellent for arthritis and joint pain. To make, thinly slice a potato, place in a glass of water, leave overnight, then drink on an empty stomach. Add lemon or other fruit to improve taste.

See under tomato re antiseptic properties of leaves.

Ribwort plantain is antibacterial.

MEDLAR. Trees are very small and beautiful.

MELON. pH6-8. Need lots of phosphorus. Critical times for watering: flowering and fruit-development. Trellis. Pinch off blossoms and remove unfruitful branches 50 days before first frost.

Pinch out the leading shoots once they have 5 leaves (about 30cm tall) to encourage side shoots. These are where the fruit will appear, so select the 4 best and pinch out any more that develop. Allow 2-4 fruits on each side-shoot.

Emir is ideal for cooler climates.

Knock fruit with your fist: if it sounds hollow, it’s ready. Also, smell.

Better to sow a little later than to risk night-time temperatures below 15c.

Cantaloupe types best for UK.

Don’t overwater young plants: it’s later that they need more water.

You may not get any fruit if you don’t hand-pollinate.

Variety Mangomel F1 was developed in Yorkshire for UK gardeners.

MICROGREENS. Indoors, can grow on pure vermiculite or perlite.

MILDEW (DOWNY/POWDERY) White on upper surfaces of leaves = powdery mildew. White on undersides of leaves = downy mildew.

Use chive spray on cucumber plants.

Nettle tea may prevent cucumbers getting downy mildew. Extracts of garlic and field horsetail control powdery mildew.

Sodium bicarbonate solution sprayed on is good at treating mildew.

For powdery mildew, spray 50-50 mix of milk and water on leaves. Lactose reacts with sunlight and inhibits fungal growth.

MOOLI RADISH. See Daikon radish.

MOSS on soil indicates that the soil is shady, acidic, compacted, poorly drained.

MULCH: Be careful about using mulch of leaves: contains phenols which may inhibit growth (Hunt & Bortz, 1986).

Stone mulches are good for warming / regulating soil temp. Hardy herbs (eg parsley overwinter or thyme) benefit.

Wood pieces: only top 1-2” of soil depleted of nitrogen as the wood is broken down.

‘Silage sheet’ = black plastic, available in allotment-sized pieces. Available from agricultural merchants.

Pile autumn leaves on flower beds to rot down and so that wildlife can over-winter.

MULTISOW:-

Plant Seeds/clump Desired plants/clump

Basil 3-4 2-3

Coriander 3 2

Dill 3 2

Parsley 3 2

Florence fennel 3 1-2

Kale 4 3

Leek 5-6 2-4

Onion 6-7 4-5

Spring onion 8-10 6-8

Peas (pods) 2-3 1-2

Radish

MUSHROOMS: Winecap mushrooms are large, fast-growing mushrooms that can grow on compost. See annforfungi.co.uk.

Toilet roll oyster mushrooms. Pleurotus ostreatus. Put 2 white toilet rolls (the whole thing, not just the cardboard tube) on separate saucers. Fill their centres with boiling water until thoroughly moistened but not sitting in water. Leave to cool for 15 mins, which will help to sterilize the paper. Then remove cardboard inner tubes. Fill the central holes with oyster spore. Then loosely enclose each roll and saucer in a plastic bag and place it somewhere dark that’s between 22-27˚C. After 10 days, the centres and tops of the rolls should be growing short soft white ‘fur’. After 2-4 weeks, the rolls should resemble Stilton cheeses and smell of mushrooms. Then – still in plastic bags – put in fridge at about 4˚C for 2-4 days. This shocks them into their fruiting cycle. Then put somewhere cool (10-20˚C), light, and humid. Pierce several holes in the plastic bags where they touch the rolls. At this stage, the mushrooms must not dry out. Mist-spray with water daily, moistening the outside of the bags, especially in the pierced hole areas. This creates humidity and encourages fruiting. After 8-10 days of mist-spraying, small mushrooms sprout. Make sure they come through the holes in the bags. When all mushrooms have been picked, store the rolls in daylight for 4 weeks at room temperature. Do not touch them. Then submerge the rolls, still in their bags, in cold water for 8 hours. Then pour away any excess water that hasn’t been absorbed and put them in the fridge again, following same procedure as before. This should produce 2 or 3 more flushes of mushrooms. If the roll doesn’t fruit the first time, check moisture level, allow the rolls to rest for a week or 2, and begin again with the fridge treatment.

MYCORRHIZAL FUNGI take carbon from plants and provide nutrients, especially phosphorus. Too much phosphorus in th1e soil (because of fertilizer) means that plants fail to engage with the mycorrhizal fungi, so miss out on the other benefits.

Brassicas don’t really use the mycorrhizal network. Nor do some types of beets.

Leaving soil bare is bad for the mycorrhizal network, as is growing plants that don’t use it.

Some plants (eg sweetcorn, onion, garlic) are more reliant on mycorrhizal fungi than others (potatoes, carrots). Growing a highly dependent crop after a non-dependent crop can significantly reduce yields. So consider using an intermediate crop or a green manure.

NASTURTIUMS attract blackfly away from broad beans.

Seed pods can be pickled and used instead of capers.

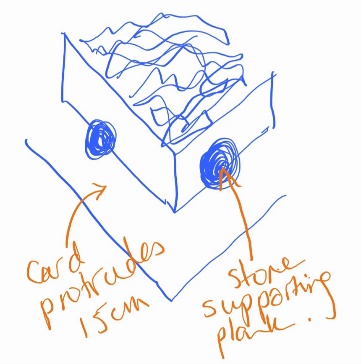
NETTLES. Host to its own aphid that doesn’t feed on any other plant. This helps to build up numbers of aphid predators early in the year. Ladybirds love to overwinter in dry nettle stalks.

Help fruit grown nearby stay fresh for longer.

Sepp Holzer says you should only soak nettles etc for one day to make liquid feed. And spray it on the plants. Use for courgettes, cucumber, cabbage, but NOT for peas and beans because risk of overfertilising. Fermentation takes up to a month, and is complete when no more foam. Nettle feed is good against aphids if it’s fresh, because stinging substance remains.

Young nettle leaves contain more nutrients (for nettle tea fertilizers).

NINE-STAR BROCCOLI. Cut back after harvest so it doesn’t flower.

Remove flowers so it doesn’t go to seed.

But you can save seeds if you want to.

NO-DIG. Easy way to make a no-dig bed. Overlap in card must be 10-15cm. In dry weather, water the ground beforehand. Compost must be at least 15cm deep (though SH would disagree!)

NUTRITION. Most nutrient-dense crops:-

Watercress (100/100)

Pak choi (91)

Swiss chard (89, including massive quantities of vitamin K)

Beet greens (87, especially vit K)

Spinach (esp vits K and A)

Parsley (65, including vast amounts of vitamin K and loads of vitamin C)

Turnip greens (62)

Kale (49, including lots of vitamin K, A, C)

Peppers (41, including lots of vitamin C)

Broccoli (34)

OCA. Perennial. Lemony tang. Not hardy. Cook like potatoes. Tubers can be lifted Nov-Jan. Tubers don’t form until there’s less than 12 hours of daylight, yet frost will kill them off! Not hardy. Can use fleece. Don’t like full sun.

Like potato but with a sweet, lemony taste. Can cook or eat raw.

Chit but no need to earth up.

Plant 12.5cm deep, 30cm apart, once risk of frost has gone.

Do NOT harvest before end of October.

Don’t eat large quantities due to oxalic acid. But if left for a couple of days before eating, the acid breaks down.

Can be stored in the ground in winter until needed, but rodents may be a problem.

Plant at edge of raised bed so it can cascade.

Yields are greater if grown in pots before planting out. Can achieve 250 g per plant.

Are good at regrowing and can be invasive in warm climate.

ONIONS hate being shaded by other plants or competing with them. In Jan, scatter BFB and wood ash. Ailsa Craig: if started indoors early, keep seeds at 27 C until germination. Start Ailsa Craig from Boxing Day onwards for big results. Red onions don’t store well. Ailsa Craig don’t store well.

Onions release a chemical that’s bad for beans.

Timing is important for planting onion sets. They’re more likely to bolt if frosted when small. Late March can be good, or April if ground <7C.

Smaller sets are less likely to bolt, because they’re less mature.

Undersow with clover.

In March, feed with high-N feed (eg chicken pellets or urine) to trigger leafy growth which leads to big bulbs.

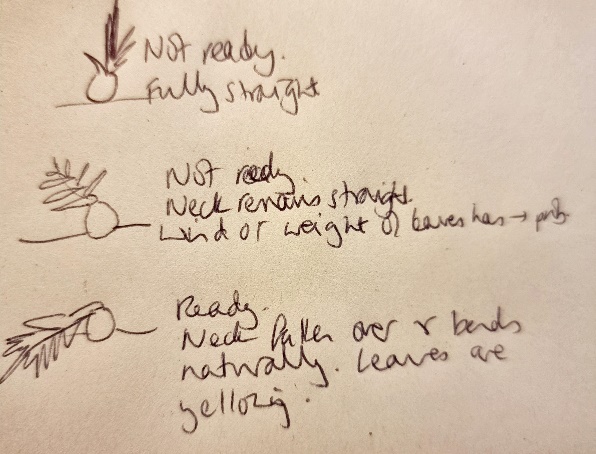
Critical time for watering: bulb enlargement, but stop when top falls or you may delay ripening.

Intensive spacing: 4-6”. pH 6.9-6.6.

Walla Walla can overwinter.

Stop watering mid-July. Any with thick soft necks will not store well. A fortnight before harvest, tease a fork under bulbs to break roots’ contact with soil – skins will then dry out.

When bulbs are swelling, allow weeds to grow, because they’ll take up spare nutrients and moisture, so the bulbs will keep better.

Don’t plant sets too early, because they’ll bolt if there’s a cold snap.

Onions that have bolted don’t store.

Overwinter onions don’t store for long.

If grown under fleece and bending over as a result, they soon straighten up once the fleece is removed.

Store in old tights, tying a knot between each onion.

Onions grown from sets (especially red varieties) are more likely to bolt than onions grown from seed. Once the plant is in flowering mode, the bulb won’t get any bigger, even if you break off the flower. So don’t plant red sets too early. Reduce risk of autumn sets bolting by top dressing with a N-rich fert in early spring.

Onions that are good for storage: ‘Setton’, which is an improved version of ‘Sturon’ – it has higher yields and stores better. Ailsa Craig stores well. Beds Champ (spring) stores better. Red Brunswick stores very well. Senshyu Yellow does NOT store well. Walla Walla has extremely poor storage (2 weeks!)

LZ says plant sets deep (2” soil over tip) so that growing roots don’t push the set upwards.

Onions are cured and ready to store once the skin has turned papery and the leaves have shrivelled.

For spring-sown onions, sow/plant as early as conditions allow. The longer days of late spring trigger bulb formation, so a good plume of leafy growth is important by this stage. BUT if there’s a cold spell, they may bolt.

Sets: heat-treated sets won’t bolt, and can produce larger onions.

Spacing will affect size of bulbs.

Onions with thicker necks don’t store well, so use them up first.

For autumn-sown onions, you can grow them in 9cm pots in a sheltered spot away from the early morning sun overwinter then plant them out in early spring.

ONION WHITE ROT. Scatter garlic granules (from horse supply shop) once soil warm and before planting. The fungus thinks alliums planted so grows and dies. Ideal time = April with air temp of 14-16˚.

It’s less problematic if you grow from seed rather than from sets.

ORANGES hate dry air in winter. Need to mist them.

ORGANIC GARDENING. Insects attack unhealthy plants – the problem is in the soil.

Chamomile, nettles, and alliums, protect plants against diseases, but their extracts are even more potent.

ORIENTAL BRASSICAS/GREENS can be good autumn-extending veg, but use bolt-resistant varieties. They cope really well with cold. Sow Chinese cabbage in July for August transplanting.

They like shortening days, so can sow in July. Must sow after mid-summer.

Don’t transplant Chinese cabbage from a seed bed as it’ll bolt. Instead, direct sow or module sow.

If mizuna and mibuna bolt, cook the flower stems in stir-fries.

PAK CHOI. Can sow under cloches in November.

Exceptionally nutrient-dense.

Likes partial shade with 3-5 hours of sun per day.

HR says that purple varieties seem less pest-prone than green varieties.

Is exceptionally fast-growing as a crop.

PARSLEY. Soak seeds for 24 hours in 43c water, changing water once. Remove any seeds that float, and sow the rest.

Leave plants in ground to set seed the second year. Great for intercropping with runner beans.

Germination takes 11-28 days. To speed process, soak overnight then freeze for a week. OR rub between two sheets of sandpaper.

More likely to bolt if exposed to substantial cold when young.

PARSNIPS. Excellent germination in loo roll tubes. Best time to plant is when daffodils bloom (H&B, 1986).

To harvest, push downwards before pulling upwards.

Seedlings are poisonous!

Only water when soil is severely dry, otherwise you’ll just encourage growth of leaves at the expense of roots.

PEARS. Critical times for watering: flowering and near harvest.

See info under apples, too.

Feed with potassium in early March to help ensure good fruit set.

Using Rootgrow (i.e. mycorrhizal fungi) can mitigate effects of replant disease.

PEA MOTH. Lay eggs in June and July, so avoid peas flowering then.

PEAS can survive light frosts, unlike beans. Sow 2-3 per loo roll and plant 5cm apart. Pea Terrain is mildew resistant so can grow in autumn. Plant 4-8 plants in 22l container. Sow Feb-Apr. Growth suppressed by nearby marigolds. Growth enhanced by nearby peas.

Don’t sow peas when it’s cold and wet.

Douce de Provence is hardy overwinter type than can be sown in October.

Round-seeded types are hardier and can be sown in late autumn and early spring. Wrinkled-seed types can be sown from March to July.

Insect-proof mesh against pea moth when in flower.

First-early peas (sow Oct-Nov or Jan-Mar and harv May+): ‘Half-Pint’, ‘Early Onward’, ‘Douce Provence’.

Second early peas (sow Mar-Jul, harv 10-12 weeks later): ‘Hurst Green Shaft’, ‘Little Marvel’, ‘Jaguar’. Jaguar = mildew-resistant.

Maincrop peas (sow Mar-Jul, harv 13-16 weeks later): ‘Ambassador’ = mildew-resistant. ‘Alderman’. ‘Rondo’.

Put Tabasco sauce on seeds as you sow them so that mice won’t eat them.

Sow peas in May so that they’re not flowering in June and July when pea moths are busy.

Round seed types are hardier and taste sweeter than wrinkled types.

Overly rich soil leads to foliage growth at the expense of crop.

Sow round-seeded types in Oct/Nov. Sow wrinkle-seeded types from March to July.

In dry weather to increase yield, water after the first flowers have opened. Don’t water before flowering as this only encourages leafy growth. Pick regularly to encourage further cropping.

Water well when they begin to flower, and for two weeks after to allow pods to swell.

Sow more first/early peas eg Meteor late in July to get another crop.

Watering peas helps delay development of powdery mildew.

If your pea seeds have pea/bean weevils, freeze them for 3 days before sowing. They should still grow OK, albeit with one lopsided cotyledon.

Peas (and beans) stop growing in extreme heat.

PEPPERS should be self-fertile, but give a gentle shake so pollen can fall where it’s needed within the flower. Pinch out tip at 8-12”, just above a pair of leaves, to encourage bushy growth and more fruit. Yield = 3-8 fruits per plant.

Variety ‘Sunset’ from Sea Spring Seeds can grow in a 1-litre pot. Masses of long sweet peppers.

To overwinter peppers, reduce top growth by a third, cutting branches just above a bud. Move plant to somewhere frost-free. Reduce watering to bare minimum. It’s fine if the foliage dies back. Remove aphids. Repot and gradually start watering in spring.

Need a longer growing season than tomatoes, so sow them early Feb.

In pots, need a 9-12” container.

PERENNIALISING CROPS. See under celery, leeks, fennel. Can also do cavalo nero, cauli etc. Purple sprouting broc.

PERPETUAL SPINACH is a beet, not a true spinach.

PIGEONS. To deter them from eating brassicas, put plastic bottles upside down on canes. The rattling deters them.

PINE NEEDLES (eg Christmas tree) = good mulch for acid-lovers such as blueberries and raspberries.

PINEAPPLE GUAVA sounds tasty!

PLUMS: Critical times for watering: flowering and near harvest.

Victoria plum is particularly susceptible to canker and silver leaf disease. Tends to have lean years between branch-breaking bumper years.

Feed with potassium in early March to help ensure good fruit set.

Using Rootgrow (i.e. mycorrhizal fungi) can mitigate effects of replant disease.

Often crop so heavily that crop breaks branches. July = good time to thin the crop. Remove all damaged/diseased fruit first, then thin fruits to 1 every 10cm or a pair every 15cm. Thinning also helps prevent biennial bearing.

Plums are easier to prune than apples or pears. Timing: either after blossom in late May or after harvest in early Sept. If cutting out a whole branch, don’t cut it flush to the stem. Instead, leave the ‘collar’ at base of branch to heal.

To renovate an old, overgrown, plum tree, reduce tree height by cutting all branches to manageable length. Cut to a point where another branch has formed, or remove back to the trunk. Then thin out remaining branches to leave space for light and air.

POLLINATORS. Grow dill around fruit trees to attract pollinators. Sow direct every 3 weeks after last frost.

Winter-flowering plants for pollinators: mahonia, viburnum x bodnantense, winter honeysuckle.

Dead wood left on trees helps solitary bees.

Red valerian attracts hummingbird hawk moths.

Many butterflies lay eggs in long grass.

Regarding pollination partners for fruit trees etc, bees can travel 300m or so, so partners don’t need to be close.

Honesty is good for orange tip butterflies, as is garlic mustard.

For bees, ensure you have things in flower from March to October.

Ragwort, thistle, and docks = twice as attractive to pollinators as plants included in pollinator mixes. Rapid nectar-replenishment.

POMEGRANATE. Needs autumn temps of 13-16 for fruits to ripen. Frost-hardy to -12. Self fertile. Very unlikely to successfully fruit in the UK.

POLYCULTURE. After planting main crops, scatter seeds of groundcover crops, eg mustard, rocket, buckwheat, fenugreek.

POPPY SEEDS. Papaver somniferum (opium poppy) is most used. Can also use papaver rhoeas, papaver dubium or papaver nudicaule. Hungarian Blue, and Maanzaad. Avoid papaver orientale – seeds are so hot and spicy that they may be an irritant.

Store in jar in fridge so they don’t go rancid.

Can grow opium poppies around the base of fruit trees.

POTATOES. In 30l buckets – up to 6.8kg crop!

1st and 2nd earlies: grow on one level so plant 4 spuds on 2 diff levels per bucket. No need to earth up. Need chitting. When chitting, if you want large spuds, leave only 1-2 chits per spud, if you want lots of small spuds, leave them all on. If you chit them too early, break off stems and start again.

Maincrop: Plant 4 on same level and earth up to a max of 8”. No need to chit.

If no potato fert, can use BFB.

First earlies can be planted closer than maincrop. After harvest, put in crates and leave out of direct sunlight to dry, before storing in paper sacks.

Potatoes for Christmas: plant July and early August.

Plant beans with potatoes so former can add N to soil for spuds. Potatoes need a LOT of nitrogen.

Like pH 5.2-5.7 for maximum yields.

Plant 10-12” apart.

Deadnettle is a good companion: it improves growth and flavour.

Earlies harvested when size of an egg and plants still flowering. Maincrop can be left until plants have yellowed and died down.

Or 3 weeks before harvesting maincrop, cut foliage down to ground. This protects against blight and encourages spuds to firm up their skins.

Dry maincrop spuds in sun for two hours to cure. Brush off excess dirt then store in hessian or paper.

When to plant: 1e at end of March, 2e in mid-April, mc at end of April.

Time from planting to harvest: 1e = 100-110 days, 2e = 110-120 days, mc = 120-140 days.

Chitting potatoes leads to fewer but larger and earlier tubers.

Can cut chitted potatoes in half if multiple growths on each one. Leave for a couple of days before planting so that cuts can heal over.

Don’t need to earth them up if you’ve planted them deeply.

Determinate/indeterminate applies to potatoes, too. Indeterminate need earthing up. Determinates: smaller spuds and smaller harvest overall. Charlotte = 2nd early indeterminate.

Store spuds in just-damp compost.

Start chitting 1e in early Feb, 6 weeks before planting out from early April. 2e and mc 2-3 weeks later.

Sarpo varieties are blight-resistant.

Earlies are ready to lift when the plant flowers. Maincrop can be left in the ground for two weeks after foliage dies back, in order to tougher skins which aid storage. Lift on a dry day and leave tubers on soil for a few hours to dry out.

Earlies benefit from fleece (CD).

Cutting seed potatoes can lead to disease.

Water only once potatoes have reached the size of marbles (usually around flowering time).

Varieties less prone to slug damage: Charlotte, Sante, Pentland Ivory.

To avoid blight in maincrop potatoes, plant as early as possible, i.e. as soon as the soil has warmed up to 8˚C.

Blight can be transmitted via potato volunteers. Late blight spores can *only* infect wet leaves.

If more than 10% of foliage is infected by blight, cut infected plants down to ground. Leave crop in ground for at least three weeks, to avoid spores on or in the soil infecting tubers as they’re dug. Don’t compost infected tubers, but do compost the plants.

POWDERY MILDEW is more of a problem when warm dry days are followed by cold nights. Plants are more susceptible when the soil is dry. These conditions tend to occur late in the growing season. The fungi overwinter on plant debris. Prevention and control: improve soil’s water-holding capacity by incorporating lots of organic material, eg leafmould. Mulch plants when soil is wet to retain water. Cut out infected apple parts in spring. Apply seaweed foliar spray every few weeks.

PREDATORS. Wasps are the major predators of aphids in late summer.

To attract hoverflies and parasitic wasps, plant the foods the adults like. They have short mouth parts so need tiny flowers, esp those that are composite flowers, eg daisy family (inc dandelion), umbellifers. Cow parsley is good. Sunflowers attract predatory insects. Leave celery and parsley to flower to attract predators.

BRONZE fennel attracts ladybirds and lacewings.

To attract beetles, leave a leaf pile so they can overwinter. Also pile stones and logs so they can shelter in day. Have dead wood stack, with lowest layers part-buried. Fill gaps between logs with dried leaves. Add more logs to top of pile over the years as the bottom logs rot down. Tussock-forming grasses are excellent for ground beetles, eg cocksfoot and Yorkshire fog. Long grass in general encourages ground beetles (which eat loads of slugs). Amaranth is a good host plant for ground beetles. Also for ground beetles, leave straw or hay in an upside-down plastic box.

Hoverflies like members of the Asteraceae family, esp sunflowers, daisies, asters, plus small-flowered herbs such as dill, coriander, lavender. They like white and yellow flowers best.

Predator invertebrates are fast (eg centipedes). Herbivores are slower (eg millipedes).

Hoverfly lagoon: they need stagnant water to reproduce. Take lower half of a large milk bottle, water and grass clippings in most of it, covered by a layer of leaves or leaf litter. Insert a few sticks so that emerging hoverflies can escape.

Honeysuckle is good for hawk moths.

Pots filled with pine cones and broken stems make good insect hotels.

Parasitic wasps eat aphids. See pale swollen empty shells on leaves. *Diaeretiella rapae* attacks the furry grey cabbage aphids.

Soldier beetles, earwigs, parasitic wasps, and blue tits are helpful in tackling aphids/blackfly.

Alyssum flowers very early, so is useful for helping feed predators at the start of aphid season. Buckwheat is also very early (and easier to grow).

PROPAGATION. To make your own hormone rooting liquid, steep some chopped up willow stems in water for a few weeks.

PRUNING. Always prune to just above a node (ie branchy bit). Otherwise you’ll have die-back and risk disease. Always remove die-back.

PUMPKIN SEEDS. To dry, boil them for 10 mins, then drain, dry, and roast on low heat with some oil for about 40 mins.

QUINCE. Add to any apple dish to improve flavour.

Flowering quince fruits need ripening indoors.

Japonica quince (Chaenomeles) is different from normal quince (Cydonia oblonga). It’s fruits are edible if very well cooked, but smaller, harder, and lacking the quince aroma.

QUINOA. Soak seeds to remove soap-tasting saponin coating before cooking.

Young leaves can be used in salads.

Use long day cultivars suitable for UK.

Sow outdoors in early April, 2cm deep. Can cope with light shade.

Very little watering needed.

Aim for 10-20 plants (yields 100-400g seeds) per metre squared.

Yellows and ripens in Sept.

30cm gap between plants.

In autumn, leaves turn yellow and start to fall, flowerhead changes colour. And if you rub seedhead between your palms, some seed can be rubbed out easily. Cut seed heads and put in paper bags. Hang the bags in an airy place for the seeds to dry. After a few weeks, you should be able to rub the seed heads between your palms and the seed will be released. Do this over a sheet to catch the seeds. Or you can lay them out on a sheet, turning every few days to prevent mould. Removing leaves and big bits of stem helps prevent mould. Good airflow and low temp is key to avoiding mould. You now need to remove the chaff from the seed. A light breeze will do this: fan or blow. Soak and drain before use, because quinoa contains saponins which taste bitter.

If your quinoa flowers are starting to go mouldy or aren’t drying, or you’re impatient, go to next step of seed removal. Wear rubber gloves and rub the heads between the palms of your hands, which will knock out the seeds and other stuff. Then pass through a garden riddle (¼ - ½ inch mesh). Spread remaining seeds in a thin layer on a tray, and leave to dry. Stir daily. Once the dry seed can be easily rubbed out of the flowers (gloves again), you can winnow it by pouring back and forth between two buckets in a breeze.

Different varieties will cross.

RADICCHIO. Sow in mid-July for autumn harvest, because it’ll bolt if sown earlier. Will survive freezing under mulch for renewed growth when temps reach 5c. Plant bolts in May. Plant densely so it’ll be kept mild-flavoured by self-shading. Can grow from indoor starts a month before last frost.

Variety ‘506TT’ reliably produces nice firm hearts.

RADISH. For mooli/daikon types, see daikon.

Can multisow. The flowers and early-stage seed pods are edible – eat raw or stirfried.

Vars. ‘French breakfast’ and ‘Icicle’ cope with heat better than other varieties. Temps over 26˚C are a problem.

Winter radishes are bigger than spring radishes, and store in the ground longer, as long as there’s no frost.

As you thin your crop, eat the thinnings, including leaves.

May be able to germinate all winter if temp is a few degrees above freezing.

Can start sowing late January.

RASPBERRIES. Can be propagated by layering. Don’t do well in pots. If they are in pots, they need generous feeding. Autumn-fruiting: prune canes to soil level after picking fruit.

Like pH 5.5-7.0.

Roots are shallow so water often.

Need excellent drainage.

Like lots of water in spring, but don’t overwater once fruit is ripening, because berries will be softer and less sweet. Use mulch at this time to keep some moisture in ground.

We have:-

1. Autumn Bliss. Late Jul-Oct (or until frost). Primocane (ie flower and fruit on this year’s growth). Cut down to ground level in Feb. OR, at end of autumn, only prune canes that fruited. This leads to higher yield. See RHS site. Can grow in containers. 2m height. Don’t need support. (2 in front garden, 1 in bed 5 nearest waterbutt.)
2. Glen Ample. Needs full sun. Primocane. Can grow in containers. Grows up to 2m. Early July onwards. Mulch in spring. After cropping, cut down fruiting canes to ground, and tie in new ones. (1 in front of waterbutt. 2 by fence in bed 5.)
3. Glen Prosen. Harvest Jun-frost. Height up to 2.5m. Full sun. Stems need support. (3 at back of asparagus bed.)

Raspberry canes naturally grow up and then over because they want to reach into trees. Prune at the point of curve during winter dormancy and they’ll be self-supporting.

* Summer-fruiting produce fruit on floricans, i.e. last year’s canes. Support using horizontal wires at 60cm vertical intervals. Cut canes to ground as soon as they’ve finished cropping (early summer to autumn). Floricanes that have fruited are brown-grey, and are harder and more brittle in texture because they died after fruiting. If primocanes are too crowded, you can prune out some of those, too. But don’t reduce number of primocanes until the plant is 3 years old, or vigour and yield may be reduced. The current season’s canes are tied in to replace the old canes. In late winter (Feb), canes are cut to 15cm above the top wire. Once rows are established, only the strongest canes should be selected for tying-in, at about 10cm apart. Weak or spindly shoots should be removed.
* Autumn-fruiting produce fruit on primocanes, i.e. the current season’s canes. Canes are not tied in to supports, but are fenced in using parallel wires running between supports. In approx Feb, cut off all canes at ground level. To thin out your autumn-fruiting patch (do this in summer), cut down diseased canes, and cut unwanted suckers at ground level. (You can dig out suckers, but only if they’re some distance from the main patch.)

Healthy suckers can be replanted elsewhere – this works best in early spring. If you’re planning to replant suckers, dig them up by cutting straight down into the soil between the parent and the sucker with a spade. Loosen soil and pull up sucker. Replant in new location and prune back to 5-12cm above ground.

For all raspberries, apply BFB and well-rotted manure in late winter.

Viruses are very common and reduce yields. The only real solution is to replace the plants, ideally in another location. Viruses spread via aphids and nematodes (so plant tagetes near them?) Symptoms of infected plants: yellowing, blotching, flecking of leaves, weak growth, crumbly fruit.

Forest or green shield bugs = cause of bad smelling/tasting raspberries.

If not pruned, their fruit-bearing capacity will reduce over time and they’ll be more susceptible to pests and diseases.

A 30 litre pot is sufficient. Only need 20% ericaceous compost.

Autumn varieties are best. Primocane. Cut to ground in Feb. Don’t need supports. Don’t need to net against birds. Can take some shade.

REDCURRANTS. Like neutral to acid soil.

Grow nettles amongst them so ripening fruits are less obvious to birds.

Flowers are frost-sensitive.

Fruit is produced at the base of last year’s shoots and on spurs of older wood. Pruning encourages the formation of this wood. Aim of pruning is to create an open-centred, goblet-shaped, bush on a short stem. In early spring in the first year after planting, select up to 5 vigorous main stems and prune them back to 15-20cm. Remove all other stems. Remove branches subsequently if they are diseased, overcrowded, or very old.

Then maintenance prune as follows:-

1 – In winter, remove any dead wood, as well as shoots lying near the ground. Then spur prune all side shoots by cutting them back to 1-3 buds from the base. Shorten branch tips by a quarter, cutting to a strong outward-facing bud.

2 – Also mid June to July, shorten the current season’s growth back to 5 leaves, except for those branches needed to extend the main framework.

3 – On mature plants only, remove up to a third of the old, unproductive shoots, plus crowded, weak, and crossing branches.

Can be grown against a north-facing wall, but fruit will be sweeter in sun.

REDCURRANTS AND WHITECURRANTS fruit on old wood. In winter, take out old/diseased/crossing branches. Then in early summer, all side shoots can be cut back to 2 buds. Because the plants fruit on older growth (unlike blackcurrants), this doesn’t remove any fruit, but does change the plant’s priority from making new growth to producing fruit.

RHIZOBIUM. Biostimulants tat add the right types of bacteria to the soil to enable legumes to fix nitrogen. Broad bean bacteria are normally present naturally in soil, but for French and runners, it’s hit and miss whether they’re present. Adding rhizobia at time of planting can have a big effect. Farmers to do this routinely and gardeners should too. (American source of info.)

RIBWORT PLANTAIN. Shred young leaves into stir-fries. The brown heads taste of mushrooms and can be added to stock. Antibacterial.

ROCK DUST. Minerals in fresh fruit have decreased by up to 70% over the 50 years to 1991. Minerals are disappearing from soil. Adding rock dust can help a lot. Use up to 1 part rock dust to 4 parts compost. Needs to be added every 5 years. Buy in bulk from gardening-naturally.com.

Minimum annual dose = 0.5kg/m2.

Optimal annual dose = 2kg/ m2 in first year, then 1kg/ m2 thereafter.

Max dose = 5kg/ m2.

Pots: sprinkle 3mm layer on surface.

As a compost activator and accelerator: sprinkle 3-5mm per 13cm layer of green waste.

It takes several months to improve microbial activity and soil fertility to show results.

ROOTS. Plants that don’t mind root disturbance so can be repotted: tomatoes, peppers, lettuce, brassicas, onions, celeriac.

Plants that hate being repotted: beans, peas, carrots, parsnips, corn, turnips, chard, cucumbers.

Leave roots in ground when you remove plants – this ensures carbon remains in soil.

ROSES. Feed in April.

Plant a clove of garlic among the roots to prevent greenfly.

RUNNER BEANS. Super runners are a cross between French and runners. Can grow even in poor conditions. Firestorm, Moonlight, Tenderstar. And they’re stringless.

Leave in ground to regrow next year. Cut down to 6” and protect with mulch. (Or can cut down and bring indoors?)

Critical times for watering: pollination and pod development.

Spacing: 2 per pole of tepee if canes are 30cm apart, or 1 per cane if they’re 20cm apart.

Helda = a bean that’s a cross between a runner and a green bean. Flat but stringless.

Scarlet runner beans = only 65 days to maturity.

SAGE. Replace plants from stem cuttings every 3-4 years.

SAMPHIRE. Germination is most difficult stage. One month before use, condition the compost by watering it with the salt solution used to grow the plants subsequently, ie 6tsp of sea salt and 15ml seaweed extract per 5 litres of water. Can sow April to July. Germination is erratic.

SCOTS LOVAGE i.e. ligusticum scoticum = milder, sweeter, low-growing version of lovage. Can use as herb or veg. Good in tomato sauce.

SEASONS. Spring Summer Autumn Winter

Early: Mar Jun Sep Dec

Mid: Apr Jul Oct Jan

Late: May Aug Nov Feb

SEEDS AND SEEDLINGS. Temperatures > 35˚C kill embryo and prevent germination.

Large seeds (eg pea or bean). Soak for 24 hrs or rub with sandpaper.

The smaller the seed, the more likely it is to need light to germinate.

Seedlings rely on their own fertility until true leaves appear.

Seeds need constant temps, not extremes. They won’t germinate if nights are cold.

All seedlings can be planted deep if leggy.

Min/ideal temps in centigrade for germination:-

Courgette min= 16 ideal = 21-35

Cucumber 16 16-35

French/runner beans 8-10 16-30

Squash 16 21-35

Peppers 16 18-35

Sweetcorn 16 16-32

Tomatoes 10 16-30

Chard 4 10-30

Brassicas 4 7-30

Broad beans 5 8-15

Carrot 4 7-30

Lettuce 2 4-27

Onion 2 10-35

Parsnip 2 10-21

Peas 4 4-24

Typically, soil temps only >10c from mid-May, and >15c from mid June.

Don’t sow seeds in ground until soil reaches 10˚C.

Use bulb planter to plant out seedlings. Diagonal crossing lines more efficient spacing than horiz/vert lines.

Transplant timings (from Hunt & Bortz, 1986):-

Crop Weeks to transplant size Week to plant out in relation to

from time of sowing. last frost date

Green beans 3-4 1-2 weeks after

Broccoli , sprouts, cabbage 6-8 4 weeks before to 2-3 after

Carrots 5-6 4 weeks before

Sweetcorn 4 2-3 weeks after

Cucumber 2-3 1 before

Kale 6-8 5 before to 2 after

Leeks 4-6 5 before to 2 after

Lettuce 4-6 2 before to 3 after

Onions 4-6 6 before to 2 after

Spring onions 4-6 4-5 before to 2 after

Parsley 4-6 4-6 before to 4-6 after

Parsnips 4-6 4 before to 3-4 after

Peas 4 4 before to 2-3 after

Peppers 6-8 2-3 after

Spinach 4-6 3-6 before

Squash (winter + summer) 4 4 after

Sweet potato 6-8 2-3 after

Tomatoes 6-10 4 after

Turnips 3-4 4 after

Seeds of parsley, carrot, parsnip, corn, squash, celery, and pepper are slow to germinate (up to 3 weeks) if the temperature is less than 25c.

Give seaweed solution to seedlings at planting out time, esp if they look unhealthy. Spray it on – helps plants dev strength to resist disease and pests.

Ideally, keep module trays on racks or raised on sticks, so that roots are air-pruned.

Do a seed viability test.

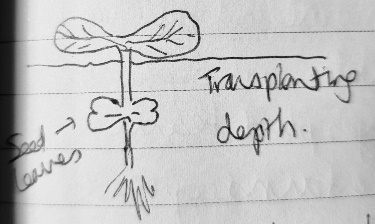
Outside, good tilth = best guarantee of quick germination.

Seedlings that were slow to germinate because conditions were poor are the most vulnerable to pests and diseases later on.

To prevent birds eating seedlings, suspend strong black (buttonhole) thread 5cm over ground above crop. Install as you sow the seeds.

Risk of sowing seed too early in the season = vernalization. Plant thinks it’s been through a winter so it bolts. Brassicas do this. And onions bolt when exposed to more than a week or two of moderate cold. Exceptions: globe artichokes and sprouting broccoli like to be vernalized, so it’s OK to sow them early.

If module tray is too shallow, seedlings can enter state of ‘premature senility’ and bolt. Needs to be 3” minimum.

When transplanting all seedlings, bury deeply. Especially brassicas. Up to level of cotyledons. If plants are planted too shallowly and bend over, they will right themselves, but they’ll also develop a tough neck that will reduce the quality and size of crop.

Add leafmould to compost for seed starting to prevent drying out.

Cover seedling trays with card (or outside-sown lines with planks) until germination.

Sow seeds direct once you’ve had seven consecutive days and nights of > 7˚C.

In a trial of C&CA salad leaves, sowing date was much less important than weather at time of sowing. Crops sown on a cool, damp, day easily out-produced and outlasted later-sown batches sown in hotter, less favourable conditions.

Lifetime of seeds:-

1-3 years: carrot, French bean, leek, onion, pea, runner bean, sweetcorn.

5 years: beetroot, broad bean, brassicas, tomatoes.

5+ years: pumpkin, squash.

It is the temperature at which a seed first absorbs water which determines successful (or not) germination and growth. You can germinate seeds at lower temps, but growth/yield will be lower. So the temperature of the soil for the first few hours that the seed is in the ground is vital. Minimums: sweet peppers = 15˚C, courgettes and cucumbers = 13 ˚C, sweetcorn = 10 ˚C, French and runner beans = 12 ˚C.

You can sow cool season crops when grass starts to grow. (Soil temp = 5˚C.)

Using a soil thermometer, measure temperature of bare soils, early morning, out of direct sun, depth 5cm for cool season crops and 10cm for warm season crops. When measurements are consistently OK for a week, it’s time to sow. Mulches keep soil cold.

Crop Min sowing temp (˚C) Seedling emergence (days)

Carrots 7 17

French beans 12 7-14

Peas 5 7-14

Parsnips 7 10-28

Leeks 7 14-18

Beetroot/chard 7 10-14

Courgette/pumpkin 13 5-8

Lettuce 5 (max 25) 6-12

Runner beans 12 7-14

Sweetcorn 12 10

Brassicas 5 7-12

Broad beans 5 7-14

Onions 5 (max 21) 21

Seedlings should be transplanted when first two true leaves (not seed leaves) are fully expanded. Keep new transplants out of direct sun for a few days.

Plants that were sown direct have better root systems.

When using peat-free compost, water from below so seeds not stuck in dry spot. If seedlings don’t progress, can start feeding when they’ve developed 2-3 true leaves.

SEED-SAVING. Allow seeds to fully ripen on plant.

Save seeds from at least 6 different plants of each species, to prevent inbreeding.

Lettuce etc: don’t save seed from plants that bolted! In fact, don’t save seed from *any* plant that has bolted.

Don’t dry seeds on a sunny windowsill: the heat could kill them.

For saving seeds from beans. Tie yarn around best plants so you don’t accidentally pick them to eat. Wait until pods lumpy/yellow, and pick on a dry day. Remove beans. Leave spread out somewhere bright and dry for two weeks.

Never store seeds in plastic bags due to risk of dampness.

Obviously there’s never any point saving seeds from F1 varieties.

If you find holes in saved bean seeds, it’s probably the larva of the bean seed beetle. So freeze bean seeds for 7 days before storing.

For ground cherries / cape gooseberries, see under cape gooseberries.

Peas = self-pollinators to extreme. They often self-pollinate even before the flowers open. So = ‘inbreeder’, hence easy to keep seed pure.

Brassicas need pollen from a flower on a different plant (self-incompatible). So if you leave eg one cabbage to flower, you’ll get little or no seed. = ‘outbreeder’.

Most crops are somewhere in between the two extremes regarding inbreeding vs. outbreeding. Eg peppers self-pollinate AND cross-pollinate via insects. Onions rarely self-pollinate but can pollinate from different flowers on the same plant.

Other crops have separate male and female flowers, eg squashes and sweetcorn.

Some plants are entirely male or female, eg spinach, asparagus.

Celery and celeriac will cross.

Wild and cultivated carrot will cross.

“Isolation distance” = how far apart you need two crops to be to prevent cross-pollination.

Broad and runner beans that flower before cropping are a problem and need a BIG isolation distance. Broad beans need to be half a mile or more from other varieties!

To save cucumber seed, let fruit get overripe, scoop out seeds, put in a tall jar with water for a couple of days. The good seed sinks and bad ones float. Pour off the top half of the jar, losing the floating seeds and debris. Refill and repeat a few times until you’re left with just good heavy seed. Then drain through sieve, and lay onto a plate or newspaper to fully dry.

During flowering, you can put mesh bags over individual bits of plant.

You need seeds from quite a few plants to maintain genetic diversity with outbreeding crops such as brassicas. But you don’t need to bother if you’re saving seeds from inbreeding crops such as peas.

For lettuce, you just need one plant. Hang upside-down in a dry place with a sheet under for 3-4 weeks. Then rub 2 pieces of wood together around the seeds to extract them. Then winnow.

If seed weevils are a problem in saved/dried peas/beans, they may still germinate. But to solve the problem, put the dried peas in the freezer for 3 days.

It’s extremely easy to save pepper seed, but you’ll need to keep different varieties 50 metres apart to avoid cross-pollination. Leave pepper fruits until they stop changing colour before harvesting the seed.

French beans do cross, but not so easily, so you can grow different varieties in different parts of the garden, as long as you’re careful about roguing out any weirdos.

Runner beans cross very easily, so only sow one variety if you want to keep seed.

Different varieties of quinoa will cross.

Minimum number of plants for seed-saving: onions: 10, beetroot: 8 (ready when seeds are brown), carrots: difficult due to cross-poll with cow parsley, garlic: 1, melon: 1.

Use bulb planter to plant out seedlings.

It’s OK to leave beans in plant until after first frost. Chronic damp is more of a problem than temperature.

Tomatoes: most varieties don’t cross-pollinate, and seed is ready when fruit is ripe (unlike squash, which is the opposite of both of these things).

SHADE. Salad leaves, brassicas, kale, pak choi, celery, garlic, spring onions. Potatoes and carrots can grow in shade but will be smaller. Raspberries, broad beans, peas, runner beans, parsnip, asparagus.

Leeks cope with afternoon shade.

Afternoon sun is good for vines such as peas/beans.

Flowers for dry shade: Japanese anemones, astrantia, snowdrops, wood anemone, geranium macrorrhizum.

Dry shade: morello cherry!

SHALLOTS grown from seed produce one bulb per seed, unlike sets. But can space them 1-3 inches apart. Plant sets Nov-Mar. Store better than onions.

Will grow on poorer soils than onions and will tolerate hotter weather. Larger sets leads to more but smaller shallots. For good-sized shallots, use 10g sets. They mature earlier than onions. Allow leaves to die back naturally, then gently lift them and leave on top of soil until foliage is dry and crisp (or undercover if it’s wet).

Much less prone to onion white rot than onions.

For easy peeling, immerse shallots in boiling water for a minute or two (as you do with tomatoes), then rub the skin off.

They are sweeter than onions and caramelise easily.

When replanting, small ones lead to fewer but bigger offsets, large ones lead to more but smaller ones. Select for best shape instead.

SLUGS. In spring, lay a ring of comfrey around new seedlings to deter slugs. This ONLY works in spring.

Nematodes for slugs are most effective if applied April/May and Sept/Oct – the main breeding seasons for slugs. Nematodes can’t tolerate heat (over 25˚C) or bright sunshine. Keep soil moist for 2-3 weeks after application.

Slugs and snails find the texture of straw mulches off-putting.

Dilute ketchup is good for drowning slugs.

SHRUBS. To see whether a branch of a shrub is still alive, scratch it. If you see green underneath, it’s alive.

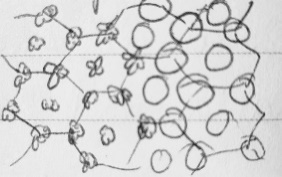
SOFT FRUIT. Place wren house nearby. Wrens will attack any bird trying to eat the fruit.

You can freeze fruit to make jam later.

SOIL. Rhizophagy cycle is how roots and microbes work together.

SORREL: Lemony taste so good in soup.

SOW THISTLES are delicious. Dynamic accumulator. Attracts birds.

SPACING PLANTS. To plant equidistantly, add plant space (eg 20cm) and row space (eg 30cm) and divide by 2 (eg 25cm).

Generally, leaves of adjacent plants should be just touching or slightly overlapping when mature. But some plants can stand more crowding than others.

Hexagonal arrangement makes best use of space with minimum bare ground and maximum crops.

SPINACH. Sow direct and water lots to reduce risk of bolting. Likes neutral to acid soil and lots of water.

Likes cool weather and short days, so sow in spring (especially) and in autumn. Does not transplant well.

Yellowing leaves are sweeter.

SPINACH, PERPETUAL. First half of July is best time to sow. Won’t bolt until following summer.

SPRING ONIONS. Can be perennialized by cutting down to ground level.

OK with some shade.

SPROUTING BROCCOLI. Sow in summer, not spring, to reduce pest problems.

Can perennialise by cutting back post-harvest to just above some new growth. Don’t plant anything else too close to it as air-flow is important.

Turkish rocket is a perennial alternative to this plant.

Claret F1 is an excellent variety.

Santee F1 = quick grower with continual crop for almost six months.

SPROUTING SEEDS. You can make hummus using sprouted chickpeas.

Keep all beansprouts in the dark – they germinate better and taste sweeter and are more tender. Rince twice per day.

SQUASHES. Winter squashes (eg butternut) have harder skins and store well. Summer squashes (eg courgettes) need eating straight away.

Early in season, it’s common for plants to set fruit which fail to develop. But this improves once weather warms. To concentrate plant’s energy on producing best fruit, cut back the stems to 2 leaves after the fruit once you’re sure it’s set properly.

Female flowers have an embryo fruit behind the petals, male flowers don’t.

Winter squashes only should be placed on tile/wood/etc to prevent rotting/slugs. Allow them to mature on the plant and cut when plant turns yellow and begins to die back. Unless it’s wet, keep them in situ for a few days to cure (harden) or bring in to a warm conservatory/greenhouse/windowsill for up to two weeks, before storing in a cool, dry place. Store upside down to prevent condensation pooling in neck.

Kabocha (eg ‘Crown Prince’) = best keeper.

Butternut Harrier F1 is good for our climate because it ripens fast. Butternut keeps for 3-4 months.

Honeyboat = marrow-shaped squash. Sweet and easier to grow than butternut. Can scramble over an arch or pergola.

Summer squashes don’t climb (unlike winter squashes). So plant summer squash under sweetcorn.

Plant out summer squash mid-May (or sow direct) – don’t leave seedlings in pots too long. Plant out when 3rd true leaf is forming. On trailing plants, stop side growths after 60cm to encourage flowering. Compact and climbing forms can grow in a 35cm pot.

Pick squashes before first frost, or they’ll turn mushy.

Only allow 3-5 fruits per plant to ripen. Remove growing tips once you have these.

Harvesting: leave a t-shaped handle of stem attached.

As fruits ripen, remove any leaves covering them, so sun can harden skin.

Cable-tie strong arches together to make a tunnel for winter squashes.

Tromboncino squash keeps for 18 months.

To work out whether a squash is ripe, tap the fruit: it should sound hollow, like tapping on a wooden table. Use thumbnail test to check skin in hard. Also, it’s ready to harvest when a fingernail dents but doesn’t puncture skin. And when the stem above the fruit has begun to turn hard and corky. And when leaves are semi-dead or mildewed.

When planting out, bury stems in the same way you would for tomatoes.

Blue Hubbard squash: 2-3 fruit per plant. Ripe when stem turns brown.

Store winter squash at 10-13˚C, at humidity of 50-70%, in dark, with good ventilation. Don’t let them touch.

You can grow eg pumpkins in huge heaps of lawn mowings.

Sow 3-4 weeks before you can plant out.

Winter squash: varieties with pale, easily cut flesh make sloppy mash or weak soup. Varieties with dense, brightly-coloured flesh will produce a better mash. The harder your pumpkin is to cut, the sweeter and firmer its flesh will be and the more body/bite it’ll have. Bake pallid squash because this will concentrate its meagre flavour.

A winter squash that sounds hollow when you tap it will keep better than one that doesn’t.

Summer squash: rotting at end of courgette indicates inadequate pollination.

Curing winter squash. Ideally leave on plant until plant has died back. Cut away with 10cm stalk attached to keep the neck sealed. For varieties with a short stalk, but 10cm stem either side in t-shape. Cure for 2 weeks in sun or inside, turning every few days to ensure that every part of the skin is exposed to the sun. Then store somewhere dry, ideally upside down with stalks hanging through a grid (to prevent condensation from collecting in neck).

Pumpkins will have increased sugar/flavour compounds if stored for a few weeks in cool temps (10˚C) post-harvest.

Boston squash = ultra-early variety for short season areas. Buy from Real Seeds.

Waltham Butternut = improved butternut. Smaller seed cavity, thicker/straighter neck, fruits earlier, more flesh per fruit.

STEVIA. Much sweeter than sugar. Grow from cuttings.

Tender perennial, so bring inside for winter.

Pinch out tips for bushier stems.

Also pinch stems before flowering to delay flowers.

Can harvest stems with lots of foliage and hang in bunches to dry, then store in airtight container.

Contains antioxidants that reduce risk of pancreatic cancer.

STORAGE. Washing root veg before storage leads to mould. Can store kohl rabi, celeriac, Jerusalem artichoke, carrot, cabbage, potato in unheated room. Attempts at growth indicate healthy roots. Store onions and squash in the house.

You don’t need to blanch veg before freezing if you’re going to eat it within three months. (Blanching reduces vit c and thiamine.) Don’t thaw frozen veg before cooking because rapid decomposition of vitamins occurs.

STRAW BALE GARDENING. To condition the bale, sprinkle a cup of nitrogen fertilizer over the top every other day (eg bloodmeal). Thoroughly water every day. Continue this for 9 days. Finish on day 10 with a balanced fertilizer. One week later, plant up your bales. Bales should be placed with cut ends of straw facing upwards. Plant your plants and backfill with a bit of compost. Standard bales fit 3 tomato plants.

Can grow tomatoes, melons, squashes, cucumbers.

STRAWBERRIES. Grow in a 2-3ft radius around dwarf fruit trees.

Critical time for watering: flowering and during runner development.

Throw a handful of Epsom salts into strawberry patch at blossom time: fruits will taste sweeter.

Respond well to drip irrigation.

Straw mulch leads to 10% increase in yield.

Growing with green beans enhances both.

Grow well with borage.

Cut off runners for first two years because they’ll otherwise use too much energy.

In September, cut all foliage down to ground level, and feed. New leaves will grow in coming weeks.

Fruits are bigger if pollination is by insects – especially bees – rather than by wind.

Holes in leaves indicate sawfly. You may be able to see the creatures on the undersides of leaves.

Peg down runners in June, then lift in autumn.

Fleece plants in late winter or early spring to bring on an early crop.

To preserve, cook in oven for 3 hours at 100˚C. They’re like sweets.

Mulching helpful because they need moisture without waterlogging. Roots are shallow. After plants have finished cropping, cut back ard to 5cm above crown.

Replace plants every 3-4 years.

Plant out runners in November.

SUNFLOWERS. If the heads start to rot, remove the seed head and hang it up for birds, or dry the seeds and place in a feeder. Sunflower seedheads are popular with finches and tits.

SWEDE. Can eat leaves like spring greens during hungry gap. Ditto for turnip.

Only water when soil is severely dry, otherwise you’ll just encourage growth of leaves at the expense of roots.

SWEETCORN doesn’t like root disturbance. Start off in loo rolls. Grow with dwarf beans or squash but plant the sweetcorn 2 weeks before other crops so it can get tall.

Leave plants in place for 1 month after harvest for a much more carboniferous compost ingredient.

To freeze cobs, cut them in half, blanch for 1 minute, then freeze.

Outdoor-sown sweetcorn (sown in late May or early June) will grow faster and do better (more cobs) than root-bound equivalent started in pots.

For mini sweetcorn, pick before pollination. (So no need to plant it in blocks.) Pick when cobs are 7cm long. This will be 2-4 days after the silks appear.

Snip off top of flower and rub it on tassels.

Underplant with tumbling toms, kohl rabi, parsley.

Sow a max of two weeks before you can plant out. They germinate and grow FAST.

Farmer’s wisdom: sweetcorn should be thigh-high by the 1st of July.

Slugs adore sweetcorn seedlings. Bastards.

Ripening sweetcorn needs potassium.

Plant quite deeply to reduce wind-rock.

Water once flowers appear. Little benefit to watering much before this point.

SWEET POTATOES. Black plastic mulch doubles yields. Harvest when the ends of the vine start to turn yellow. Allow to cure for a week (like winter squash). Wrap in paper and keep at 10˚C for at least six weeks whilst starches turn to sugar.

SWISS CHARD. First half of July is best time to sow. Won’t bolt until following summer.

In forest garden, let Swiss chard flower and set seed.

TAYBERRIES. Sweeter and larger than loganberries. ‘Medana’ is best.

TEMPERATURE. Plants grow best between 4c and 27c. Plants grow best if night temps are lower than day temps.

Plants grow when average daytime temp equals or exceeds 6c, so there are 250-300 growing days in the UK. Temp also affects the rate of growth.

In extreme heat, pollen is less viable and pollinating insects can’t function.

THYME. Grow in cracks in patio.

Antiseptic. Good for cuts.

TOMATILLO. Must grow more than one plant to ensure pollination, because they’re not self-fertile. Grow them 50cm apart.

Roast with oil and garlic – they don’t have to be used in Mexican dishes.

TOMATOES. Overwinter side-shoots for next year’s crop. Pinch out tips Aug 10th. Remove lower leaves to prevent blight.

Tie bush tomatoes to a stake to keep fruit off ground.

Sow using ‘half-pot’ method, i.e. sow in half-filled pot, then earth up as they grow. Can do this for cukes, too.

Soluble aspirin 600mg in 4.5 litres water. Mist on leaves once plant is about to come into flower.

Warm nights are secret to rapid and healthy growth. But hot sun helps ripen fruit. Fluctuating temps = bad. Cold nights make leaves curl lengthways.

Determinate/bush varieties ripen over a much shorter period than indeterminate/cordon.

By time all the fruit is turning red, bottom 60-90cm of leaves should have been removed.

Overfeeding and overwatering = worse than benign neglect. Consistency important, though.

In baskets, 3 plants per 45cm basket.

Tomato leaf antiseptic. Rub it on cuts.

Once a truss of fruit shows a bit of colour, remove leaves up to that truss.

Var. Microcherry from Sea Spring Seeds gives massive yields.

You can’t save seed from F1 varieties, so propagate by saving side-shoots instead.

To shock them into production, keep them in their pots (and slightly pot-bound) until the first flowers have developed, before planting out or potting on. This ensures that the crucial first truss is set (i.e. fertilised) which in turn ensures that the following trusses will set more readily, thus bringing the plant into production earlier. If plants are transplanted too soon, they will concentrate on growing leaves rather than flowers/fruit.

Start feeding as soon as they come into flower.

Bloody Butcher (heirloom) is a fast maturing variety. Ditto Early Girl, Black Prince (from Siberia so copes with cold), Sub-Arctic Plenty, Sun Gold, Orange Roma, Juliet, Mini San Marzano, Golden Sweet, Early Doll, Black Cherry, Tigerella (heirloom).

If leaves go yellow between veins, there’s probably a Mg deficiency. Use foliar application of Epsom salts at 20/litre. Don’t need to do this if only the older leaves are affected.

To ripen green tomatoes: introduce cover, put ripe banana/skin under fruit, or used bruised windfall apples. Reduce watering, trim lower foliage, remove foliage covering fruits, remove new flowers. Give the plant a shock: grasp it firmly by stem and tug it gently to loosen root system. Ripen indoors.

Water once flowers appear. Little benefit to watering much before this point.

Variety ‘San Marzano’ = plum variety good in sauces. ‘Roma’ = good in sauces and salads.

Blight is NOT transmitted in tomato seed.

Allow part of tomato plant to trail across ground. It will form roots and the plant can then absorb stuff from a wider area.

Stressing plants by under-watering as fruit ripens leads to better flavour. Plants stressed by lower levels of moisture are often more resistant to pests/diseases, as their defence compounds are triggered. Yields may be lower but flavour is better.

TOOLS. Use Niwaki Crean Mate to clean secateurs. Add a bit of camelia oil to the blades and then use Crean Mate like a rubber.

Use Gardening Naturally’s Natural Citrus Cleaner for pots and covers etc.

TRANSPLANTING. See under ‘seeds’.

TURKISH ROCKET is a perennial.

TURMERIC. Place root in a plastic sandwich bag and leave in a sunny, warm, spot. Plant when growth can be seen. Needs conditions above 10˚C.

Likes warm and wet conditions, but not too hot.

When cooking, using too much leads to a bitter taste. Can grate, chop, or grind the tubers into a paste. You can replant some of the tubers each year.

Soil in pot must be free-draining to prevent root rot.

Choose a pot at least 30cm deep and wide. Break/cut bigger rhizomes into smaller pieces, leaving a minimum of two buds on each segment.

Can reach 1m high or more.

Harvest tubers in autumn. It’s almost time when the foliage turns yellow and dies back. Leave tubers on soil to dry, then dust off. Will last in fridge for 2 weeks (or 3 if unpeeled). Or 6 months in freezer. No need to peel it.

To dry turmeric, cut into v thin slices. Air-dry these, or dry in dehydrator or oven. Then grind the dry slices in a food processor or with a pestle and mortar. Store in glass jar. Keeps for 2-3 years.

TURNIPS. Roast the roots and eat the greens. Greens overwintered are good in the hungry gap.

Can multisow. Regular watering stops turnips and swedes going woody. Only water when soil is severely dry, otherwise you’ll just encourage growth of leaves at the expense of roots.

Can grow in pots. (Swedes can’t.)

Harvest early so they’re sweet.

VERTICAL GARDENING. Home-made arch: insert long canes in ground and use water pipe to join them into arch.

VIETNAMESE MUSTARD (*Brassica juncea*) has a mild and slightly sweet flavour. You can steam it, stir-fry it, or add to salad. It also produces small broccoli-like florets. Aphids are a problem.

WATER BUTT. Use tights over end of pipe to act as a filter.

WATERING: To avoid blasting your plants with hosepipe, run it into a watering can with rose attached.

Droplets from tree canopy have up to 50x more nutrients than rainwater that’s come straight to ground. So collect rain that’s dripped from trees.

Broad beans and peas need water at flowering and again at first pod formation. Runner beans should be kept wet all the time, ditto fennel. French beans can cope if it’s drier. Courgettes need more water than squash. Keep sweetcorn watered from flower to harvest.

To make watering can, use 1l plastic bottle. Lid on. Heat a needle in a flame and make 25 holes, all near the centre of the lid.

Brassicas like having their leaves wet, unlike tomatoes, peas, squash, melon, and courgette.

Plants take up more water when the soil is nutrient-deficient (because they’re ‘looking’ for missing nutrients in the water), so reduce watering needs by ensuring soil is good.

Shading (eg because of close cropping or mulch) *dramatically* reduces water loss from the soil via evaporation.

Plants lose less water via transpiration when soils have a good balance of nutrients.

Watering seedling trays from below leads to development of strong roots.

Heavy watering = 11 litres per m2.

Fruiting crops: flowering time and setting/swelling = important times for water. Avoid watering after establishment and before flowering unless wilting occurs, as this just encourages lush leaf growth.

Raised beds dry out more around the edge, so plant with this in mind, eg quinoa at edge and brassicas and lettuce in middle. Try and water more around the edge.

Plants that need watering throughout their life: celery, celeriac, fennel, spinach, radishes.

Plants that only need watering when it’s severely dry, otherwise you’ll just encourage leaf growth at the expense of roots: carrot, beetroot, parsnip, swede, turnips.

Fruiting crops (tomatoes, beans, peas, sweetcorn) benefit from watering after starting to flower. Before that it yields little benefit.

A single watering 2-3 weeks before harvest gives maximum benefit for cabbage, calabrese, lettuce, cauliflower.

WEBSITES AND BOOKS AND PRODUCTS:-

Digforvictory.org wildaboutgardens.org.uk thomasetty.co.uk for heritage seeds.

Slugzilla. Knowlenets.co.uk. Catwatch = ultrasonic repeller endorsed by RSPB. Made by Concept Research.

Aquamania and Northampton Reptile Centre sell live daphnia. CJWildlife.

Gardening-naturally.com schsupplies.co.uk (for smallholders etc). franchiseeds.co.uk

Greenmanure.co.uk organiccatalogue.com naturalgrower.co.uk ecogrow.co.uk

Maxicrop is a biostimulant. Buglife.org.uk

Dolly Foster – hort4u = winter sowing expert.

Book: Ruth Stout’s ‘No Work Gardening’. But her method isn’t good in wet areas.

Oxford Real Farming Conference has an archive of YouTube sessions.

WEEDS. Cabbages, beans, and sweetcorn can outcompete weeds, but onions, carrots and peas can’t. Growth of beets, brassicas (other than cabbage?) and alfalfa is slowed by the presence of weeds.

Kent & Stowe corkscrew weeder (£12.99) is excellent for weeds with deep taproot.

Field bindweed can send roots down 10m. I GIVE UP!!!

Use perennial weeds. Bag them up in an inside-out compost bag, soak with water/urine, tie bag, puncture all over, leave in a sunny spot. After 12-18mos, you’ll have rich, dark, compost.

If you hoe or rake every other week, area stays weed-free.

WHITECURRANT. See redcurrant.

WHITEFLY: Older, fragrant varieties of French marigolds repel these.

Nasturtiums repel whitefly. As does basil.

Mint *attracts* whitefly!

Flowering tobacco is useful: sticky substance under the leaves traps them.

Enviromesh.

Spray plants with nettle tea (steeped for 3-4 days) to deal with infestation.

WILDLIFE. Garlic mustard = important food for orange-tip butterfly.

Growing food for birds: teasel (goldfinches), hazel (nuthatches), miscanthus (greenfinches and goldfinches), ornamental thistle Cirsium rivulare (finches and dunnocks), birch (seeds and habitat for 300 types insect), sunflowers (great-tits, bluetits and chaffinches), globe thistle (finches), berry plants such as holly, ivy, hawthorn, cotoneaster.

If using beer traps for slugs, place sticks so that ground beetles can get out.

Hummingbird hawkmoth caterpillars eat lady’s bedstraw, hedge bedstraw, and wild madder (which grows in dry soil by paths etc). Adults visit aubretia, buddleia, viper’s bugloss, red valerian, honeysuckle.

Butterflies like mint flowers.

WILD GARLIC can be used for anything where you’d use onion.

Harvest before it flowers.

WINTER SOWING. Very high germination rate. Mix ¼ vermiculite in with compost. Use 4.5-l bottles. Discard lid. Cut around middle leaving hinge. Coffee filter or newspaper on bottom to keep slugs out. Holes in bottom – easier to make if lid on and bottle intact when you cut them. Minimum 4” soil. Tape shut.

Open up tops when seedlings have 2 true leaves.

Can use ziplock bags instead. Can use masking tape if no duct tape.

Check moisture level – there should be condensation visible inside. Likely to need water if it’s very sunny

Doesn’t mean that you’ll get flowers etc any earlier.

Start HHAs a bit later than HAs. Can use for perennials, too.

Start tender annuals after last frost.

No damping off. Don’t need to harden off.

Seeds are naturally cold-stratified.

Seedlings can be planted out when they’re very small.

Start sowing at the winter solstice (21/12) and continue until May.

Cold overnight temps is what matters.

Not a problem to start early, because seeds will germinate when they’re ready.

Example of timings for zone 5: Jan-Feb: sprouts, broc, cabbage, chard, thyme, parsley, poppies. March: HHAs and tender annuals, coriander, lettuce bok choy. April: tomato, basil.

Peppers best started indoors because they need a long season.

Not all seeds will germinate by May – some take ages. Open up those containers when overnight temps are warm.

Don’t remove any snow that settles on the jugs.

Cold hardy plants germinate first.

Separating plants for transplant is easier if you water first. Can either chop into blocks like brownies, or separate out individual plants.

Spring sowing: either for things you forgot in winter, or for tender plants. Same as for winter sowing but cut 4 extra vent holes around the shoulders of the bottle to let hot air out. And water more.

Can’t use this method with bulbs or tropical plants.

See wintersown.org = Trudie’s site. (The originator.)

WOOODCHIP. See Linda Chalker-Scott.

WORM CASTS contain 5x the nitrogen, 7x the phosphates, and 11x the potassium of surrounding topsoil. These nutrients are in a very available form and thus easily lost!

WORMWOOD. Tea discourages aphids and slugs. But plant is allelopathic to everything so grow in pot.

YACON. Polymnia (smallanthus) sonchifolia. Half-hardy perennial. Edible tubers. Grows to 1.5-2.0m high. High yields. Easy to grow. Start tubers in 15cm pots in spring, planting just beneath surface. Gentle heat speeds growth, but they’ll grow in an unheated greenhouse. Plant out post-frost. Allow spacing of 90cm because plants have huge leaves. Grow a catch-crop in the interim – radish or spinach. Tubers are harvested after the foliage has been killed by frost. Long storage life.

Eaten raw, tubers have a crunchy texture and sweet taste similar to watermelon, so good for salads.

Yacon is sweet, crunchy, and tastes of pear. Use as you’d use a radish or turnip, eg grate on salad or roast/mash it.

It retains crunch when cooked so can be used in Chinese cooking as substitute for water chestnuts.

Always peel because the skin has an unpleasant taste.

Can leave them in ground in winter until needed, but rodents may be a problem.

Put crowns in crate of compost and store where they won’t freeze.

YAM. Hardy down to -20˚C.

Perennial climber. Harvest after two years. Plant close (20-30cm) because roots are vertical (and can be up to 2kg!)

Harvest as needed. Leave in ground. Use as potato.

YARD-LONG BEANS cope well with drought. Good in stir-fry.

YIELD. Leaf damage of up to 30% may increase yield in some crops.

RECIPE IDEAS

Apple, parsnip, lentil and ginger soup.

Chinese plum sauce: simmer plums with onion, garlic, ginger, chilli, soy sauce.

Can add plums and pears to stir fries.