

Growing food at home series

Vegetables - growing in summer

Pack D Notes 6a

These notes contain information to assist the home grower in selecting suitable vegetables to grow in spring through to summer. Whilst growing your own food is fantastic and rewarding, there is no doubt, there's much information to understand, and numerous factors to consider for success. To assist you select the best site in your garden for growing produce at home, prepare the soil and assess your resources refer to the information in [Pack A](#), [Pack B](#) and [Pack C](#). When the site is prepared it is time to start sowing seeds and planting seedlings. Information on how is in [Pack D1](#), [Pack D2](#) and [Pack D3](#). Separate information sheets on manage crops over the seasons is in [Pack D5](#).

Growing summer vegetables

Summer vegetables are often planted in late spring when the soil temperatures has increased to allow germination and consistent growing. Examples being: Solanums (tomato family); and Cucurbits (pumpkin family). They can be sown in punnets in early spring, potted up so they are more established by planting time good for tomatoes, eggplants and capsicums but not for the cucurbit family. These plants will grow and be harvested through summer, with some harvesting in autumn such as pumpkins. A second planting of some crops can occur during the summer months such as lettuces, spring onions and radishes. Enough time needs to be allowed for those that need to grow, flower, set and ripen their fruits, so getting the seedling established in good time is important.

To grow summer vegetables in Adelaide one for the major issues to address is the heat, plants need protection and regular effective watering. Summer heat waves and the hot later afternoon sun are a problem for plants in Adelaide with plants bolting to seed, becoming sunburnt and heat stressed.

Protection will need to be provided from hot sun and strong drying winds which may affect the choose of plants (bolt resistant lettuces, seeds collected from plants grown in the local area shared through neighbours and local community gardens) and the way you design your garden in summer- planting canopies and in guilds.



Summer in Adelaide

- Lasts four months between December to March, but can be hot earlier
- Has a low rainfall
- Experiences intense heat with temperatures over 40°C, often for days at a time, with high overnight temperatures
- Has very dry days with low humidity
- Has hot and dry northerly winds

Protect plants and soil from heat and wind

For plants to survive they and the soil need protection from the heat to reduce

- burning of leaf and fruit and
- evaporation and water loss that stresses plants and soil micro-organisms.

This may even be necessary for one crucial day as the plant is being established and it's an extreme heat day. Which means summer is a time you need to be around in the garden to put up and take down protection as required.

Shade cloth

White shade cloth can be used to protect vegetables from summer heat. This will mean less watering, less stress and healthier plants. It can be placed as a canopy (cover) over the garden or parts of it. It can also be used to protect from drying winds if placed to the north and hot sun if placed to the west of your garden or any sensitive plants.

- White 70% overhead for the east and north
- Lower % - Green/black on the west and south
- Leave open access for beneficial insects
- Use a strip as a hedge
- Place as temporary protection in heatwave
- Also, you can use white pots up ended over seedlings in heat waves



Prevailing winds

These are mainly south westerly; occasional hot northerly winds that are a problem. Streets, houses and fences also direct wind movement. Learn where winds are coming from on your property and position protection accordingly. Planting a wind break of open shrubs can be a good investment.

Extra protection from wind and sun

This can be temporary for those extra heat days or weeks. Often put up for the period and then taken down. Simple structures can be made to support sheets, curtains, bamboo/woven matting or other material that allows air flow

Use plants for shading

Existing trees and bushes will lower the temperature of your garden. Whether they provide shade in the right location for your vegetable patch is another matter. If you are committed to growing vegetables it might be worth considering planting deciduous trees to advantage your patch in summer, but the roots will invade in-ground garden beds. Bushy herbs and other tough plants can also provide shade but the same

root invasion problem will exist especially if you are regularly watering the patch. Using other vegetables can be a good solution. Planting in guilds included putting beans and other vegetables on trellis, with other plants growing underneath or on the shady side. Ground cover plants can keep the soil temperature lower and shade roots of other plants.

<p>Tall plants on the western side Offer protection for the plants next in line to the east</p> <ul style="list-style-type: none"> • amaranth • beans- grown up a trellis • corn • jerusalem artichoke/sunflowers <p>Plants that cope with western sun</p> <ul style="list-style-type: none"> • capsicum • chillies • eggplant 	<p>Next in line, protected from the taller plants</p> <ul style="list-style-type: none"> • basil • brassica • carrots • celery • onion family • tomatoes • salad greens 	<p>Low growing plants shade soil-“living mulch”</p> <ul style="list-style-type: none"> • sweet potatoes • pumpkin • zucchini
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Mulch

Mulches reduce evaporation from plants and soil. Plants can offer shade that serves similar purpose as mulch in that they will shade the soil and reduce soil temperature.



Sugar cane

Bedding straw

- Grasses and leaves make the best mulch
- Straw, lawn clippings and weeds (without seeds)
- Apply a thin (½ to 1 cm) layer to start with then build up to 2 cm by mid-summer. Individual circumstances need to be considered in the thickness and timing.

For more information refer to [Pack G2](#)

Watering

When really hot weather occurs plants need heaps of water to stay alive and even then may wilt. If they do wilt, watering may not resuscitate them immediately. You may need to shade or even cover the plant entirely to prevent a setback to the plant. Plants thrive best when the watering is like light rain, as it saturates the soil slowly. Heavy rain disturbs the soil.

- Dripper or soaker hoses are best as they water under the mulch
- Deep soaking once a week, even less if the weather is mild
- Check soil before and after watering
- Water early, before the day heats up
- Seeds and seedlings- water as necessary
- When planting seedlings at this time of year, cover for a few days after planting
- Seeds will need to be kept moist- may need watering every day or twice per day. A damp tea towel over the soil when seeds are freshly planted can keep the soil moist. Take off when they germinate!

Provide a source of clean water for the wildlife that supports your garden- insects, lizards and birds. Fill a shallow plant saucer with pebbles and cover with clean water. Predatory insects will land on the rocks safely for a drink. Or put corks in a bird bath for bees as they drown in water without floating support.

Planning

Aesthetics may influence your layout, nice neat rows which can also be convenient for watering, weeding and harvesting. It is easier to plant seeds in rows. One row of plants may shelter another row. But rows of plants make it easier for a pest or disease to spread and may not make full use of the soil.

Mixing your plants and rows may add benefits. A fast growing crop may be planted between slower growing larger plants and thinned out as you need them. Leafy greens are ideal for this between tomatoes, capsicum, eggplants, corn and brassicas or planted in the space that a zucchini or pumpkin will grow into.

Flowering plants including herbs will attract beneficial insects to the garden. It is important to have as much variety in flower and form as possible to build up a good range of insects and spiders. Flowering plants on the edge of a garden may include larger herbs such as lavender and rosemary. Include as many flower in plants in the garden as you can so that there are flowers all year round.



Summer vegetables

CABBAGE family are gross feeders. They need a lot of fertiliser as they mature. They also need plenty of space 30-50 cm between plants. Bury a little fertilizer 15-20 cm from the young plants so that their roots reach it when they need it most as they mature. Not many grow in summer.

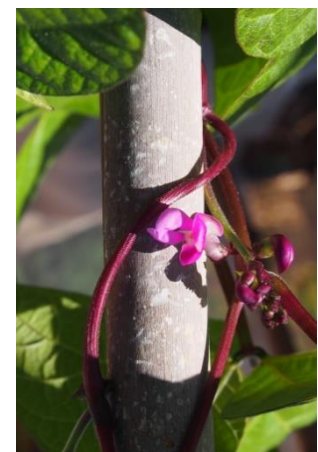
- Can be in part shade to full sun
- Protect from cabbage white butterfly
- Broccoli - sprouting varieties or Kailan
- Cauliflower - snowball
- Kale/Mizuma tough with deep roots
- Bok choy/Pak choy fast growing
- Rocket as leafy green



Beans need less fertiliser than most other summer vegetables. Plant seed in bare soil in a 1-2 cm deep water well then don't water again until shoots come up. Once seeds emerge apply 1 cm compost or a light sprinkle of pellets (5 pellets Rapid Raiser per plant) and then cover with ½ cm mulch. Harvest beans before fully mature (beans show through in pod), the more you harvest, the more they will produce.

Runner beans

- Good for poles/trellis/fence
- Start cropping from 10-12 weeks
- Crop over the whole summer
- Purple King/Lazy Housewife tough
- Kentucky Wonder/Blue Lake less so
- Scarlet Runner needs shelter



Bush beans

- Fast cropping 8-10 weeks
- Plant pairs or rows 15-20 cm apart so support each other
- Plant every 6-8 weeks through summer
- Can get 2-3 crops per season
- Plant 15-20 cm apart in a diamond shape to support each other
- Brown Beauty/Purple Queen tough
- Butter/Hawkesbury Wonder less so
- Epicure/Stringless/Snap shelter



Lima beans

- Productive over 5-7 years
- Need a strong trellis
- Can use to protect garden/house
- May die back in winter in a cold spot

SILVER BEET/CHARDS AND BEETROOT are the same species. They are moderate feeders. For beetroot too much nitrogen will promote leafy growth with a smaller root. Apply compost or a sprinkle of pellets then mulch once seedlings have come up.

- They are best planted as seed
- Transplanting seedlings damages the taproot
- Plant seed $\frac{1}{2}$ 1cm deep and keep damp
- They will grow in any soil type
- Their very deep roots open up soil

You only need 3-6 silver beet/rainbow chard per person. They can be in rows or easily dotted around the garden to save space. Plant seeds/seedlings out every two months for a continuous supply of vegetables throughout summer.



Lettuces are best grown from seed. Seedlings need much more water to grow. Transplanting damages their taproot and slows early growth. Putting the seed in a closed container in the fridge for 3 days breaks the seeds dormancy so that it all germinates at once when you plant it.

- Need little fertiliser just add water
- Will grow in most soil types
- Ideal for growing between other plants
- Sprinkle seed, cover with light mulch and water gently
- Keep damp for 3-5 days

Open leaf lettuces for summer

- Cos lettuce tall variety with stiff leaves
- Italian Lollo frilly green/bronze/red
- Freckles frilly
- Oak leaf
- Tango/Green Frilled
- Butternut Crunch great flavour but can't save seed

SOLANUMS - tomatoes, capsicums, chillies and eggplants are fruit. They need a fertiliser for fruit to do well. Too much nitrogen will cause leafy growth and bitter fruit. The secret is to add potassium (K) either in a complete fertiliser for fruit (Gyganic or Citrus Fertiliser) or as sulphate of potash if you use Dynamic Lifter/Rapid Raiser pellets. Sprinkle 2-3 teaspoons of sulphate of potash per plant every 2 months and water in well.

Tomatoes transplant well. They can be grown as a sprawling bush or staked upright. There are some dwarf varieties 40-50 cm high. Use tomato dust early on for mite, white fly and caterpillar control. Plant in three different spots to cater for differences in season development

- Can mix staked tomatoes throughout garden. Staking makes it easier to control pests on
- Staking increases production for area. Put stake in when planting, make sure its firmly in the soil
- Pinch off laterals between leaf and stem and tie plants up to stake

Bush tomatoes can be left to grow “as is” on the ground or directed onto a frame. A frame could be as simple as some brush or a bunch of woody prunings that raise the tomato plant above the ground. Cherry tomatoes do well sprawling over the ground or frames.

You should be able to water tomatoes weekly through most of summer using drippers. Deep watering is the key right from the start. Thick compost, 2-3 cm on the soil surface, covered with 2-5 cm of soft mulch helps. Protect the western side from hot afternoon summer sun with shade cloth or other plants.

Eggplants, Chillies and Capsicums

- Transplant well
- Fertilise and water as for tomatoes
- Small to medium fruiting bushes
- Perennial in a warm spot
- Protect from hot afternoon sun

CUCURBITS - pumpkins, squash, cucumbers, melons and gourds. Are all summer fruiting vines and so like the same conditions and fertilisers as the Solanums. As vines they will spread so you have to plan for this. Provide a trellis or other structure for them to grow up onto, or the space in your garden for them to extend into.

- They are all best planted from seed
- Plant seed 1-2 cm deep, water well
- Deep water weekly
- Shelter from wind
- Protect from afternoon sun



The flowers are pollinated by bees so use other flowering plants to attract them.

Cucumbers

- Grow on trellis/wire mesh
- Space plants 40-80 cm
- Crop in 8-10 weeks
- Keep harvesting to encourage more fruit
- Harvest before mature
- Many varieties bitter when mature, or this could be too much Nitrogen
- A drip system under the mulch help prevent powdery mildew fungal infection

Melons

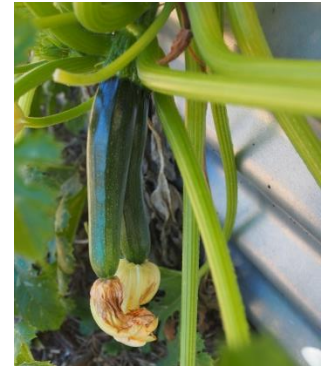
- Grow on trellis/wire mesh
- Space plants 80-120 cm
- Crop in 14-18 weeks
- Harvest when mature
- Melon comes off with a light twist
- Small watermelon are good for Adelaide's heat

Pumpkins

- Need space
- Plant seeds in shallow mounds
- Stake in mound for watering point
- Can grow over fence or up trees

Squash/Zucchini

- Plant seeds in mound
- Plan for spread 2-3 metres, they ramble
- Don't wet leaves when watering
- Harvest young fruit continuously
- Three plants per family?



CARROTS like open or light sandy soils to grow straight. Dig coarse sand into top 20-30 cm of heavy soil or sow seed in a garden bed that has just had another crop. Over fertilising will promote leafy growth at the expense of root growth. If they follow another crop such as Brassicas or Solanums they may need no fertiliser at all.

- Seed needs to be fresh
- Plant in rows or patches
- Sow seed direct 2-3 mm
- Water daily 7-10 days
- Thin seedlings out and eat them

Carrots for summer

- Chantenay
- Baby Carrots
- Early Nantes
- All Seasons
- Paris Market/Pom Pom
- Purple Dragon/Atomic Red



LEAFY OR SALAD GREENS can be grown as a mixed patch or between other plants. They are smaller fast growing plants best harvested when young. Harvest by pinching out plants or with scissors rather than pulling them out so that you don't disturb the remaining plants roots. Don't over fertilise but water well for sweeter plants. A densely sown patch will promote soft upright growth. They are ideal for containers like broccoli boxes.

- Lettuce
- Baby Spinach
- Mizuma/Mibuma

- Bok Choy/Pak Choy
- Mustards
- Rocket
- Coriander
- Dill
- Chicory/Endive

CORN needs plenty of fertiliser and plenty of water to grow in summer. All the F1 varieties are super sweet.

- Grow in blocks for good pollination
- Add 2-3 cm of compost to soil surface
- Sow seed direct 1-2 cm deep
- Space plants well 30-40cm
- Rows 80-100cm wide
- Use pellets 20-50 cm from plants
- Thick mulch 2-5 cm
- Water well

ONION FAMILY

- Need little fertilizer
- Transplant well
- Leeks in a sheltered spot
- Spring onions for greens
- Chives in sheltered spot
- Garlic chives very tough

Herbs

- Sweet basil in blocks or spotted about. Does well with tomatoes
- Thyme as a border in sheltered areas
- Dill interplanted or randomly spotted about
- Marjoram as border plants
- Oregano as tough border plant
- Parsley sprinkle fresh seed and water
- Tarragon in sheltered areas
- Ginger, turmeric like warm moist spots
- Galangal better suited keep moist
- Dandelion young leaves and flower

References

The Seed Savers Handbook, Michel and Jude Fanton

Organic Gardening, Peter Bennett

Yates Garden Guide

The Australian Vegetable Garden, Clive Blazey, Diggers

Adapted from Harry Harrison - Grow your Own Food workshop series 2015

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