Cuttings
Seeds
Peat free Composts
Starting Dahlias
Dahlia Cuttings

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NB videos might NOT play in this .pdf file copy the link and paste into your browser

Softwood cuttings

- By soft cuttings, I mean "new growth" (usually green stems)
- Plants root more readily from a leaf node than bare stem
 - Leaf nodes have "stem" cells able to grow into leaves, stems, roots
 - True for trees, shrubs, herbaceous, dahlia etc
 - Does not mean leaves and stems can't grow roots, some will
 - Some plants are propagated from root or leaf cuttings for example but keep in mind that some "roots" are actually underground stems
- The talk is about what I do, works for me. If you do things differently and it works for you, just carry on doing it
- Better still come tell the rest of us so we can learn

Soft Wood Cuttings

- Some plants like Hydrangea and Tomatoes can new root along the whole stem
 - Inter-nodal cuttings useful if you want a large number of cuttings, some species better than others
 - Nodal cuttings, ie those taken at a leaf node, are more reliable and root faster. I often get 8 out of 10 success rate with nodal cuttings for shrubs and herbaceous



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• I use hormone rooting powder or gel as I have found this increases

success rate, not always essential



Doff Natural Rooting Powder 75G £3 Amazon Poundland



Westland Organic Rooting Gel, 150 ml £5 Amazon

Compost for Cuttings ??

- For peat based compost, it was traditionally
 recommended to amend compost so its a 1:1 or a 2:1 mix
 so 2 parts compost (sifted to aerate) and 1 part Perlite or sand / grit
- For peat free composts; this does not make sense to me. I find the composts currently available are less dense and
 - 1. When watered these composts become saturated with water
 - 2. Then they quickly dry out, so need frequent watering
 - 3. Nutrients (fertiliser) are washed out from frequent watering; need adding back to pots every watering
- I find 5 or 6 parts sifted compost to 1 part perlite is about OK to produce a useable mix for cuttings and seed starting. I use capillary matting, needs careful watering because top of compost can dry out whilst bottom is still wet
- Otherwise NO need to add perlite to these composts

video - Peat Free Compost - 6.5 mins

How to use peat free compost successfully

link to video below, copy and paste into browser https://www.youtube.com/watch?v=1WbEiDvdhrY

Compost



Takinging Cuttings

- As soon as a cutting is taken, it starts to die, its been removed from its "life support" system
 - No longer has a water source so starts to dehydrate
 - No longer has the humid microclimate from surrounding leaves
 - No longer has a nutrient supply to feed it
- You have to provide those
- The quicker a cutting is put into compost / water, the greater its chances of survival (penstemon roots in 3 weeks water)
- A cutting has no roots so needs a wet but well drained compost that retains oxygen or the stem will rot
- This is the only time the compost should be saturated so the stem has immediate access to water
- It also needs a humid environment to reduce transpiration

Reduce Leaf Area



Cover with a plastic bag, place on a window shelf - needs light but not in sun, spray leaves every few days until new growth





"Soft Wood" Cuttings

- Soft cuttings taken Feb to March, need bottom heat to root and a humidity dome (could be a plastic bag)
 - Can put them on a window shelf above a radiator
 - Can move to a frost free greenhouse once rooted
- My cuttings taken from mid March are placed under a dome and raised in a cold greenhouse – no heat
 - misted twice a day for the first weeks and covered with a dome, removed for ½ an hour morning and afternoon for extra ventilation

show humidity domes

• Soft cuttings root in about 3-4 weeks



Cuttings

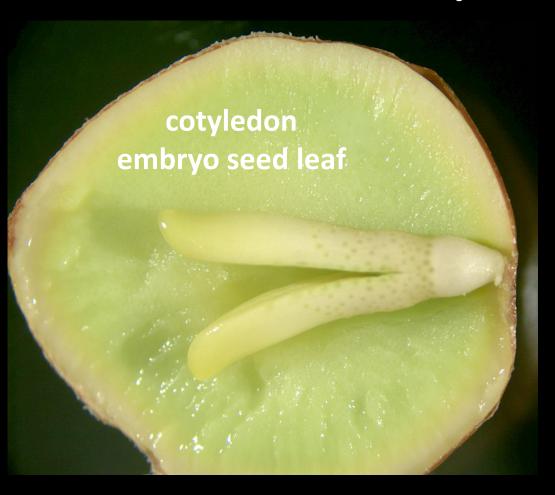
- Some cuttings taken from plants in the ground, June onwards, I root in bottles as I showed you for hard wood cuttings (no top). Bottle provides a "humid environment" to stop drying out as weather heats up
- Or covering pot with a plastic bag works well
- Keep moist, spraying leaves occasionally helps
- Bottles placed outside in the shade, open to the rain is self watering
- By the time they are rooted, they will already be "hardened off" and can be moved into pots or the ground to grow on
- This information is also generally true for Dahlia cuttings



Dahlia are easy to grow plants

- If your worried about complex overwintering, DON'T
- Think of them as annuals, after all many of our annuals are tender perennials, we don't always know it
- Dahlia tubers are cheap to buy and each plant will provide many months of colour from summer to autumn
- My Dahlia plants range from small 30cm (9x12inch) to 2m
- I grow some dahlia from seed, its cheap and I don't worry whether they appear again in spring
 - Flowers 4 months from sowing
 - You can buy dahlia seed cheaply
 - plants will form tubers that will grow again next year
 - Collect your own seed, knowing the dahlia that emerges will be unique – or use "dead heads" from friends

Anatomy of a seed



Seeds are hibernating plants, if kept for too long, all the nutrition is used up and none is left for the seed to germinate

Is why seeds stop being viable, check use-by date although some latitude

Seeds will last longer kept chilled (fridge), slows life

Germination starts when water detected

Note: first to appear is the root, but if in doubt, place sprouted seed on its side when potting

Time lapse - 90 seconds

link to video below, copy and paste into browser https://www.youtube.com/watch?v=ECibetK2EYI



Grow from Seed

Can be seed you collected or bought

- Sow seed in any moist compost, in a tray or in plugs or pots and just cover with compost to hide, need light to germinate. Gently water surface to ensure seed is in contact with the compost
- Surface sown seeds must be covered with a dome, eg a bag to keep soil surface humid so moisture gets through seed casing. Remove after all seeds germinated
 - germinates in 5 to 10 days, room temp, about 18°C to 24°C
 - pot on into a larger pot and grow on, then harden off for a week before planting out in June
 - Dahlia will flower about 4 months after sowing if sown now flowers August

(NB.)

Short video shortly on simple alternative method

Popular Easy Varieties from Seed

var. Dandy - Collarette type H 60x40cm

'Bishops Children' H 75x50cm



even when neglected, good for pollinators

Starting seeds

- Pre-soaking seeds with a hard coating in water speeds germination
- Can pre-germinate on moist kitchen towel

 Here is an expert who is credited with creating many new dahlia hybrids

Kristine Albrect - Germinating Seeds 3mins

Kristine is a Dahlia hybridiser

(note: sowing seeds in January)



Seed Starting





NB it would seem some food bags give off "vapours" that inhibit seed germination

I usually only buy a single Dahlia tuber clump because they are so easy and straight forward to propagate



Time Line – Temperature dependant

Working on planting out mid June

Cuttings earliest start

14th February: start tuber for cutting material - 4 weeks

Cutting needs 12 weeks before planting out - take cuttings from mid March

First blooms 16 weeks after taking cutting so in July

I take cuttings through the year for contingency / over wintering

Tubers

Plant out 8 weeks after starting

- so if tubers started 1st April

First blooms 12 weeks so 1st July depending on soil temp.

Overwintered Clumps



Dahlia Anatomy

- Dahlia stems (ie flowers) can only grow from
 - an eye on the collar
 - attached to a tuber via an unbroken neck
- If the tuber neck is broken, it cannot feed the "eye"
- Tubers are roots, they cannot grow a new stem



eyes on collar growth points for new stems

Dahlia Anatomy

- New growth (stems) can only come from an 'eye' in the collar that is located between the tuber and the stem
- Broken necks make the tuber useless





Dividing Dahlia Tuber Clumps

- Can be done prior to winter storage or in spring when eyes are starting to swell and become more visible
- Division and cuttings will also work with bought dahlias tubers, but might be best to use for cuttings
- Plants with multiple stems; pull the tuber clump apart using the stems
- If single stem need to cut the clump so each piece has both a tuber and a piece of collar with an eye
- Can cut through stem

demo

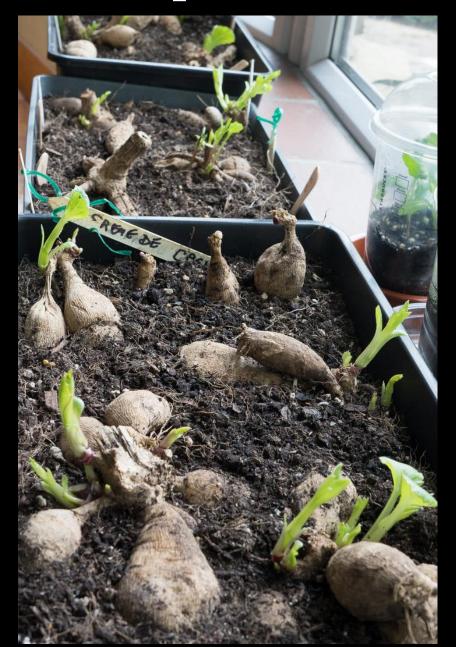
Pre-sprouting Dahlia Tubers for planting in borders



Compost for Pre-sprouting Dahlias and starting tubers into growth

- Can use any compost does not need to be amended with perlite / grit / etc
- I use old compost from pots that grew previous years tomatoes in my small polytunnel, but avoid any from pots where plants were diseased
- The purpose of the compost is simply to provide the tubers with moisture and a rooting medium
 - make sure its only just moist and not wet
 - do not cover the collar to reduce risk of rotting
 - Occasional feed with ¼ strength fertiliser when in growth

"Sprouts"



Dahlia 'Creme de Casis'



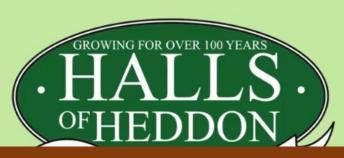
"Left-overs"



Ready for Cuttings



Halls of Heddon 4mins UK's premiere dahlia grower



link to video below, copy and paste into browser https://www.youtube.com/watch?v=LfmgsW3S 5E

Dahlia Propagation-

taking cuttings our way.

Take care to NOT damage eyes



- Take care to cut above the growth point to leave a flower stem
- Do not cut into the stem or the tuber
- Cutting into the tuber or the stems removes growth points and creates entry points for viruses and bacteria

Regrowth from around cutting



Cuttings Taken 15/3/22



- "Wet drench" compost
- Cuttings taken, I used hormone rooting and inserted into compost
- Leaves sprayed with water

Cover with a plastic bag, place on a window shelf, out of sun "Bagged dahlia cuttings" not watered again till rooted (3-weeks)







Planting Dahlias

- Dahlia tubers showing no signs of growth can be planted into the ground a month before the last frost date. Stems take 3-6 weeks to reach the surface depending on temperature
- Sprouted plants and those from cuttings after last frost date
- Plant 4-6 inch deep depending on plant hight, sprinkle fertiliser around planting hole, water-in the plant, then only water when soil is dry until flowering starts
- Dahlia only need regular watering when in flower
- Plants first job is making leaves and roots, so needs **food**. If the ground has been well mulched with compost / manure before planting, might be fine!
- otherwise

Fertiliser

- There is no consensus on fertiliser for dahlia plants, much will depend on your soil. I have sandy soil
 - I work fertiliser granules into the soil around the new planting to provide on going nourishment
 - I then water in with a nitrogen rich fertiliser when planting to support leaf growth – (as NDS) contrary to advice from many broadcasters who avoid using nitrogen rich feeds
 - Only necessary when planting out tubers / new plants
 - Do not need watering or feeding again until buds form
- Dahlia prefer dry conditions, but watch for wilting
 - Plants in pots will need daily watering when very hot
- After the plants have formed buds, I use a ¼ or ½ strength liquid feed of Miracle Grow weekly.
- Exhibition growers do similar (NDS National Dahlia Society)

Dahlia display July to October



Dahlias in Pots

- Dahlias grow well in pots, plants upto 1m best, avoids blowing over when windy
- Bottom 1/3rd of my pot is leaf mould or old compost that has had "builders gravel" / grit mixed in 1:3, to reduce the risk of wind blowing the pot over
- Work a good quantity of slow release fertiliser into the top half of the growing medium before planting
- Supplemented with ¼ strength liquid feed every watering

Dahlia 'Totally Tangerine' in a Pot



Dahlia 'Cafe Au Lait' in a Pot



