



Dahlia Cuttings

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Vegetative Propagation or taking Cuttings

A great way to increase the stock of cultivars that don't come true from seed. These methods produce cloned copies of the parent stock.

Taking cuttings is a great technique worth trying in your garden if you want to multiply your plants quickly.

Herbaceous (young, green growth in spring)
Fine, pliable new growth that will bend instead of breaking.

Softwood (starting to toughen up)
It may snap when bent.

Semi-ripe or **semi-hardwood** (woody material starting to form, may be hollow)



Supplies



1. Potting mix, usually soil-less, aims to be nice and open, providing moisture and air as a rooting medium. Water the potting mix thoroughly.

Examples

- 2 parts sharp (builders) sand:1 part fine vermiculite.
- 1 part Coir:1 part sand
- Or buy premixed (Osmocote seed and cutting mix)

2. Rooting hormone powder or liquid (optional)

3. Pots (I like square ones as roots get directed downwards and don't circle)

4. Tags and permanent markers

5. Garden snips

6. Methylated spirits (for sterilising snips between plants)

7. Plastic food bag and damp paper towel



Gathering cuttings material

Collect material early in the day when it is full of water (turgid)

Soft plant material loses moisture rapidly, so care needs to be taken to prevent wilting.

Select healthy, vigorous shoots

If you cannot prepare the cuttings immediately, place the cutting material in a clean plastic bag with a label and store the bag in the fridge.



Basal or Softwood Cuttings

Softwood

It is the soft and flexible young shoot tips from this season's growth

Basal shoots

Basal cuttings (from the base, close to the tuber).

These are shoots (plant stems) arising from below or near the ground surface.



Softwood cuttings

The material is taken from the soft, flexible young shoot tips, which root readily. Softwood cuttings have the highest rooting potential of any stem cuttings.

Collect non-flowering shoots, as they will root more freely.

Both **apical** (main) shoots and **lateral** (side) shoots work well for Dahlias



Nodal or Internodal

Nodes are points on a stem where new growth sprouts, usually leaves, buds, side shoots or roots.

The section of the stem between two nodes is an **internode**.

Most softwood cuttings are nodal, i.e. cut at the bottom just below the leaf joint or node, where there is a concentration of hormones to stimulate root production.

When taking **nodal stem cuttings**, you trim them just below a node at the base, as this is where new roots will sprout. Dahlias will also produce roots from the internode; they are known **as internodal cuttings**.

In my experience, both are acceptable and produce comparable outcomes.

When selecting a stem for propagation, choosing a new growth stem (from the current growing season) with no buds or flowers is important.



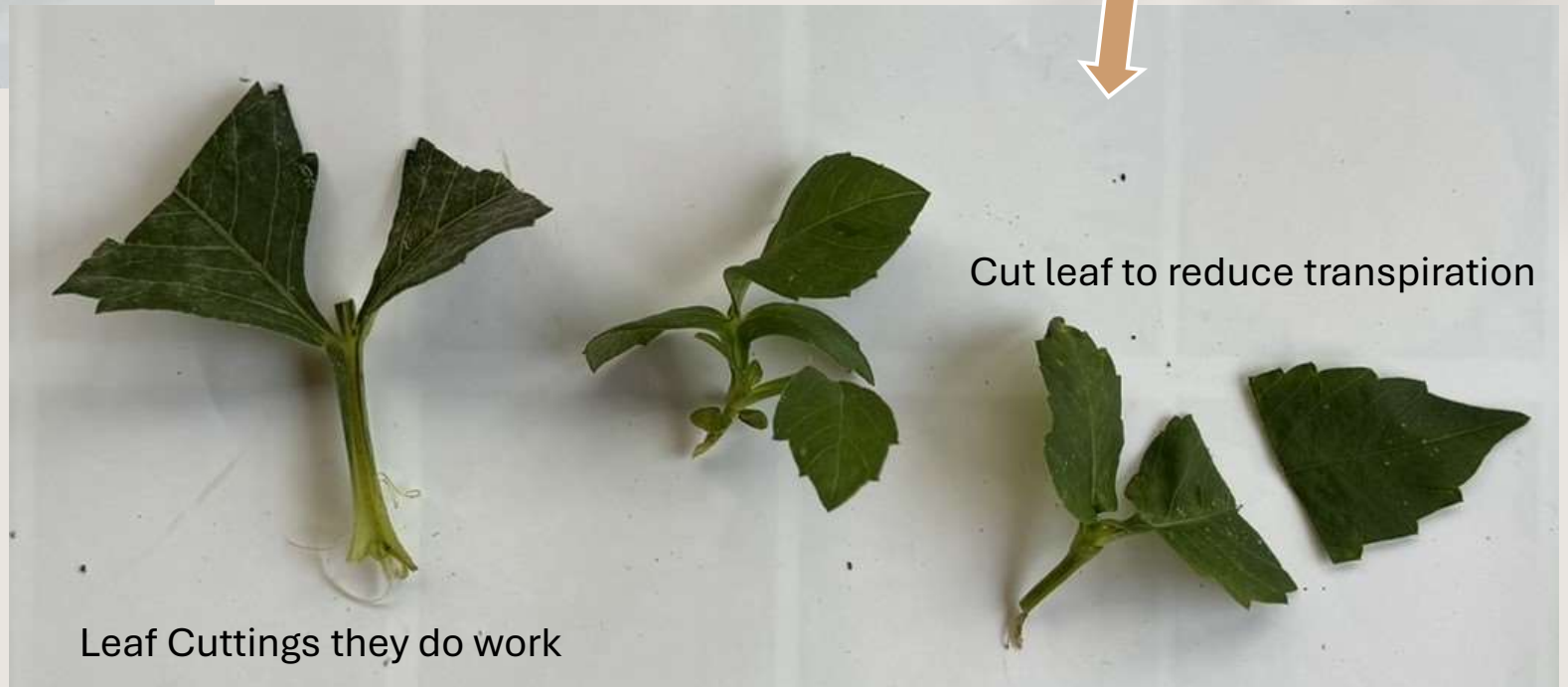
Softwood cuttings

Using snips or a sharp knife trim below a node to make a **cutting** about 5-10cm long. Be careful never to crush or squeeze the stems.

Trim the stem directly below a leaf node and remove the lower leaves, leaving just the top pair. If the top pair of leaves is large, you can cut them in half to reduce water loss.

Make a slightly slanting cut to expose a larger area and dip the cutting into a **rooting hormone**, either powder or liquid, to speed up root formation. Rooting hormone is not essential with Dahlias, as, at this stage in a plant's growth, it is growing vigorously, but I use it (better safe than sorry).





Push stem into **potting mix**, approximately 5 cm deep up to the base of the cutting with the first pair of leaves just above the level of the compost, firm it down gently to ensure the stem is in contact with the compost,
Label the cutting and **water** to settle the mix.



Tuber preparation for cuttings

Pot up dormant tubers and start them into growth in warm conditions in late winter to early spring (I use a lot of mother tubers from previous years)

- Fill a seedling tray or small pot with free-draining, damp **potting mix** or coir/sand mix. Make sure you have good drainage; dahlia tubers are prone to rotting.
- You can half-bury some tubers, but ensure the neck and stem are not covered with soil.
- Label the pot and tuber using a permanent marker pen.
- Place the container in a warm spot out of direct sunlight, with bottom heat if possible. Keep the soil only slightly damp.
- Within a couple of weeks, eyes should develop near the neck of the tuber. Shoots will then emerge.

Be vigilant and watch out for snails and slugs



Mother tubers after 2 weeks



Basal or Tuber cuttings

You can take a cutting once the shoots are 5-10cm tall and ideally with three to four leaves.

Use a clean razor blade, sharp knife or snips.

There are two options when taking the cutting:

- Cut the shoot, **including part of the woody basal tissue**. This may aid in the cutting's establishment; however, since the eye has been removed from the tuber, it will not sprout again. This method is effective when dealing with tubers or clumps that have multiple eyes; leave 2-3 eyes and their corresponding shoots on the tuber for planting.

Or

- Cut the shoot near the tuber, leaving the eye and a small stub of the shoot on the tuber. The eye and remaining shoot will regrow, and the tuber can be planted as usual.



Creating the right growing conditions

Golden rule – “warm bottom, cool top”

Stage 1

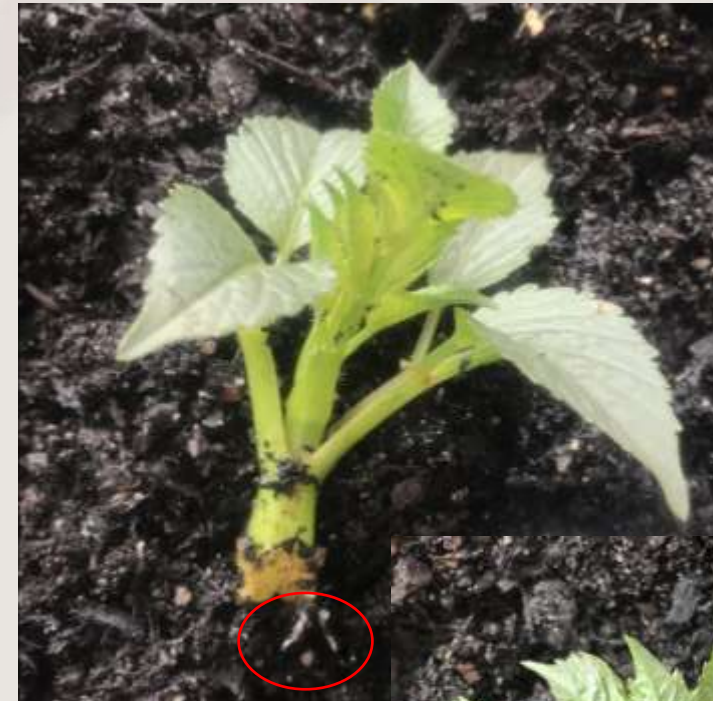
1. Place the cuttings and pots somewhere **warm** or on bottom heat of **18-24°C**.
2. Keep soil **moist, not soggy**.
3. **Humidity** needs to be medium to high; misting units can provide this. Covering with a plastic bag or upturned clear plastic tub is simpler. Remember to ventilate regularly. In a greenhouse, humidity can be raised in hot weather by damping down (wetting) the floor, overhead watering or misting. However, high humidity can cause fungal problems, so vents should be used to improve ventilation.
4. Ensure the cuttings are placed in good **light**, not direct, scorching sunlight. A shade cloth over a greenhouse is ideal. Freshly cut stems may wilt and look a little sad for a week or so, but they will perk up. The growth rate varies by species and the vigour of the mother plant.
5. **Remove** any dead, rotting, or diseased material regularly.



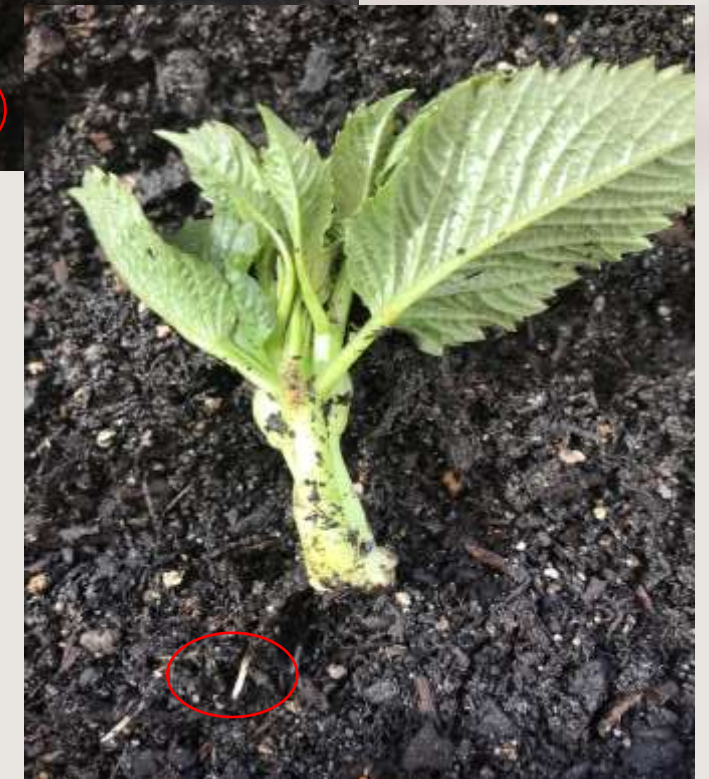
Roots and Shoots

Stage 2

Generally, roots form after 3 to 6 weeks; check under pots, and you will see roots sticking out. Once started, dahlia roots and shoots are incredibly vigorous. Pot up into larger pots. They need some protection but do not need high humidity or bottom heat now and can be put on a greenhouse bench. Remember, airflow is needed to replenish the gases absorbed by plants and keep down fungal diseases.



After 1 week



Getting ready to plant in the garden

Stage 3

Gradually **acclimatising** tender or indoor-raised plants to outdoor conditions to toughen them up and prevent a check in growth. Place plants outside in a sheltered spot during the day, then bring them indoors at night for a couple of weeks. Or place them in a shade-house where they will **harden off** ready to plant in the garden.



Planting out in your garden

Dahlias do not take long to fill pots; you can plant them out in the garden or pot up into a very large pot.

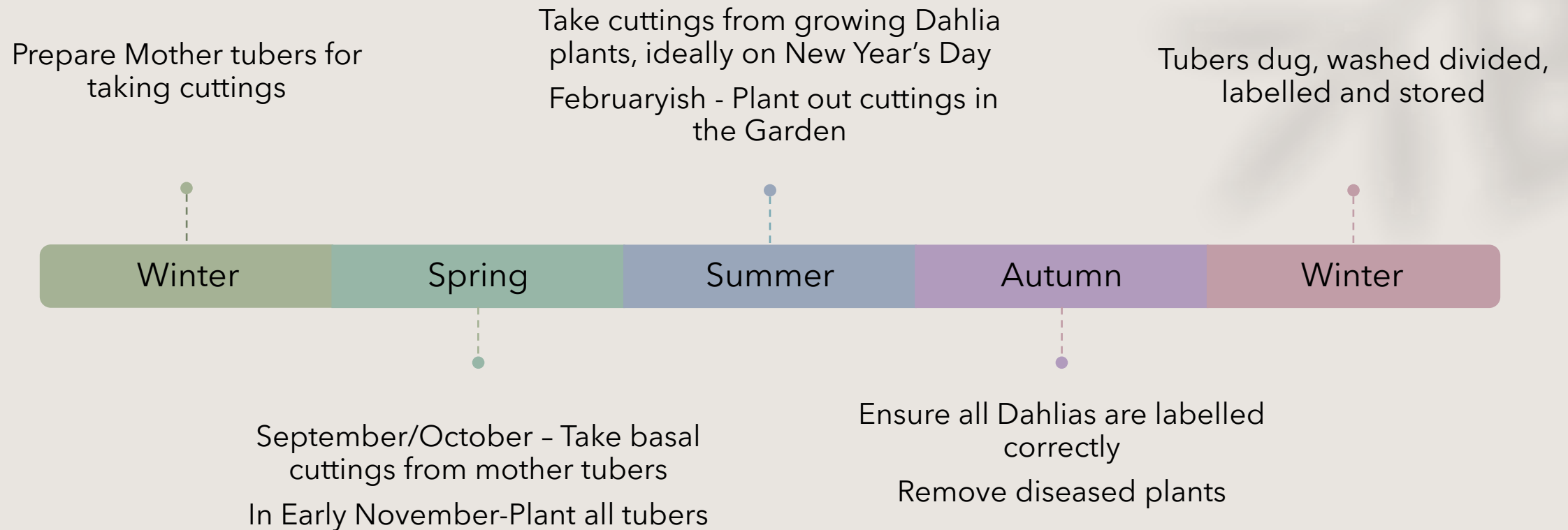
Choose a sunny location with well-draining soil, and space the plants about 30-40cm apart. Water well.

If cuttings are started in early spring, they can be planted out in the garden a few months later over Summer and will not stand out from other tuber-grown plants during their Autumn growth.

At the end of the season, they can be dug like any other dahlia and will be able to be stored for winter.



Timeline





New roots (future tubers) grow from the original tuber, also highlighting the need to pinch growing tips early on in the season to get more stems.



Seedlings growth bursting pots

Questions?



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The way to get started is to quit talking and begin doing.

Walt Disney

