

# Agriculture Academy's Viburnum Production Cycle



Agriculture Academy



# Thank you for downloading this eBook!

*Viburnum sinensis*, also known by its common name sweet viburnum, is a luxurious hedging species that you can grow in your nursery to rely on steady, year round sales. In this video we are going to show you how viburnum is grown in a commercial nursery, starting with stem cuttings and finishing with large, 40l plants with a hefty price tag.

With that in mind, let's begin by taking a look at the propagation principles.



# Propagation & Mother Stock Selection

Depending on your situation, certain propagation methods will suit you and your viburnum production best. In some regions, you can purchase rooted or unrooted cuttings from specialist growers. You will receive your cuttings in trays, which you can then acclimatise in your nursery. With rooted cuttings, you can transplant your cuttings into pots soon after delivery. If you purchase unrooted cuttings, you will need to first let the cuttings develop roots before you transplant. Rooted and unrooted cuttings are a great option for new growers who might not have viburnum mother stock on hand from which they can take their own cuttings, and the plugs might be available throughout the year when viburnum might be otherwise dormant.



If you are in possession of mature viburnum mother stock, then you can save money and take your own cuttings. (Insert a note about royalties on certain species). As you can see here, this nursery retains a lot of its stock so they can take cuttings. If you wish to do the same, follow these rules:

1. Although viburnum can develop roots at almost any thickness, it is best to cut stems that are roughly a pencils thickness. Usually this will be stems that have grown in the current season which have had some time to harden off and become sturdier.
2. You can use both terminal and non-terminal cuttings. But make sure your cuttings have at least two nodes. When planting your cuttings, roots will grow from the nodes in the rooting medium and a new canopy, or leaf system, will develop from the upper node. In the nodal regions, there is a lot of active growth inside the cells of the plant, which encourages quicker root development.
3. Use rooting hormones to encourage faster, even root development. Medium strength hormones are best for semi-woody

cuttings like viburnum. Dip the bottom nodes into the powdered hormone before sticking them in the rooting medium.

4. Speaking of rooting medium, a mixture of coco peat and perlite work best for this nursery. We have a few videos discussing the best rooting medium options suited for different situations. We will link these videos in the description, so take a look at those if you need more information.
5. Cuttings should be at least 10 cm ( 3- 4 inches) tall with 1 set of leaves at the terminal end. When sticking your cuttings try to make sure that leaves of the adjacent cuttings do not overlap and touch each other. If this does happen, fungal and bacterial growth will be encouraged. If your leaves are too large, then you can cut them in half to make them more compact.
6. Stick your cuttings as soon as possible after you have taken the cuttings. After they have been cut, the stems immediately

become exposed to water and heat stress, and when exposed to these stressors for long enough, will eliminate your chances of successful rooting. To avoid this, take your cuttings during cool periods, whether this be in the morning, late afternoons or cloudy days.



Once you have taken and stuck your cuttings, you will need to keep them in a humid, warm environment to encourage root growth and prevent dehydration. In this nursery, a mist bed is used. A detailed tour of this mist bed will be linked in the description.



# Root Development and Transplanting to 4l Pots



These cuttings have been in the mist bed for 4 weeks. You can see how the base of this cutting has started to swell, and it looks like the stem is starting to split. This is a great sign for impending root growth. You can even see the first signs of root development in the split (arrow in left picture).

Once a healthy root system has developed and your cuttings have hardened off, you can transplant your cuttings into pots. This is newly transplanted stock. In this nursery, two cuttings are often placed in a single bag. This is done for two reasons:



1) The likelihood of two cuttings to fail is much less than that of a single cutting failure. This will therefore help ensure a pot with its fresh soil isn't wasted, as it is likely that at least one of the cuttings will establish into a new plant.

2) The rate of establishment is quicker. Two established cuttings will reach a marketable size faster than a single cutting, shortening the time between stuck cutting and receiving an income from that cutting.



These pots are filled with a composted bark mixed with sand and perlite. Depending on the growing medium you choose, you may want to include a slow release fertiliser to supplement new root and leaf development.

These pots are kept under a shade net. This not only prevents damage from excessive rain or hail, but shields the young plants from harsh sunlight. These pots are irrigated once a day with a sprinkler system.

Once these cuttings have put on some foliar growth, you can consider selling your new plants. In small pots like these, you can cater to large scale buyers. These will likely be landscapers or other nurseries looking to mature the plants themselves and sell them later.





# Transplanting to Larger Pots and Value Adding

If you have the time and space to do so, you can mature the viburnum yourself. By holding some smaller pots back for yourself, you can transplant them into 10l bags approximately 14 weeks later, depending on the climate and season. As you can see here, matured plants in 4l pots are being transplanted into 10l pots filled with a high quality mixture of composted bark and manure. These larger pots will sell for a higher price, albeit in lower quantities.

The viburnum in these 10 litre pots can also be trained into standard or topiary forms. As you can see, a single leader stem was selected and all the lower leaves were removed. As new growth flushes from the base, it must be continually pruned to maintain the standard form. Trained and pruned viburnum will offer more value and appeal to sellers, who will be willing to pay you far more compared to the standard bushy viburnum. Keep in mind both the standard and bushy plants will have their own client base, so consider keeping stock of both options in your nursery.

In this nursery, the grower is able to further transplant the viburnum into 20 and 40l pots. These plants have 10 to 50 times the asking price of the original 4 l pots. So even though they will sell on a much lower scale than the smaller plants, bigger options should be considered if you have the resources to do so. Ultimately, it would be ideal for a grower to have a range of viburnum sizes in their nursery, allowing them to attract a range of clients.