

Stump Carrots for Exhibition

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**The National Vegetable Society
Scottish Branch**



Introduction

Up until 2008, I used to grow my stump carrots outside in raised wooden beds, however in order to compete at the bigger shows, I decided to move my raised beds inside and now grow them in a polytunnel.

The move from outside to inside benefits the stump carrots by providing them with a warmer growing environment that improves their colour and it also allows you to control the amount of water they receive, which is a critical element to achieve smooth, uniform roots.

Bed Size & Sterilisation

My raised beds are of wooden construction and lined with a plastic damp proof material to increase their lifespan.

Each of my 3 beds measure approx. 91" long x 34" wide x 26" high and are filled with rough grit concreting sand from a local sand pit. Each bed accommodates 60 stump carrots

At the end of January, I sterilise these beds using a diluted solution of Jeyes Fluid™ (1 x tablespoon per 2 gallons of water) and soak each bed with 12 gallons of this solution. After this 1st sterilising process, I leave the beds for a few days as the level of the sand will drop, and on my return I "top up " the beds with more concreting sand and sterilise the top layer with the same solution (approx. 2 to 4 gallons per bed should do this 2nd stage).

I have used this method for many years and it appears to be as good as any for disease free roots.

Mix Preparation

At the end of March, I prepare the growing medium mix as shown below;

Stage 1 - Measure out;
4 gallons finely riddled Peat
1 gallon of finely riddled Sterilised Soil
1 gallon of finely riddled Silver Sand
1 gallon of finely riddled Vermiculite
(I use a riddle with a 1/8" square mesh)

Stage 2 - To the above mix, add;
2oz Garden Lime
2oz Calcified Seaweed
1oz Superphosphate
1oz Sulphate of Potash

I mix thoroughly using a cement mixer and bag up ready for use.

Borehole Tools and Preparation

To produce the boreholes that the stump carrots will grow in, I use the tools shown in Photo 1 -drain pipe $2\frac{3}{4}$ " $\varnothing$ x 24" long, piece of pipe as a handle, mallet, block of wood, scoop, funnel, plastic caps, drainpipe collars 4" $\varnothing$ x 3" high (1 per borehole), dibble tool & "tapper".



Photo 1

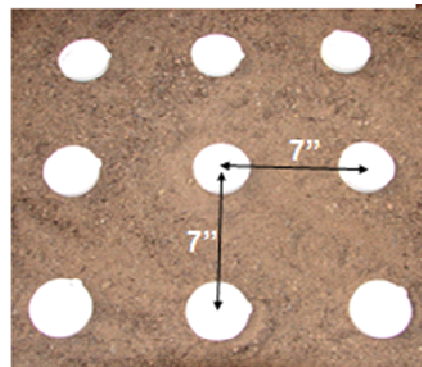


Photo 2

Once I have positioned all 60 markers, I then commence with the coring out of the 1st borehole using the drainpipe shown above. Push the pipe in as far as you can, ensuring that you keep it at 90° to the bed. See Photo 3.

Then use the mallet (use a block of wood on top to protect the drainpipe) and knock the pipe down as far as the "handle". See Photo 4.

Using the handle, carefully pull out the pipe to leave a clean bore hole.



Photo 3



Photo 4

When I have cored out the 1st borehole, I then place a funnel into the mouth of the borehole before I fill it with the growing medium mix, thus preventing any small stones from the concreting sand falling into the borehole which could potentially cause misshapen roots. See Photo 5

Once the funnel is in place, I then gradually fill the borehole with the growing medium mix and when complete, I gently press down on the top of the filled borehole with the flat side of the plastic cap. See Photo 6.



Photo 5



Photo 6

Once the 1st borehole has been cored out, filled up and pressed down, repeat this process until all 60 boreholes have been completed.

Seed Sowing

When all boreholes have been completed, the next step is to sow the stump carrot seed $\frac{1}{2}$ " deep in the centre at the top of the borehole. To ensure uniform germination, I use a small tool I had specially made $\frac{1}{2}$ "Ø by $\frac{1}{2}$ " deep. See Photo's 7 & 8. Make the $\frac{1}{2}$ " deep indentation in all boreholes and then sow 3 seeds in each borehole. See Photo 9



Photo 7



Photo 8

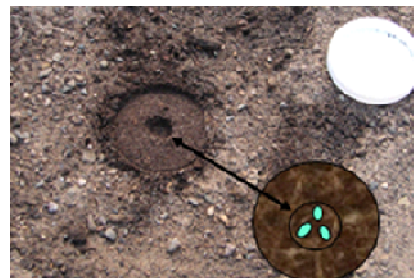


Photo 9

When all boreholes have had their three seeds placed in them, I then fill each indentation with a small amount of the growing medium mix and gently tap down (using the “tapper”) until flush with the top of the borehole.

After all boreholes have been “seeded”, I then place a 4” diameter x 3” tall collar on top of each borehole and press gently into the concreting sand approx. 1” deep. See Photo 10.

I fit these collars around each borehole for two reasons;

- To water into when the plants are young.
- To fill up with peat later in the growing season if the carrots shoulders start to push up through the top surface of the borehole and therefore avoiding the shoulders from turning green from the sun.

When all the collars have been positioned and pushed down, I give the whole bed a thorough watering with a “fine rose” at approx. 2 gallons per bed.

After watering, I cover the bed with fleece approx. 18” above the surface of the bed, which helps with germination. Germination should take approx. 14 days.



Photo 10



Photo 11

Once all the seeds have germinated, monitor the surface of the bed, and if you think it is getting too dry, then give it another light watering with a fine rose.

Thinning Out

After approx. 5 weeks from sowing date, the seedlings should be ready for thinning out. See Photo 12.

At this stage, don't be too alarmed if the seedlings look a bit leggy, as once thinned, they will soon pick up.

If you've yielded 100% germination, you will have 3 seedlings in each borehole giving you a good selection to choose from.

Once you have decided on which of the three seedlings is the strongest one, remove the other two seedlings by holding their stem and gently pulling them out, root intact.



Photo 12



Photo 13

IMMEDIATELY after removing the two seedlings you MUST dispose of them in a bucket and spray the remaining seedlings with Garlic Barrier to deter potential infestation of Carrot Fly. Photo 14



Photo 14

When all boreholes have been “thinned out”, it may be necessary to give the remaining seedling some support to grow straight. I do this by putting some peat in the collar, around the stem of the remaining seedling. See Photos 15 & 16



Photo 15



Photo 16

After this, I re-cover the bed with the fleece to re-instate a wind free, warm growing environment.

Growing on

Growth after thinning can be quite rapid if conditions are good ;
6 weeks growth – foliage approx. 8” tall. Photos 17 & 18
9 weeks growth – foliage approx. 16” tall Photo 19



Photo 17



Photo 18



Photo 19 @ 9 weeks – 16" Tall

After 9 weeks have elapsed, I will remove the protective fleece to encourage more light into the plants for their continued growth. At this point however, be very vigilant and keep a close eye on the weather. Should frost be forecast, the fleece will have to go back on until the frost has passed.

From now on, all that you require to do is to keep the top surface of the bed moist, but not too wet, to maintain steady growth, and keep a watchful eye out for any potential aphid attack.

If aphids do become an issue, then spray them immediately with a suitable pesticide to avoid plant loss. I use Bug Clear™.

As the plants continue to grow, I have found it advantageous to place a wire mesh frame (2" x 2" mesh spacing) about 18" above the surface of the Bed.

This allows the plant to grow up through the mesh and helps support the foliage, especially when watering from above. See Photo 20

Spray with Garlic Barrier once per week from now on, to deter carrot fly.



Photo 20

Lifting Time

One of the main criteria of stump carrots is that the carrot must have a definitive stump, a feature that is determined by “time”. I, like many other exhibitors, use the variety “Sweet Candle” as it is currently the most favoured variety, winning at all of the top shows. In order to obtain a definitive “Stump”, I would normally give Sweet Candle 22 weeks from sow date to lifting date. See photo 21.

If you have a lot of shows to enter throughout the season, I find it prudent to lift as few carrots as possible in order to get a set for any given show.



Photo 21

To minimise the number of carrots you lift, it is best to excavate around the shoulders of the carrot and select maybe 6 with the same size of shoulder. See Photo 22

Cut the foliage of carrot No. 1 to approx. 6”, grasp the 6” of stem and gently pull until the carrot exits from the borehole. See Photo 23.



Photo 22



Photo 23

Once lifted, immerse the carrot into a barrel of water and carefully wash the carrot with a soft sponge removing all excess growing medium materials. After washing, place the carrot on a clean damp cloth on a table or other flat surface and cover with another damp cloth.

Repeat this lifting and cleaning process until you have managed to obtain a “set” that you are happy with (plus one spare).

Immediately after the lifting process, make sure you spray the remainder of the carrot bed with Garlic Barrier and dispose of the cut stems well away from the polytunnel.

Final Cleaning / Show Preparation / Staging

When I get back to the house from the polytunnel, I complete the cleaning and show preparation process by carefully removing all of the fine root hairs down the length of the carrot and carefully wash around the crown of the carrot with a soft sponge and some non-scented soap in cold water. See Photo 24 showing fine hairs and Photo 25 with hairs removed.



Photo 24



Photo 25

Once totally cleaned, I will soak the carrots overnight in a bath of cold water to keep them fresh. See photo 26



Photo 26

In the morning I will wrap each carrot individually in damp white kitchen roll, then bubble wrap and place them carefully in their transit box.

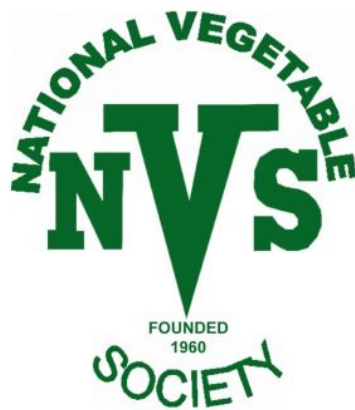
When staging the carrots, and where the schedule allows, I will place the carrots on a black cloth to enhance their look and finally trim the stems to 3" (76mm).

Finally give the carrots a spray with clean water and cover them with a damp cloth to keep them fresh until judging time.

Place your ticket and cultivar card next to your exhibit and that's you - job done !

If you follow the processes explained above, then there is no reason why you shouldn't be able to grow specimens as shown below. Good luck and good growing !





If you are interested in growing vegetables for exhibition or the kitchen why not join us. Please visit www.nvsuk.org.uk

Published by the National Vegetable Society Scottish Branch.