

Growing Vegetables in North Vancouver

Part 2: Growth medium for containers

2020 LVGC VEGGIEMATES

Growth Medium for Containers



For Seeding

Seeds are **expensive**

So it is cost effective to purchase specially prepared medium

- Small volume required
- Easy to use
- Fine texture
- Sterile and weed free



Volume

Pots are bigger than you think!

10 cm (4 inch) square = 1 L

20 cm (8 inch) square = 8 L

30 cm (12 inch) square = 25 L

30 X 20 cm round pot = 15 L



20 L bag =

\$8 - \$12 + tax

Volume

Rubbermaid trash bin ~
70L -- **but too heavy to
lift when full!**



Earth Box[®]
Suitable for 2
tomato
or cucumber
vines



=50L =



Prepared and pre-packaged medium

SPHAGNUM BASED

- Cheap but not renewable
- Holds water well
- Good drainage initially
- *Extremely difficult to re-wet if it becomes fully dry*
- *Tends to clump and drain poorly over time*
- *Environmental concerns*



Prepared and pre-packaged medium

WOOD (BARK) FIBER-BASED

- Cheap, renewable
- Rots quickly
- Tends to clump and drain poorly over time

COCONUT COIR-BASED

- Cheap, renewable
- Rots slowly
- good for RE-NEW and RE-USE



Prepared and prepackaged medium

- Good for one season's use
 - Even wetting and drainage are impaired over time which
 - Impairs diffusion of oxygen to the roots
 - Causing plants to weaken or fail to thrive
- *Prepared/prepackaged medium is less cost effective in this setting:*
 - RE-NEW and RE-USE
 - Make your own

RE-NEW and RE-USE

Goal is to increase average particle size - opens soil texture - aids drainage - promotes healthy roots

PERLITE (Volcanic glass)

- Light weight
- Lasts many seasons
- *Take care not to inhale dust*

VERMICULITE (Expanded mica)

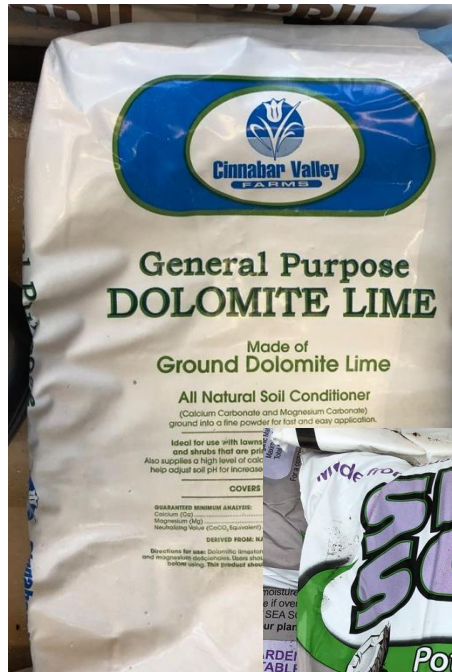
- Light weight
- *Easily compressed and loses its porousness*

COURSE SAND/CRUSHED STONE/PUMICE

- Grains *no smaller* than 1/8 inch (*finer material discarded*)
- Long lasting and durable
- *Heavy and expensive*

Make your own

- PERLITE is excellent
 - Expensive in small quantities
 - But 80 L bags can be had for less than \$25



Recipe for 50 L of potting medium:

- 1 bag (32 L) of Sea Soil potting mix
- 1 bucket (~15L) perlite
- 2 cups Ground Dolomite lime
- additional fertilizer of choice



RE-NEW and RE-USE

- Remove old roots and break up the old potting medium with a shovel or trowel
- For every 45 L (3 buckets) of medium to be RE-NEWED:
 - Add 7-10 L of Perlite and 2 cups of dolomite
 - Add fertilizer of choice
 - Some organic fertilizers will attract animal pests
- Mix thoroughly until uniform and open of texture
 - Add more Perlite if medium remains clumped, uneven, or sticky