



WINTER GARDEN CHALLENGE
VIP Session 1



CHOOSING WHAT TO GROW





ALL ABOUT SEEDS

ALL ABOUT SEEDS

1. Good seeds and good soil really are the two pillars of a successful garden
2. “Without high-quality seed, all the other activities are moot.” - NOG by Elliot Coleman
3. What about GMO, hybrid, open pollinated, and heirloom seeds?



SEED DEFINITIONS (JOHNNY'S SEEDS)

1. **GMO or Genetically Modified Organisms** –
“The mechanical or biological transfer of genetic material outside of natural methods and between genera, families or kingdoms.”
2. **Hybrid** – “The offspring of a cross between two or more varieties, usually of the same species.”
3. **Open-Pollinated** – “A non-hybrid variety. One that can reproduce itself in kind.”
4. **Heirloom** – “An old variety that owes its present availability to the seed-saving efforts of amateurs.” All heirlooms are open-pollinated.

ALL ABOUT SEEDS

1. GMO seeds have serious health and environmental concerns that continue to mount.
2. Hybrid seeds are not “evil.” We are all hybrids!
3. Hybrid seeds can have added vigor, uniformity and disease resistance.
4. Hybrid seeds will not reproduce “true to type.”



ALL ABOUT SEEDS

1. There is evidence that nutritional content may be superior in open-pollinated varieties.
2. If you want to save your own seed, you need to use open-pollinated seeds.
3. Saving seed is unique to different plants. You need a good book to guide you.



SEED COMPANIES

1. **Seedtime** - Get 20% OFF!
2. Johnny's Selected Seeds (Maine)
3. High Mowing Seeds (Vermont)
4. Baker's Creek Heirloom Seeds (Missouri)
5. Southern Exposure (Virginia)
6. Territorial Seeds (Oregon)
7. Peaceful Valley (California)
8. Mlgardener (Michigan)
9. Botanical Interests (Colorado)
10. Seeds for Generations (Virginia)





DIRECT SEEDING

WHY DIRECT SEED?

1. It is not practical or economical to transplant some plants
 1. Examples of these plants are:
 1. Tap-rooted crops (carrots, parsnips)
 2. Low-return-per-square-foot crops (corn, pumpkin)
 3. Legumes (peas, beans)
 4. Fast-growing crops (radish, spinach)
 5. Herbs (can go either way)

DIRECT SEEDING

1. Germination percentages for direct seeding are lower than the percentage on the seed packet.





DIRECT SEEDING

- Allow for a “fudge factor” of 50 to 100 percent germination
- Example: If you want a plant every 4 inches then set the seed spacing at every 2 inches for the seeder



DIRECT SEEDING

- As a general planting rule, cover seeds around three or four times their diameter with soil (i.e. plant a 1/4" diameter pea seed 1 inch deep)
- Keep soil moist until germination



DIRECT SEEDING

- Moisture tips
 - Burlap/frost cloth
 - Automatic irrigation
 - Knowing days to germination



TRANSPLANTING



TRANSPLANTING ADVANTAGES

- Transplanting is more reliable
- Better plant care and cost efficiency
- An almost sure harvest
- Green manure productivity
- It is easier to deal with weeds
- It increases the effectiveness of succession planting
- Shelter gives a head start

TRANSPLANTING

1. Germination temperatures
2. Ideal temperature for most crops: 70-75° F (21-24° C)
3. Ideal temperature for asparagus, cucumber, eggplant, melon, pepper, and squash: 75-80° F (24-27° C)
4. Use a heat mat and/or start seeds inside



TRANSPLANTING

1. Three Stages

1. Starting Starts
2. Potting on (optional)
3. Setting out



STARTING STARTS

1. Seeds are sown in some sort of bed or container which usually holds a special soil mix or potting soil
2. The soil mix is different from garden soil in that it has extra organic matter and drainage material in it. This helps seedlings thrive despite their confined conditions
3. A controlled environment (in your home, greenhouse, cold frame, etc) is used to enhance the growing conditions for the young seedlings

STARTING STARTS

1. Types of containers to start seedlings in: individual pots, plug-type trays with individual cells, or soil blocks
2. We prefer the soil block method for most of our seedlings





POTTING ON

- Transferring a seedling from its initial container to a larger container
- This is only necessary when crops are grown for a longer time or to a larger size before being set out

SETTING OUT

1. Planting the young plants in the garden, field, or greenhouse where they will grow
2. The more efficiently this transfer is done, the more effective transplanting becomes



TRANSPLANTING

1. Starting your own transplants vs. buying them
2. Using a heat mat





BONUS: OUR POTTING MIX RECIPE

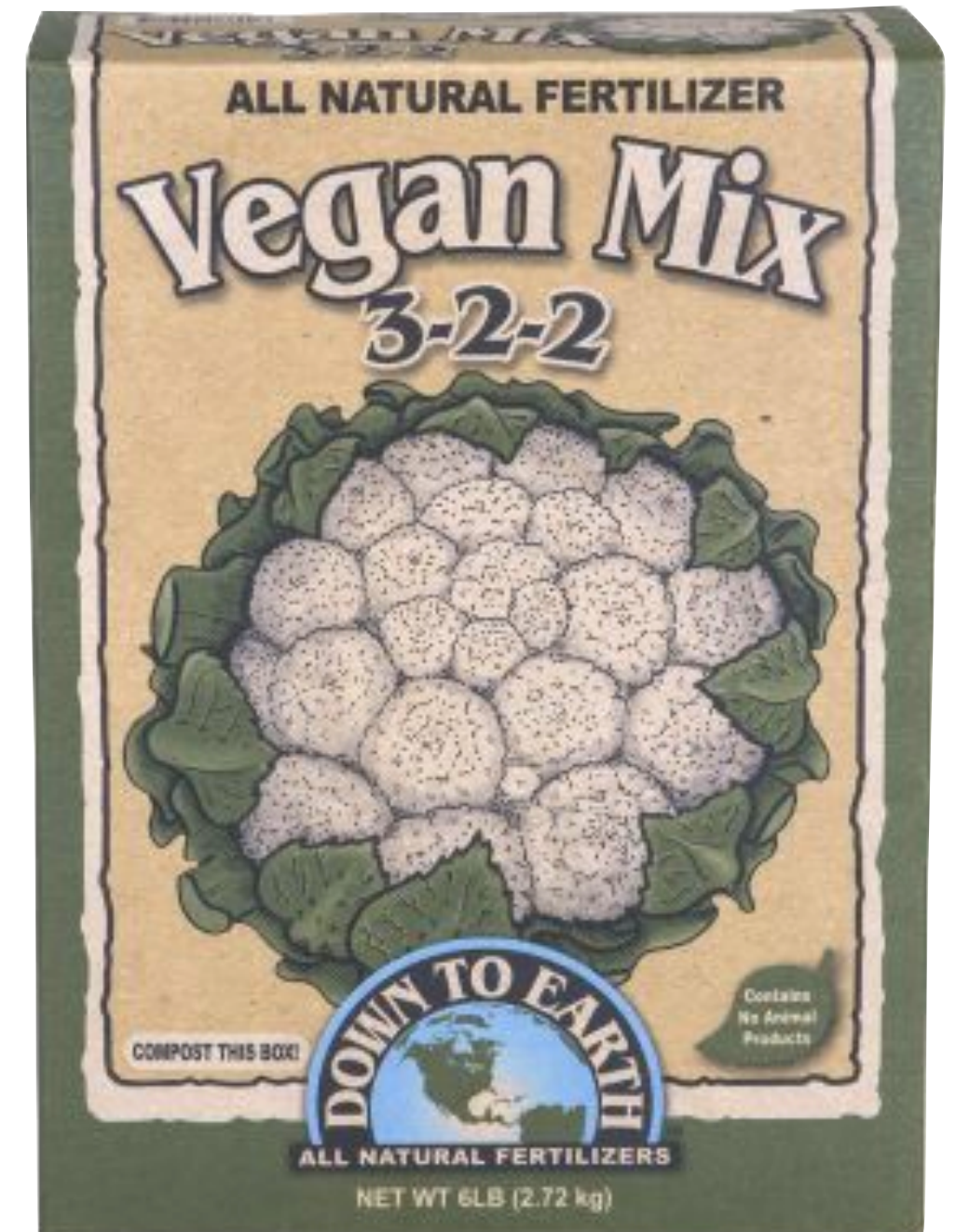
POTTING MIX RECIPE

1. Potting Mix Recipe:	Full	Half	Quarter
2. Peat Moss	6 gallons	3 gallons	1.5 gallons
3. Compost	6 gallons	3 gallons	1.5 gallons
4. Course Perlite	2 gallons	1 gallon	1/2 gallon
5. Fertilizer Mix	2 cups	1 cup	1/2 cup

6. **Note:** 2 gallon buckets work well for measuring. You can find them at your local hardware store.

FERTILIZER MIX

1. Down to Earth Vegan Mix
 1. OMRI Listed
 2. 100% Plant Based
 3. Excellent balance of nutrients
 4. Soy bean meal, canola meal, alfalfa meal, rock phosphate, langbeinite, greensand, kelp meal and humic acids



A close-up photograph of fresh green leafy vegetables, likely kale or collard greens, with numerous small water droplets on their surfaces. The leaves are vibrant green and show detailed vein patterns. A dark, semi-transparent horizontal bar is overlaid across the middle of the image, containing the word "HOMEWORK" in white, bold, uppercase letters.

HOMEWORK

HOMWORK

1. **Download** the homework sheet
2. **Make a list** of what you want to grow this winter
3. Celebrate by going LIVE or posting in the FB group and **share your #1 takeaway** from today's class

