



# STARTING TRANSPLANTS

Making sure your “babies” get a good start in life.

“The cultivation of the soil, the sowing of the seed, the care bestowed on the seed by the sower, represent different stages of Christ’s work for the soul. First appears the blade, then the ear, then the full corn in the ear.”

—YI August 16, 1900

# WHY USE TRANSPLANTS?



- Lengthen your growing season.
- Ensure a full bed (no skips)
- Helps you use your garden space more efficiently
- A strong, healthy transplant is better able to withstand pests and disease (compared to direct seeding)
- Gives you a huge jump on weeds!

# WHY GROW YOUR OWN TRANSPLANTS?

- Save money
- More variety
- Better quality
- Grow and plant on your schedule — not when the box stores have the plants.
- It's fun!



# 3 BIGGEST CHALLENGES:



- Spindly (Leggy) Starts
- Damping Off
- Lack of Balanced Fertility

# I. LEGGY STARTS

- Results from a lack of light (or too much heat).
- Windowsills **never** produce enough light!
- Use fluorescent shop lights an inch or less above the plants (or LED plant lights)
- Once seeds have germinated, cut back on temperature.
- Petting the plants can also help to stiffen their stems.



## 2. DAMPING OFF — CAUSES



- A number of soil-borne fungal species
- Overwatering and/or lack of proper air circulation.
- Poor soil drainage
- Cool soil temperatures
- Can effect both seeds and seedlings.

## 2. DAMPING OFF — SOLUTIONS

- Use a soilless, peat or coir-based potting mix.
- Let soil dry out some between waterings.
- Keep plants and water warm (these disease organisms thrive under 50 degrees F).
- Use a small fan for air circulation.
- Actinovate





# 3. LACK OF BALANCED FERTILITY



- Use a professional potting mix. (We use Berger OM-1)
- Never skimp on container size.
- Don't overwater.
- Pot-on or transplant at the ideal size/time.
- Keep your growing area warm (70+ F.)

# WHAT'S WORKED BEST FOR US...

- Use Soil Blocks
  - Highest quality transplants
  - Have more soil volume
  - Less root shock
  - Modular — easy to pot-on: 3/4" → 2" → 4" (or pot)
  - Simple and Sustainable
  - Available from Johnny's Selected Seeds or Amazon



“In the cultivation of the soil the thoughtful worker will find that treasures little dreamed of are opening up before him.

No one can succeed in agriculture or gardening without attention to the laws involved. The special needs of every variety of plant must be studied. Different varieties require different soil and cultivation, and compliance with the laws governing each is the condition of success. *The attention required in transplanting, that not even a root fiber be crowded or misplaced, the care of the young plants, the pruning and watering, the shielding from frost at night and sun by day, keeping out weeds, disease, and insect pests, the training and arranging, not only teach important lessons concerning the development of character, but the work itself is a means of development. In cultivating carefulness, patience, attention to detail, obedience to law, it imparts a most essential training.”* Ed III

# 3/4" BLOCKS (MINI BLOCKER)



- Grow lots of plants in a small space.
- Use with a heat mat for starting tomatoes, peppers, basil & eggplant.
- Also used for crops which take a long time to germinate — like celery and parsley.
- Cover seeds or push into blocks (I differ with Eliot Coleman on this).
- Pot-on as soon as they germinate.

# 1 1/2" BLOCKS



- Lettuce & chicories
- Scallions
- kale & collards
- beets
- kohlrabi
- spinach

# 2'' BLOCKS

- Heading Brassicas
- Potting-on tomatoes, peppers, eggplant, celery, parsley
- Starting cucumbers & squash (with 3/4'' insert)
- Fennel



# 6" POTS (OR 4" SOIL BLOCKER)

- Tomatoes
- Peppers
- Eggplant (great way to outgrow flea beetle)
- Early Cucumbers
- Early Squash



# DON'T FORGET TO “HARDEN OFF” YOUR TRANSPLANTS

- Introduce your babies to the harsh, cold world, slowly and deliberately.
- They can't handle the shock of going straight from a sheltered environment to the “real world”





“He who gave the parable of the tiny mustard seed is the Sovereign of heaven, and the same laws that govern earthly seed-sowing and reaping govern the sowing of the seeds of truth....”

E. G. White – Lt55-1897