



Growing Great Vegetable Transplants

For the Consumer Market

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Growers.**

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Description	Start Method	Prop weeks	Finish Wee	Germ Method
Arugula	Direct Sow		4 to 5	Mist
Beans	Direct Sow		3	Cart
Beets	Direct Sow		4 to 5	Mist
Broccoli	Direct Sow		4 to 5	Mist
Brussel Sprouts	Direct Sow		4 to 5	Mist
Cabbage	Direct Sow		4 to 5	Mist
Carrot	Direct Sow		4 to 5	Mist
Cauliflower	Direct Sow		4 to 5	Mist
Collards	Direct Sow		4 to 5	Mist
Corn	Direct Sow		3	Cart
Cucumber	Direct Sow		3	Cart
Eggplant	128 Plug	4	4	Chamber
Kale	Direct Sow		4 to 5	Mist
Kohlrabi	Direct Sow		4 to 5	Mist
Leek	Direct Sow		6	Mist
Lettuce	Direct Sow		3 to 4	Mist
Melon	Direct Sow		3	Cart
Okra	Direct Sow		3	Cart
Pak Choi	Direct Sow		4 to 5	mist
Peas	Direct Sow		3	Cart
Peanut	Direct Sow		5	cart
Pepper	128 Plug	3	3	Chamber
Pumpkin	Direct Sow		3	Cart
Radicchio	Direct Sow		4 to 5	Mist
Radish	Direct Sow		4 to 5	Mist
Spinach	Direct Sow		4 to 5	Mist
Squash	Direct Sow		3	Cart
Tomato	128 Plug	2	3	Chamber

Vegetable Selections

Germ Chamber

70 Degrees for
72 hours.

Tomato
Pepper
Eggplant

Lightly Cover
seed.



Other germ Methods

- Mist- Boom or fog. Keep seeds moist, light vermiculite covering can help. Once 85% germ start to reduce moisture. Good wet dry cycle will encourage root development.
- Carts- Direct sow into finish containers and leave on carts anywhere 65-68 degrees. Make sure soil stays moist during germ. Once plants have emerged move to finish location. 60-65 degrees is a good finish temp.

Fertility

- No starter charge in soil helps to control stretch.
- During prop and plug stage 75ppm constant feed plus minors.
- In finish containers 100-125 ppm constant feed.

Growth Regulators?

- Uniconazole (Concise/Sumagic) is very effective on tomatoes and peppers.
- Tomatoes and Peppers: At full stand (usually within 7 days of sowing) Sumagic @2ppm. This helps to control initial stretch and thicken stems.
- Within a week after transplant tomatoes benefit from another 2ppm spray. Peppers can usually be controlled with just moisture.

Fungicides

- Griffin has a detailed PDF called “Greenhouse and Nursery Insecticide and Fungicide Options for Edible Crops for 2013”. Email or call for a copy, I did not find it on their website.
- Early in spring when light levels are low and disease pressure is high we will do the following: After transplant or when direct sow product develops first set of true leaves, spray Cease @ 1gal/100.
- 10 days after first spray Cease @ 1gal/100 and Milstop @ 2lbs/100.
- Usually plants ship shortly after this and no further sprays are done. If issues arise some good options are: Veranda-O, Decree, and Phytan 35.

Insecticides

- Many of your broadleaf plants like eggplant, squash, and cucumbers are whitefly magnets! Keep a close eye on them.
- Weekly rotation of Horticultural oil(1% rate) and Azatin tank mix, then M-Pede(2% rate early then 1% in May) and Azatin tank mix. This does a nice job of keeping most pests in control. If whitefly/thrip pressure is high adding Botanigaurd to this tank mix works well.
- When insect pressure is high or active pests found, sprays of Lada and Kontos work very well.
- Earlier in Spring when caterpillars are more active we add Dipel Pro to our weekly tank mix. Conserve is a good option for active infestations.

Summary

- Always read labels and make sure rates and timing are correct!
- Most vegetables once established can be grown on the dry side to control growth.
- Low fertility rates will help produce a better plant.
- Keep greenhouses free from weeds and old overgrown product to reduce disease and insect pressure.
- Irrigation late in the day should also be avoided, wet leaves going into the evening is asking for problems.