Seed Starting

Why start your own?

- Selection, Selection, Selection.
- Is often the only option for certain varieties, such as heirloom varieties.
- Gets you primed for the real thing.
- \$\$\$\$savings (At least that's what you can tell your spouse).

Where to get Seeds

- Save your own
 - But, be careful. Won't necessarily be true to form.
 - Seeds need to be collected and cured, as well as germination-checked.
- Purchase the varieties, only choice for hybrids.

Which plants to start indoors

- Most can be, but some are set back by transplanting, for others the benefit is minimal.
- Good Choices Tomato, Pepper, Eggplant, Tomatillo, Cabbage Family.
- Don't Bother Cucurbits and most short season plants.

Start seeds directly into pots or use a separate germination tray?

- Starting into pots is easier as you skip the first transplant step, but you have to thin plants.
- With a germination tray, you get more plants.
- Either way, consider timing to make sure that your plants will be ready for in-garden transplanting at the correct time.

Soil (and soil-less) mixes

- Choose soil-less mixes for seed starting germination, not growing seedlings.
- Don't bother with the extra money for mixes with fertilizer added
- Biggest factor in disease prevention. If you start with sterile soil and clean seed, you will not have to worry about seedling diseases, which can be disastrous.

NOTE. If you utilize tobacco products, watch out around tomato family plants.

Planting

- Pay attention to depth and spacing.
- Match depth and light needs according to each species. Some are very particular.

Germinating Conditions

- Light trigger, for some species
- Warm (72 degrees) and moist (enclose in plastic bag until at least half of the seeds germinate).
- Heating pads, near radiator, on top of refrigerator.

Growing Conditions

- Cooler is better (60 degrees is adequate and will produce hardier plants). Warmer is good for tomato family plants, or if you started seeds later than desired.
- Do not over water. Allow soil to dry between watering events.

Light requirements – for seedlings. Light needs increase for larger plants.

- Fluorescent lights are by far the best. They are cooler and provide a better quality light than incandescent bulbs.
- Studies (Organic Gardening Magazine) show that cool white fluorescent lights are just as good as the more expensive grow lights.
- Lights wear out over time and lose their intensity.
- Get the plants close (1-3 inches) for best results.

Fertilizing seedlings

- None needed for the first few weeks.
- Fertilize sparingly to avoid spindly plants (I use ¼ strength plant food mix once per week or so)

Potting up

• Pot up as many times as needed to keep up with the plant and prevent rootbound plants.

Hardening off

- Gradually acclimate plant to the real world or you will kill it.
- Expose the plants to either full sun or wind a short amount of time their first day, then slowly increase the time and the intensity of the garden's environmental conditions which they are getting exposed to on a given day.

Transplanting into final growing site.

- Water availability is more important than basically anything else.
- Watch planting depth. All species have their own specific needs. Many species have to be kept at the same soil depth as they have been growing in.
 - Tomatoes are the major exception. In fact, you will get significantly better root production and fruit production, if you bury most of the stem. Pinch off the branches and roots will re-grow from those nodes. Trench method is often best, vs. burying deeply.
- Protect young seedlings from cutworms and wind.



Scott Reuss, Agriculture/Horticulture Agent UW-Madison, Division of Extension 1926 Hall Avenue Marinette WI 54143 715-732-7510, toll free 877-884-4408 scott.reuss@wisc.edu