Vegetable Growing Tips

I. Tips for particular plants

• Tomatoes: bury deep, right variety, fertilize only at planting, nip the tops, cage, how to force to ripen, blossom end rot, blight and WOW. If needed, sidedress when fruit sets. Watch the Ca:N balance. Maintain even watering until the fruits are full size, then cut back or better yet, cut roots on one side. The critical water period is blossom onset through fruit swell. Fruit sets at over 50 deg. 64-70 is the ideal temperature. Most varieties need one week at no less than 54 deg. To flower. Too hot also causes blossom drop as does overwatering or drought. Tomatoes require 2-½ gal/week/standard size plant, more if staked or windy or extra hot. Cage or grow on tables for best production. Concrete reinforcing wire makes the best cages. No overhead water after start to color. Stress reduces the sugar content and cold kills the flavor components. Do not refrigerate picked tomatoes. The fruits do not require sunlight to ripen and may sunscald if the vines are pruned. Use moderate N, high P, K and Ca. To speed ripening cut roots on one side, cover with plastic and throw banana peels and apple waste under. Tomatoes cut at starburst (white star on bottom of pale green tomato) will ripen with full vitamin content and nearly full flavor. Any sooner and they will be red cardboard. Using the right variety is the real key, but our cold varieties sometimes have trouble when we get a long hot spell.

• Peppers: extra S, higher fertility, foliar sprays, WOW. Add N at fruit set. Work in 1-2# S/100 sq. ft before planting. Keep the soil evenly moist, using about 1 ½ gal/plant/week. Peppers prefer 60-65 deg. nights and 60-85 deg. days, varying by type of pepper. When growing transplants, drop the temperature to 55 after the 2nd set of true leaves form. The critical water period is blossom set through full expansion. Peppers can get blossom end rot too. If the plant has a single stem, nip off the top when planting to force lateral branches where the fruit forms. Let no flowers set before 7/1 for best yield. For hot peppers you need hot days.

• Eggplant is a challenge in cool summer areas. Plant it in June with your peppers. Use warm water when irrigating. Eggplant needs less water and more heat than peppers. Use the fish/kelp fertilizer mix about every 3rd week.

• Potatoes: Potatoes bear best if they are supported above the soil and well hilled up. Mesh or string “bed”. Chitting is preparing the potato piece for planting. You use a small whole potato or cut pieces with 2-3 eyes. Keep these 7-114 days in good light to grow sturdy, short green leaved starts that are then planted. Excess N can reduce tuber size. Use no fresh manure. Sidedress with N at 8” if needed. New potatoes may be harvested 2 weeks after bloom. Water evenly until the plants start looking
shabby or until you can feel full-sized potatoes in the ground. Then cut off all water. If the vines won’t quit and the potatoes are formed, break over the foliage to force the energy into the tubers. Wait 2 weeks and dig. You can plant a second crop in June, but all potatoes require a chilling period of 40-50 degrees for 4-15 weeks before replanting. When you dig potatoes, handle them gently and do it on a warm day. Potatoes bruise easily when first mature and if bruised will not store. If possible, cure them in a warm (60 deg.) area in the dark before storing to harden the skin. Then store at under 55 degrees and above freezing in the dark. Do not use a frostfree refrigerator. Over 55 they will sprout after the chilling period. Below 45 potatoes get sweet and often flabby. Let them warm up a couple of days before using.

- Onions: sets exposed to near freezing temps will bolt, especially the fat ones, so chose skinny sets. Use LD varieties. For overwintering onions start from seed in late August. Walla Wallas are better from seed than starts. If you start your own seedlings you can transplant them into the garden in early September. Add light fertilizer when sowed, then sidedress in February and April. Keep evenly moist until May, then cut off the water. Dig when the neck is dry (May, June or July). Don’t plan on long storage. Storage onions are also best from seed. Fertilize heavily in the planting row. Cut off all water after the tops flop over. Once 50% of the tops are down, you can break over the rest. Dig after 1 week and cure 2 days to 1 week to harden them up in a warm place with no direct sun. Store near freezing.

- Garlic: Plant in the fall, fertilize Jan-Feb. Use the largest, best cloves to plant back. Too small a clove or planting too late will not give you cloves back, just 1 big round (called onioning). The rounds are great for planting back. Cut water off by June 15 for fall planted garlic (Oct.) Spring planted will form very small cloves as a rule. The garlic should have 3 skin layers when it is ready. Harvest usually started about July 15. If you keep watering, the skins will start to break down and the cloves to grow. Mature garlic must be kept dry. The flower buds and scapes are delicious. The flowers are also excellent habitat for good bugs, but do reduce the yield. Store cool and dark at about 50 degrees or less. Over that temp, the garlic will sprout. Do not store fresh garlic in oil (botulism).

- Cucurbits: cucumbers and melons are most sensitive to the cold. Train up to enhance drying. Use S exposures. Most of the cucurbit family is happiest at 75-95 deg. Do not hold in pot more than 4 weeks to transplant. Average yield should be 25 fruits. Respond well to manures and compost. When plant has 6-7 leaves, pinch out the growing tip. The side shoots need only 3j-4 leaves after the first female flower. Non-bearing laterals
may be pinched out at the 7th leaf. Water at the base. Cut off the fruit, don’t pull.

- Cucumbers like soil temps of 70-80 deg. The critical watering time is at flowering and as the fruit develops. Sidedress as they start to run. Trellis if you can. If cucumbers are bitter they are toxic unless pickled. Air temperature. Hollow fruits may be due to B or Ca deficiency or excess N or erratic watering or overmaturity.

- To grow cantaloupe you need the correct variety for your site! You also need to manage the microclimate for maximum heat. Generally it is best to plant< than 4 week old transplants in June. The soil temps should be 70-80 ideally. A cool start can doom them to non-fruiting. The respond well to composted manures. Sidedress when they start to run. If trellised, support the fruit with stocking slings. Keep the water even, but never soggy. Too much N or water ruins the flavor. Optimum temps are 86-98 air, 55-60 minimum soil temps. The critical time for watering is flowering through fruit swell. Once fully expanded, reduce the water to enhance ripening and flavor. Storm at 70 deg. For 1-2 days after harvest to set the flavor. Excess water with melons of all kinds shuts down the roots, stops photosynthesis and destroys the sugars. The plant must have 5-9 mature leaves before it flowers. Use maximum heat enhancement techniques.

- Summer Squash like a rich soil high in OM with a pH of 6.5 or higher. It responds well to composted manure. The soil temp should be 60+ and the optimum air temp is 70-80. The critical watering time is slightly damp at seeding, damp at bud development and flowering. Do not handle wet plants. The first fruits commonly abort due to non-pollination. Usually the male flowers come first, then just female flowers and finally zucchini glut. My very favorite zucchini is Tipo. Harvest by cutting the stems 1” from the fruit. If bitter they are very toxic and cannot even be pickled.

- Winter Squash are like summer squash for care but are rarely bitter. Pinch off all small fruits and flowers after 9/1. They are ready to harvest when you cannot pierce the shell with your fingernail. Cut the stems 2-4” from the fruit and cure at 60-70 deg. For 10 days. Store at 40-50 degrees. Ours often hold from October to May. If properly cured washing with bleach is not beneficial. You can cut back on the runners, but all the leaves provide the energy to form the fruit. My favorite is probably Red Kuri, not a high yielder.

- Greens: Spinach, lettuce, kale, chard, corn salad, chickweed, bittercress, Asian greens, such as Kyona/Mizuna mustard and leafy Pak Choi plus some protected leaf lettuces and sprouting broccoli are the mainstays of the winter garden. For the summer greens, kale, chard, lettuce, New Zealand spinach and the cabbage family greens work well. In the warm season it is best to keep the latter greens covered with Reemay™ or netting to ward off the aphids, cabbage maggot, and cabbage caterpillars. These are easy to grow here almost year round. There is a tremendous variety of cultivars. The trick is to do succession sowings based on how
long each green can be expected to produce well. Sow the new batch when ½ the useful life of that green is past. Interplant these and use the tips on keeping them cooler.

- **Root crops**: beets, carrots, parsnips, etc. All the root crops appreciate deep loose soil with no fresh manure. Parsnips are exceptional in the winter stir fried with carrots.

- **Beets** need N, K & B plus trace elements especially. Sidedress them at 4”. Keep evenly moist or they will “zone.” Beets will bolt when temps drop under 40. Excess heat causes zoning and poor flavor. Avoid erratic watering! Beets are best for greens as these are far more nutritious than the roots and can be “cut and come again”. Plant twice as close as recommended and then thin every other one for delicious greens before the leaves touch. Beet is a multiple seed, so must be thinned. They respond well to a short soak in tea or water before planting, no more than a couple of hours. Beets can be transplanted, but do it while at the 2-4 leaf stage. Beets, like chard and spinach, can concentrate nitrates, so watch the N!

- **Carrots** can be difficult. Make seed tapes or cover with sifted compost mixed with vermiculite or sharp sand or with a seedling mix. Do not plant deep. You can use radishes to make the rows and keep the soil from compacting but do not crowd the carrots with the radishes. Keep carrots evenly moist, especially during the long germination, but never soggy. Excess water may cause splitting in fully-grown carrots. Sidedress at 4”. Warm days and cool nights make the sweetest carrots. They are best as a fall crop and great for overwintering. They will then be super crisp but not as sweet. 39-41 degrees is the minimum soil temp to germinate, but 65 is optimum. Carrots may take forever to germinate at cool temperatures. Wash them just before using. They store well buried in barely moist sand in a cool area. Excess N causes hairy roots. Stress may make then bitter. Sun on the shoulders will cause greening and bitterness. Cold stored seeds may last 30 years.

- **Parsnips** like high OM, but no fresh manure within a year or you will have to shave the roots to use them. Excess N causes forking and wiry roots, so go easy on it. The preferred pH is 6-8. They are best after frost and a thorough chilling. They overwinter very well. They are incredibly sweet when properly homegrown, nothing like the stuff in the stores. The foliage is toxic and many get a rash from touching it.

- **Corn**: Spacing can be 9x9, but you will get better corn at 12x12. It is a monocot, so it grows differently than our vegetables. Corn transplants easily when young. It is a heavy feeder and need extra N, P & K at
planting, when 8” tall and when 24” tall. It is a heavy water user, especially from tasseling through silking to ear formation. The soil should be at 70 degrees or more and the day temps in the 80s and 90s with very cool nights for the best sweet corn. The supersweets (all shrunken kernel corn) if supersensitive to cold. These should be isolated from other corns as should be popcorn. Lodging is when the stalk fall down and can be prevented by hilling or putting a string fence around the patch. Don't remove the basal suckers, they help prop up the plant and photosynthesize for the ears, Tasselate ears are ears with tassels where you expect silks. We also see tiny ears of corn (no husks) on the male top tassels occasionally. These seem to be due to weather vagaries (just weird). Tasseling very early and long before silking is quite common. It is usually not a problem and may be weather stress related also. Topping is a question we often get about corn as people observe the commercial fields doing it. It is only recommended if you are machine harvesting and if done too early will drastically reduce ear fill and yields. Pick corn late afternoon and cut it off or use a sharp twist downward. Leave those suckers and tassels alone. Sweet corn can be dried for meal, the silks make a good diuretic tea and the cobs make jelly or fire starters.

- Tip of the Year: Learn to know and use the volunteer wild vegetables in your garden. They are the easiest of all to grow. We eat miner’s lettuce, chickweed, bittercress, amaranth, lambsquarter, purslane, shepherd’s-purse, red sorrel, dandelion and many more, especially in the winter and early spring. Also many flowers are delectable on the table and in the stomach.

- Flowers: Deadheading. Edible. Most flowers last longer with cool nights.

II. General tips
- Wet at night, fungus delight
- Water to promote deep foraging roots
- Fertilize where needed only
- MGM
- If short of water, space them out
- Never handle wet plants
- Do not spray or fertilize plants under high stress
- Do not overdo the N. It disrupts Ca and other nutrient balances. It increases the risk of disease and pests. It may delay maturity. It may degrade flavor and nutritional value.
Lane website
http://extension.oregonstate.edu/lane/garden