**Growing Warm Season Vegetables**

**• Characteristics of Warm Season Vegetables**

o **Require warmth to germinate** o **Require long hours of daylight and high temperatures both day and night to**

**form and ripen fruit** o **In most cases the fruit is the object of the harvest, rather than the leaves,**

**roots, or stems** o **When to plant**

‣ **After danger of frost has passed** ‣ **After soil has lost its winter clamminess and begun to warm up** ‣ **When there is sufficient warmth to keep vegetables growing unchecked** o **Planting Guidelines: http://www.mastergardeners.org/warm-cool-veg-charts**

**• Choosing Plants from the Nursery**

o **Check for insects or disease** o **Check roots**

**• Preparing to Plant** o **Loosen soil** o **Break up clods** o **Add amendments** o **Rake smooth and level**

**• Transplanting**

o **Prepare the ground** o **Dig hole, water and add compost/amendments** o **Remove plant** o **Place plant in hole** o **Fill in around plant** o **Firm soil** o **Water and protect plant from heat and wind**

**• Fertilizers**

o **Fish emulsion** o **Bat Guano** o **Feather meal, cottonseed meal, alfalfa pellets or meal** o **Liquid fish, seaweed or kelp** o **Blood meal and bone meal**

o **Composted manure and earth worm castings** o **Liquid manure or earthworm castings**

**• Plantings seeds directly in the ground**

o **Prepare soil** o **Furrows** o **Planting seed**

‣ **Small** ‣ **Big** o **Label** o **Keep moist**

**• Some keys to Success** o **Site Preparation** o **Time of Planting** o **Viable Seed/Healthy Transplant** o **Adequate Spacing** o **Maintaining Plant Health**

‣ **Irrigation** ‣ **Weeding** ‣ **Thinning** o **Observation and Record Keeping**

**• How to Prevent and Control Problems** o **Provide good air circulation** o **Provide well-draining soil** o **Plant resistant cultivars** o **Attract beneficial insects** o **Interplant** o **Rotate plants** o **Go light on fertilizer** o **Mulch** o **Insecticidal soaps, oil sprays, botanical sprays**

**• Watering: Hand, Soaker, Drip, Emitter**

**• Growing and Harvesting Tips**

o **Tomatoes**

‣ **Bury stem when planting, trimming off lower leaves** ‣ **Harvest when fully colored**

‣ **Insects: Aphids, tomato russet mites, hornworms** ‣ **Diseases: Fusarium and verticillium wilt and tobacco mosaic virus** ‣ **Cultural Conditions: Blossom end rot, cracking and splitting**

o **Peppers**

‣ **Harvest by cutting from plant** ‣ **Protect from direct sun to prevent scalding Cut from plant** ‣ **Susceptible to end rot** ‣ **Harvest when full size and color are achieved** ‣ **Picking will increase productions** ‣ **Allowing peppers to mature increases their mellow sweetness but**

**decreases production**

o **Eggplant**

‣ **Need lots of heat** ‣ **Harvest before skin looses its glossy shine** ‣ **Cut from plant**

o **Cucumbers**

‣ **Need support from trellis or tomato cage** ‣ **Often planted in raised hills to improve drainage** ‣ **Pick when young, while still glossy** ‣ **Keep well watered to avoid bitterness** ‣ **Cucumber beetle spreads bacterial wilt**

o **Summer Squash**

‣ **Most grow on bushes and need 4 feet between plants** ‣ **Direct seed** ‣ **Pick when young** ‣ **Cultural condition aborted fruit from lack of pollination** ‣ **Susceptible to powdery mildew towards end of season** ‣ **Formula for powdery mildew:**

**1 gallon water 4 tsp. baking soda 2 1/2 Tbs. horticultural oil**

o **Cucumbers**

‣ **Need support from trellis or tomato cage** ‣ **Often planted in raised hills to improve drainage** ‣ **Pick when young, while still glossy** ‣ **Pick frequently to increase production**

‣ **Keep well watered to avoid bitterness** ‣ **Cucumber beetle spreads bacterial wilt**

o **Melons**

‣ **Muskmelons slip from their stems when ripe** ‣ **Mediterranean melons turn from creamy green to ivory-yellow** ‣ **Melons are susceptible to powdery mildew** ‣ **Cucumber beetles can spread wilt to the vines** ‣ **When ripe watermelon stems turn dry and brown and surface loses its**

**glossy luster. Sounds deeper when thumped**

o **Winter Squash**

‣ **Vines needs lots of space to ramble** ‣ **Leave on vine for several months until fully mature** ‣ **Harvest when shell has hardened and squash has turned to proper color** ‣ **Leave a couple of inches of stem attached** ‣ **Pests and diseases are the same as for summer squash**

o **Legumes**

‣ **Harvest before seeds bulge** ‣ **When picking hold vine back with one hand so it isn’t torn from its**

**support** ‣ **Older beans can be used as shell beans** ‣ **To grow dry beans, leave beans on plant until they turn brown and**

**brittle** ‣ **Common pest is aphid**

o **Corn** ‣ **Colors include yellow, white and bicolor**

‣ **Genetic types include normal sugary, sugar enhanced and supersweet** ‣ **Plant extra seeds because emerging seedlings are consumed by pests**

**like snails, slugs, birds, earwigs.** ‣ **To avoid corn earworm, when silk appears on corn**

**- Put several drops of mineral oil in middle of silk - Close off silk with spring-operated clothespin**

o **Okra** ‣ **Soak or freeze seeds for 24 hours before planting**

‣ **Harvest young and wear gloves when handling plant or harvesting** ‣ **Pests include aphids and corn earworms**