



# Healthy Garden Tips

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## **GROWING SWEET CORN IN NAPA COUNTY**

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*Also – Baby Corn, Ornamental Corn and Popcorn*

### **Kinds of Plant:**

Local trials and Master Gardener taste panels suggest the following partial list of varieties of Sweet Corn suited to our coastal growing conditions: Bonanza, Country Gentlemen, Early Sunglow, Golden Bantam, Honey and Cream, Illini Gold, Jubilee, Kandy Korn, Silver Queen. These guidelines also apply to baby corn, ornamental corn and popcorn.

### **Requirements:**

Corn is injured by frost and requires moderately warm to hot weather to mature a crop. Put corn where there is full sun all day. Remember, corn is tall – plant where corn won't shade other crops in your garden. Corn plants need a consistent supply of water and fertilizer. Corn is wind pollinated so should be planted in 'blocks' three or four rows wide. Expect to supply a family of four for a week with corn picked from 30 feet of row.

### **Soil Preparation and Planting:**

Corn should follow a legume or vine crop in your garden crop rotation plan. Double digging your fertilizer into the ground before you plant will assure healthy root development. For good seed germination plant after your soil temperature reaches 70°F. Corn roots grow 18 to 24 inches deep, so require weekly irrigation. One planting will yield for only 7 to 10 days, so several timed plantings spaced two or three weeks apart (mid April to early July) assure a longer harvest. For maximum soil warming and best pest management, apply mulches after thinning.

### **Care:**

Water consistently and faithfully – apply an inch to an inch and a half every week in the summer. Thin plants to a foot apart when seedlings are 3 to 6 inches tall. Keep weeds under control for the first 6 weeks using frequent shallow cultivation. Support roots will develop at the base of corn stems if loose soil is 'mounded' against growing stalks during cultivation. High nitrogen users, corn plants benefit from fertilizing at planting and repeat applications of a soluble nitrogen fertilizer when plants reach 15 and 30 inches tall. In most local soils, corn responds best to using a fertilizer containing nitrogen and sulfate. Expect crop maturity after 75 to 130 days, depending on variety and weather. Corn is ripe when ears grow plump and the silks begin to dry. Kernels will squirt milk-like juice when crushed. Overripe corn is tough.

### **Common Problems:**

Corn seeded into cold soil rots before it can germinate. Birds, snails, beetles and cutworms attack seedling plants. Lack of nitrogen or water stunts plant growth. When corn plants get too hot or too dry, ears may fail to fill out normally. The corn earworm is our most damaging local pest. It feeds on developing ears and silk and is more common later in the season – seldom found on ears picked in July. Planted in the same location year after year, corn roots are attacked by wire worms (beetle grubs) and get corn smut fungus which causes

swollen kernels or blank ears. Crop rotation minimizes these problems. Stunted plants with speckled leaves have Mosaic Virus disease – ears are edible but may have missing kernels. Jubilee and Bonanza are examples of virus resistant varieties. Aphids and spider mites may live on corn leaves, but do not normally impact the crop.

**Suckering:**

Removing suckering (side shoots) does not affect the size or number of ears produced. However, stripping numerous large suckers can remove enough functioning leaves to stunt plant growth. Regular removal of small suckers will have a minimal impact on plant growth and can make it easier to cultivate and to inspect the crop.

**Tricks:**

Plant into well prepared warm soil. Deep, not frequent watering after thinning. Feed regularly. Inspect ears weekly and remove small earworms. Harvest ears and cook promptly. Sweet corn begins losing sugar immediately upon harvest and loses much of its quality within hours unless refrigerated. Start heating the cooking water before picking. Enjoy.

**Additional Reading:**

*Quality Sweet Corn Production in California*, UC ANR Publication #2818, 1978.

*Home Vegetable Gardening*, UC ANR Publication #21444, 1992.

*Planting Guide for Napa County*, mimeo, 1982.

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