

## Sweet Corn Pollination:

5-8-2016

Q: "Every year when I harvest my sweet corn, there are lots of missing kernels on the ears. I'm ready to give up on corn!"

A: Ah yes, we watch those ears grow, we wait anxiously until it's time to harvest them and we expect to find a luscious, juicy ear of corn, but instead find only a few kernels dotted here and there. Such disappointment! What you're describing is poor pollination. On an ear of corn, each silk has the potential to become kernel, and silks that go unpollinated will not develop into kernels, leaving all those empty spots on an ear of corn.

There are a couple of possible issues here, the first being the way you're growing your corn. Many home gardeners grow small amounts of corn due to the space it can take up, so they may plant just one or two rows, which itself may be the problem. Unlike most garden vegetables which rely on bees, butterflies and other pollinators, corn is wind pollinated. For best pollination it should be planted in blocks. Four or five short rows are better than one or two long rows and it's advisable to plant at least three rows.

The other possibility is poor pollination due to temperature. Too high of temperatures will result in poor pollination. Pollen shed begins a day or two after silks appear and lasts only a couple days, but it's impossible to know exactly when that will occur so one must make an educated guess. Sweet corn varieties mature in 70-80 days, and tasseling occurs about 20 days before harvest, so an early variety sweet corn will tassel approximately 50 days after germination. If it is too hot (above 90 degrees F) when this happens, the pollen will be sterile. The plant will continue to grow and develop ears, but the ears will not develop kernels.

There are no absolute, fail-proof guidelines here as there are multiple non-controllable variables. You must use your own knowledge of the type of corn you are growing and the average temperatures of the area where you live; you want pollination taking place before temperature gets too hot. So for our area, a very general guideline is this: planting corn earlier is better (but not earlier than our average last frost date of April 15th). Another advantage to earlier planting is that you'll have fewer problems with corn earworms as their population is at its lowest density in early spring.

To pick ears at their peak flavor, harvest them when the tassels begin to dry and turn brown. To test an ear's readiness, split the husk open and use your thumbnail to pierce a kernel, if the liquid is clear, the ear is immature, if the liquid is milky it's ready.

Don't give up on corn quite yet, there's not much better than biting into a fat ear of juicy, garden-fresh corn. Except maybe a juicy, garden-fresh tomato?