



Sweet Corn

Corn is a warm-season crop that requires high temperatures for optimum germination and rapid growth. Soil temperature should be between 70° and 85° F for best germination. If the soil temperature is too low, the seed will not germinate. If, at the same time, the soil is too wet, the seed may rot before the soil temperatures are adequate for germination. In general, sweet corn does not tolerate cold weather, and frost will injure sweet corn at any stage of growth. Other stressful climatic conditions, such as drought or flooding, can reduce yields and cause small, deformed ears.

Because corn is a short-day plant, some cultivars will not flower when the day length is more than 13 hours. This is rarely a problem with commercially available sweet corn varieties. We grow heritage varieties of sweet corn at Diversity Gardens so we are mindful of day length when we plant our corn.

Corn is wind-pollinated and should be planted in blocks of at least four rows for good pollination to occur. Sweet corn can also cross-pollinate with other types of corn. If sweet corn is planted downwind of popcorn or field corn, kernels will be starchy instead of sweet. Cross-pollination between white and yellow cultivars will change the colors of the kernels. Extra-sweet and standard cultivars also should not be planted near each other or at the same time. To prevent cross-pollination problems, sweet corn should be separated from different types of corn by at least 400 yards, different types or cultivars of corn should be planted at least one month apart, or cultivars with different maturity dates should be planted.

Organic agriculture employs a combination of the best methods of traditional agriculture and modern technology. Present-day organic growers use tried-and-true practices such as crop rotation, growing a diversity of crops, planting cover crops, and adding organic matter to the soil.

In contrast to "conventional agriculture," organic farming relies on preventive rather than corrective practices.



Instead of depending on synthetic insecticides, fungicides, and herbicides for pest control, organic growers employ practices such as crop rotation, growing a wide diversity of crops, planting cover crops, adding organic matter to soil and attracting beneficial insects.

Four types of sweet corn are available: standard (su), sugary-enhanced (se), and supersweet (sh2), and synergistic or triplesweet (sy). The su type is the old-fashioned sweet corn with which we are all familiar. It must be consumed quickly after harvest, or the sugars rapidly turn to starch. The se types contain more sugar than the su type and, if cooled, will remain sweet for several days after harvest. The sh2 type also contains more sugar than the su type but converts very little sugar to starch. If properly cooled, an sh2 variety will remain sweet for 7 to 10 days after harvest. The sy type is a hybrid comprised of 75% se and 25% sh2 kernels, resulting in an ear with the sweet and tender characteristics of the se type but with the shelf- life of the sh2.





Grow Organic

Organic Gardening Tips from Diversity Gardens



Fall 2009
Page 2

(con't from page 1)

Genetically modified varieties of sweet corn are available to conventional growers in Canada. However, the Canadian Organic Standard prohibits the use of these, so organic corn will always be GMO free.

At Diversity Gardens, two pests of sweet corn give us grief - corn earworm and racoons.

Earworms tunnel into the corn cobs. They don't really do much damage to them, and they are easily cut out - but unfortunately our society demands perfection in produce. At Diversity Gardens we use traps to monitor the adult moths that produce the earworms. This helps us figure out how big of a problem earworms are going to be. If it is a year with lots of earworms, we walk through the corn field with an oilgun (filled with cooking oil) and inject oil into the neck of each ear of corn. This seems to repel the earworms.

The racoons are more difficult to deal with. There is nothing more frustrating than coming down to harvest corn and see that they have beaten you to it. We use two layers of protection. First we surround the corn patch with a solar-powered electric fence. That slows them down, but some always manage to jump it. So, we also walk through the patch just before the corn is ready to harvest and wrap each ear a few times with painters tape, and then tape it to the stalk. The tacky tape frustrates the racoons it seems and they usually abandon their goal with only one or two cobs!



Links

ATTRA

<http://attra.ncat.org/attra-pub/sweetcorn.html>

NC State University

<http://www.ces.ncsu.edu/depts/hort/hil/hil-50.html>

