



Strawberries

June is strawberry season. Strawberries are one of the most intensively sprayed fruits. Nonorganic strawberries are highly likely to contain pesticide residue after harvest. When the PDP (the USDA's Pesticide Data Program) releases its annual list of produce samples with residues that exceed tolerance levels, strawberries appear more often than any other fruit or vegetable. Growing organic strawberries, with no toxic and persistent chemicals, is the smart alternative.

Strawberries will grow anywhere from zones 3 to 10. This information is geared to growers in zones 5 – 6 in the humidity of southern Ontario.

Selecting the Site

Strawberries need full sun and fertile soil with a pH between 5.5 and 6.5. Avoid shady sides, low spots where frost settles, and areas where water puddles in spring. Also avoid sites that have had strawberries, raspberries, potatoes or tomatoes the previous year.

Preparing to Plant

Start preparing your berry patch a full year before planting your berries. Dig out every perennial weed – especially those invasive weeds that spread by underground roots. Plant a cover crop - buckwheat is great - over the area. Cover crops will out compete weeds and therefore reduce the weed seed bank in the site. They will also help to raise the organic matter and fertility of the soil.

Selecting the Berries

The best way to select berries is to ask organic growers in your area what varieties are working best for them.

Basically there are 2 types of plants:

- “June Bearing” - ripen one crop over a 2 week period in late June/early July. You get a huge yield at once, and can choose early, mid and late varieties to make sure you harvest over a long window.
- “Everbearing” – bear 2 crops in season - the usual June crop and then a smaller crop in the fall. Day-neutral cultivars like “Tribute” and “Tristar” are a big improvement over other everbearing plants as they yield full sized fruit throughout the growing season.



The disadvantage is that they produce lots of runners and you need to continually remove these to keep the berries large and lush.

Planting

Plant your berries as soon as possible in the spring. The “matted row” system is the easiest system for growing strawberries in our experience. This system yields a 3-4 ft wide “patch” of berries. Simply plant the new plants 18 inches apart. Keep the blossoms picked off the plants so they direct their energy into their root systems and runner production. Allow the runners to fill in the gaps between the plants and root there. Strawberry plants are easily buried too deep. When you plant them, make sure the “crown” (where the root meets the stems) is just on top of the soil, and that the roots are well grounded in the soil. Water each plant with an organic fertilizer - like kelp for example. Keep the patch weed free and keep picking off the blossoms. You are ready to harvest berries in one year.

Ongoing Care

In organic systems, beds are rotated usually every 2 or 3 years. Keeping plantings weed free is really important. Strawberries don't compete well with weeds. Mulch can help with weed control. It also helps conserve moisture.





Ongoing Care (con't from page 1)

Strawberries have some unique fertility needs compared with other fruit. June-bearing strawberries set buds for the following year's fruit in the fall. (Most perennial fruit crops set their fruit buds in the spring or early summer.) To get a good bud set, the plants must have adequate chilling and not be nutritionally stressed. Therefore, fertilizer applications are usually needed in the late summer, giving the organic fertilizer material enough time to break down and provide nutrients for the plants during the crucial fall bud-set. After the harvest, run a lawn mower or clippers over the strawberry patch, and rake away all the debris. Apply compost and an organic fertilizer and fresh mulch to the berries.



Beneficial-insect habitats planted alongside strawberry fields provide shelter, pollen, and nectar sources to predators and parasites of insect pests. Some good plants that will attract beneficials include: mint family, carrot family (ie: queen Anne's lace, dill, cilantro)

For an organic strawberry producer, diseases are the most difficult challenge. Conventional growers can use a battery of sprays to combat these diseases, but the organic grower needs to focus on soil health as the key management strategy. A soil with adequate organic matter can house numerous organisms such as bacteria, fungi, nematodes, protozoa, arthropods, and earthworms that may suppress soil-borne pathogens. Basically its simple - you want the "good guys" to out number the "bad guys". However once a disease is present, the only solution is to remove the patch and start again in a new location.

Rotating strawberries with other crops is a critical factor in organic production. Crop rotation reduces insect, disease and weed pests, improves soil fertility, improves soil tilth and structure, reduces soil erosion and improves water management. Cover crops, vegetable crops, legumes, and cereals are recommended rotation choices.

Why do Organic Berries Taste Better?

Without synthetic fertilizer, organic strawberries ripen more slowly, with more time to soak up nutrients from the soil. They have a higher solid content (are firmer) and a lower water content, which yields a fruit with more flavour.

Links

Organic Agriculture Centre of Canada

http://www.organicagcentre.ca/Extension/ext_strawberries_pests.asp

