Organic Production

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Organic crop production is often associated with the growth of fruit and vegetable crops. All kinds of crops, including grains, can be grown organically and marketed for a premium if the right buyer is located. In Nebraska, wheat, proso millet, oats, barley, corn, soybeans, edible beans and forages including alfalfa, are grown and marketed organically. Other organic crops grown include amaranth, popcorn, blue corn and spelt. Poultry and beef are produced in accordance with organic guidelines as are specialty products like sprouts, herbs and a variety of vegetables.

What Is "Organic" Production?

According to one organic organization, "Organic production focuses on natural processes and their management: materials and products are an adjunct to, not a replacement for, effective management."

Organic means the crop was grown without the use of synthetic fertilizers, herbicides, insecticides or fungicides. Instead, intensive management is used to improve soil health and reduce the need for synthetic inputs. The production of crops by simply eliminating synthetic fertilizers and pesticides is known as "organic by neglect" and doesn't give the high yields and quality that purposeful organic production does.

In organic crop production, emphasis is placed on building the soil with organic amendments and using crop rotations to enhance the cropping system's natural defenses against disease, insects and weeds. The rewards for such intensive management can be premium prices paid for the product. However, since the organic market is still getting established in this state, successful organic farmers invest a lot of time in marketing, as well as production.

Organic Fertility Management

Methods for building fertility in the soil without using chemical fertilizers are well-established. Managing cropping systems to naturally build soil nutrient levels is the preferred approach; simply replacing chemical fertilizers with organic fertilizers is inadequate and often prohibitively expensive.

Applying animal manure is one of the oldest agricultural practices known. Composting the manure before it is applied kills bacteria, reduces odor and minimizes nitrate release. Other sources of organic nutrients are fish emulsions, natural phosphates, bone meal, cottonseed meal and seaweed.

Beginning Oct. 21, 2002, the USDA Organic seal may be displayed on organically produced products produced and handled by operations certified by a USDA-accredited certifying agent. The USDA Organic seal tells consumers that a product is at least 95 percent organic.

Growing a legume in rotation with other crops is a very important fertility-building practice. Legumes host rhizobial bacteria that form nodules on the plant roots. These nodules convert atmospheric nitrogen gas into a form plants can use (nitrogen fixation). Clovers, vetch, lupine and alfalfa are some common legumes grown for their nitrogen (N) contribution. Usually, large-seeded legumes grown for the seed (like beans), use as much N in seed production as they fix and aren't generally used to build soil nitrogen levels.

Incorporating the legume–or a non-legume such as oats, rye or buckwheat–returns the plant tissue itself to the soil as a nitrogen source. A crop grown for the purpose of being plowed back in is called a green manure. Austrian winter pea is one legume being studied for use as a green manure in the Great Plains.

Certification

All agricultural products labeled organic must originate from farms or handling operations certified by a state or private agency accredited by the U.S. Department of Agriculture (USDA). Farms and handling operations that sell less than $5,000 worth per year of organic agricultural products are exempt from certification.

For more information about USDA organic standards and/or certification, call the National Organic Program (NOP) at (202) 720-3252; visit online at www.ams.usda.gov/nop; or write USDA-AMS-TM-NOP, Room 4008 S. Bldg., Ag Stop 0268, 1400 Independence, SW, Washington, DC 20250.

The State of Nebraska has not established its own organic standards or certifying agency. In Nebraska, chapters of the Organic Crop Improvement Association (OCIA) are the main certifying agencies. OCIA is an accredited world leader in the organic movement, certifying thousands of farmers and processors in North, Central and South America and Asia. OCIA is accredited to ISO-65 by the USDA and is an accredited member of the International Federation of Organic Agriculture Movements (IFOAM).

In August of this year, the OCIA International office moved to: OCIA International, Inc., 6400 Cornhusker, Suite 125, Lincoln, NE 68507. For more information about OCIA, call 477-2323 or visit online at www.ocia.org.

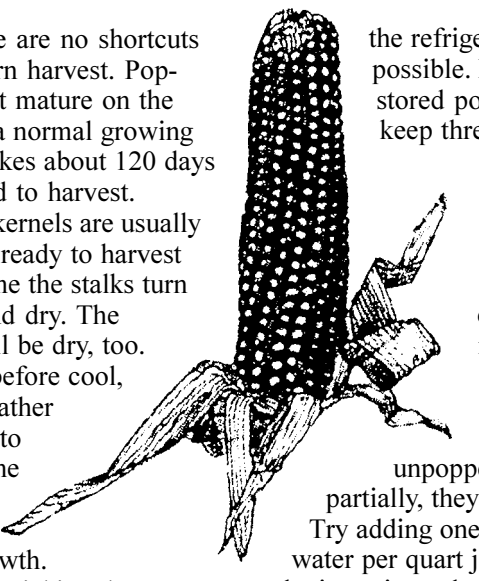
Benefits of Organic Certification

The main benefit of receiving organic certification is having access to the organic market, which usually pays a premium for organic products. Other important benefits include reducing input costs; building soil quality; increasing safety by decreasing chemical use and reducing pest, weed and disease problems that accompany monocropping. A USDA study found organic farmers are good managers who follow sound soil, water and energy conservation practices and value environmental quality.

Source: NebFacts (96-259) "Organic Certification in Nebraska.

Urban Agriculture

Let Popcorn Mature on the Stalk



There are no shortcuts to popcorn harvest. Popcorn must mature on the stalk. In a normal growing year, it takes about 120 days from seed to harvest.

The kernels are usually hard and ready to harvest by the time the stalks turn brown and dry. The husks will be dry, too. Harvest before cool, damp weather settles in to prevent the possibility of mold growth.

After picking the ears, remove the husks and cure the ears for two to three weeks. To cure, place them in a nylon stocking or mesh bag and hang in a warm, dry, well-ventilated place. After curing, remove the kernels by rubbing one ear against another, starting at the tip and working toward the base.

Store the kernels in sealed one quart glass jars, filled three-fourths full and store in the refrigerator, if possible. Properly stored popcorn should keep three to four years before becoming stale.

How popcorn pops depends on its moisture content. If many kernels remain unpopped or pop only partially, they are too dry. Try adding one tablespoon of water per quart jar and shaking the jar twice a day for a couple of days. If a test popping shows kernels are still too dry, repeat the process once again.

If kernels are too moist, they will pop very slowly with a loud explosion, and steam may rise from the popper. To encourage moisture loss, leave the popcorn storage container unsealed until a test popping shows the kernels are properly cured. (DJ)

Drying Gourds

Harvest gourds when the stem dries and begins to turn brown. Be sure to complete your harvest before the first hard frost. Immature gourds will not cure correctly, so only harvest mature fruit.

After harvest, wash the fruit in a mild bleach solution and dry off with a soft cloth. Discard any bruised, diseased or damaged fruit. To dry, place gourds on slatted trays or chicken wire fencing. Make sure they do not touch each other and are located in a warm, dry well ventilated location.

Curing can take one to six months, depending on the type of gourd. The outer skin hardens in one or two weeks, while the internal drying takes at least an additional month. Poke a small hole in the blossom end of the gourd to quicken internal drying. Occasionally turn the fruits, checking for uneven drying or soft spots. When you shake the gourd and hear the seeds rattling, it is cured and ready for a coat of paint or varnish, if desired. (MJF)

Raising Ducks

About 22 million ducks are raised annually in the United States. Most are produced under confinement on specialized duck farms in a few commercially important duck production areas. However, many farms still raise a few ducks primarily for family use or local sale.

Ducks are raised primarily for meat. Although most breeds used are relatively poor layers, the flock should be managed to save the eggs produced for food purposes or hatching. The commercial duck industry is built around the Pekin breed. Pekins reach market weight early and are fairly good egg producers, but they are poor setters and seldom raise a brood.

Photo courtesy of USDA

Muscovy ducks

The Rouen is a popular farm flock breed. It is slower growing than the Pekin, but it reaches the same weight over the five to six month period of feeding and foraging under farm flock conditions. Its slower growth and colored plumage make it undesirable for commercial production.

The Muscovy, a breed unrelated to other domestic ducks, is also used to some extent in farm flocks. They are good foragers and make good setters. Muscovy males are much larger than the females at market age.

Meat production is generally of primary importance in selecting a breed, but egg production for propagation, brooding tendency and the white plumage that produces an attractive dressed carcass should also be considered.

Keeping small, ornamental varieties of ducks, sometimes called bantam ducks, for exhibition or hobby purposes is increasing. Included in this grouping are White and Gray Calls, Black East Indias, Wood Ducks, Mandarins and sometimes Teals. Most general poultry shows and some special bantam shows offer classes for these ducks. (DJ)