

Organic Production in High Tunnels

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Although high tunnel production in Minnesota is in its early development stages, there are many indicators that high tunnels will be an excellent tool for organic producers. Current research has indicated that disease control within the high tunnels is much easier achieved than field production because of the ability of the high tunnels to protect the plants from long periods of being wet, along with wind and other forces of nature.

Because the plants are somewhat enclosed in high tunnel production, insects can often be controlled with predatory insects instead of chemicals.

Since the high tunnels protect the soil from excess moisture and nutrient leaching, nutrients can be managed more effectively than in field production.

The use of raised beds, which are recommended in high tunnel production, gives the organic producer an advantage to manage soils to a much greater degree than in field production. High tunnels hold great potential for the production of heirloom varieties, especially for the market gardener, since they can be managed on an individual plant basis and usually yields per plant are excellent in high tunnels.

Growers must consider many options before deciding to go into organic production. Growers must fully understand what organic production all entails. Organic production is more than selling your products at premium prices, and not have used prohibited products for three years. Organic production requires developing and maintaining an ecological system when nature solves the problems with proper management, giving your plants the competitive edge.

Organic production at any level requires intensive record keeping and production practices must be verifiable. This helps consumers to be assured the product they are purchasing is actually organic. Organic producers must make their records available on demand.

Organic producers must understand that there are few if any controls for major outbreak of production problems as with conventional production. Therefore it is of extreme importance that organic producers fully understand insects, disease and weed cycles better than conventional growers, and anticipate problems before they happen.

Before you start organic production, think about the changes that you and your operation will need to undergo. I suggest you talk with other successful organic producers. Even if you are going to exempt your operation from using a certification agency, under the \$5,000.00 rule I recommend that you talk to one of the several organic certifying agencies so that you get a

complete understanding of what organic production is really about. And remember that the \$5000 exemption does not exempt you from any organic requirements, and your produce must be as traceable through intensive record keeping as the larger certified producers.

At the time, there are no specific rules for organic production in high tunnels, so the USDA organic regulations apply. This may change in the future so it is important to check with the Minnesota Department of Agriculture or the University of Minnesota Extension Service periodically for rule updates.

Where can I get a copy of the national organic standards?

www.ams.usda.gov/nop

Where can I get information about being exempt from certification?

www.mda.state.mn.us/esap/organic/exemptions.htm

Where can I contact a real, live certified organic farmer for information and advice?

<http://mofie.coafes.umn.edu>

How and to whom do I report suspected pesticide drift onto my operation?

www.mda.state.mn.us/appd/pesticides/drift.pdf

Where can I find information about inputs that are allowed (or prohibited) in organic production?

www.ams.usda.gov/nop/NationalList/ListHome.html

www.omri.org

Where can I find a list of certifiers that operate in Minnesota?

<http://www.mda.state.mn.us/esap/organic/usdaaccredited.htm>

Where can I find information about current organic vegetable, fruit, and crop prices?

www.newfarm.org/opx

Where can I find sound, reliable organic production information for various crops?

www.attra.ncat.org/organic.html

Are there loans available for organic growers?

<http://www.mda.state.mn.us/esap/esaploan.htm>

What are some other good sources of information about organic agriculture?

Midwest Organic and Sustainable Education Services www.mosesorganic.org

Northern Plains Sustainable Agriculture Society www.npsas.org

Organic Ag Info – Science-based information about organic agriculture

<http://www.organicaginfo.org/>

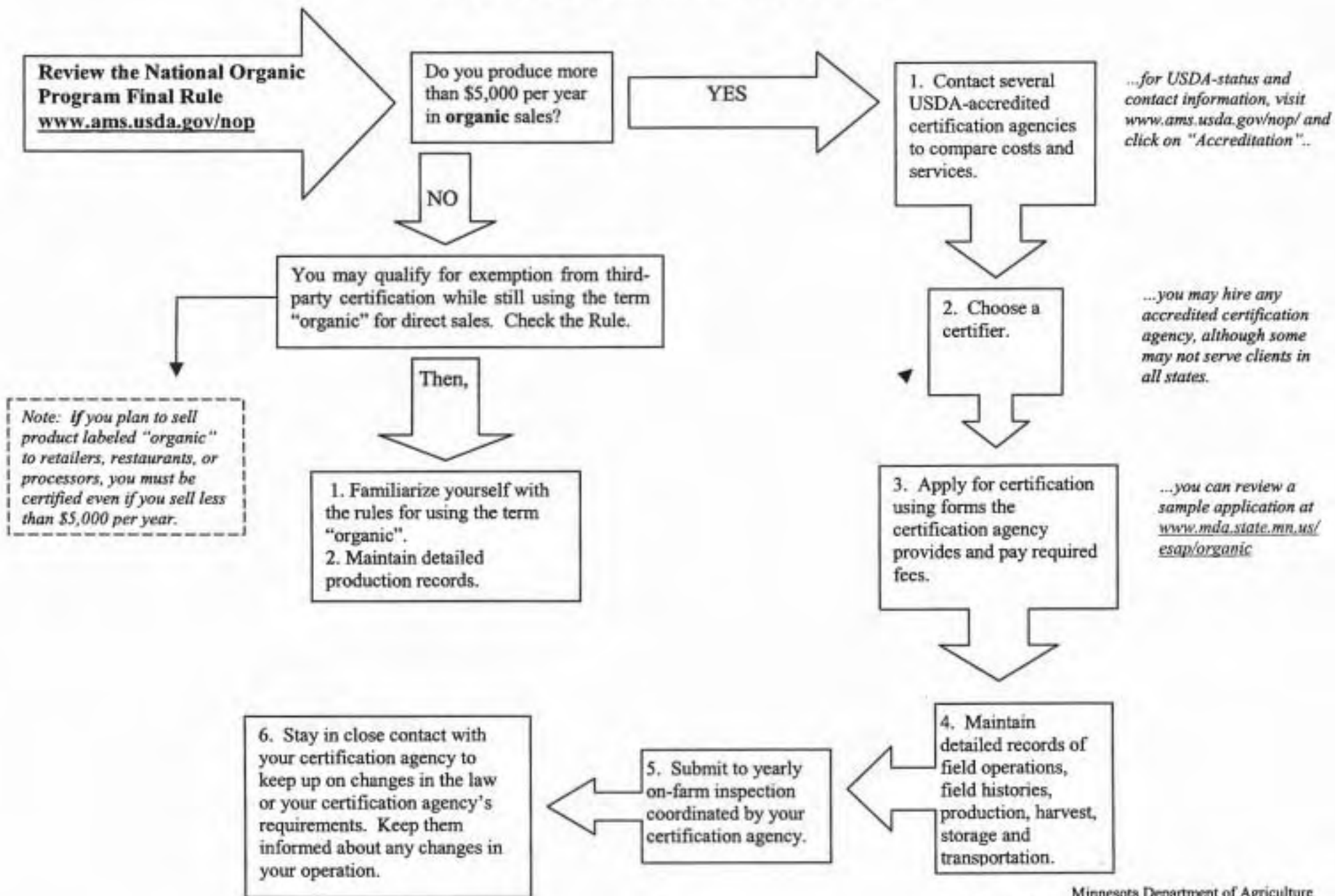
Organic Farming Research Foundation www.ofrf.org

Organic Research at University of Minnesota <http://swroc.coafes.umn.edu/organic>

Organic Trade Association www.ota.com

“The New Farm” on-line magazine from Rodale Institute www.newfarm.org

If you have trouble finding any of the above information, call Meg Moynihan, Organic and Diversification Specialist at the Minnesota Department of Agriculture, 651-297-8916.



What do you mean, “organic”?

“Organic” is a guarantee about how an agricultural food or fiber product was grown and handled before it reached the consumer. It’s also a set of guidelines for farmers who grow plants and animals, and for processors and handlers who turn it into food or clothing products.

Products that make organic claims must follow the National Organic Rule, maintain careful records, and be certified by a USDA-accredited organization, a process that includes on-site inspection. Certification assures consumers that the product was grown and processed according to a set of *organic standards*. There are stiff penalties for fraud, which means representing a non-organic product as organic.

Organic agriculture ... promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain, and enhance ecological harmony.
 --The USDA National Organic Standards Board, 1995

*Farms that gross less than \$5,000 in organic sales can be exempt from certification.

For More Info...

Alternative Farming Systems Information
 301-504-6559 or www.nal.usda.gov/afsic

Appropriate Technology Transfer for Rural Areas (ATTRA) – a wealth of info for all levels of expertise 800-346-9140 or <http://attra.ncat.org/organic.html>

Midwest Organic and Sustainable Education Services – home of the “Upper Midwest Organic Resource Directory” call 715-772-3153 or www.mosesorganic.org

Minnesota Department of Agriculture Organic Web Page
www.mda.state.mn.us/esap/organic

Minnesota Organic Farmers Information Exchange – Free service connecting Minnesota beginners with experienced volunteer organic farmer mentors <http://mofie.coafes.umn.edu/>

National Organic Program (USDA)
www.ams.usda.gov/nop

Organic Ag Info – scientific reports and practical info about organic agriculture (production, economics, etc.)
www.organicaginfo.org

Organic Consumers Association
<http://organicconsumers.org/>

Organic Farming Research Foundation
 831-426-6606 or www.ofrf.org
 See especially “About Organic”.



Organic



Minnesota Department of Agriculture

What do the organic standards require?

CROPS, in general: Organic crops must be grown on land managed to reduce erosion and improve soil quality, and fertilized with non-synthetic nutrients for three years before harvest. Most synthetic herbicides and pesticides are prohibited, although a few synthetic nutrients and soil additives appear on a special National List and are allowed. There are strict manure and compost guidelines. Sewage sludge is prohibited. Weeds, insects, and other pests are controlled using practices like crop rotation, variety selection, biological control (habitat for natural enemies of the pests), mulching and tillage. Organic farmers may not use genetically modified seed.

LIVESTOCK, in general: Organic livestock must eat organic feed and pasture. They must not be given growth hormones, treated with antibiotics, fed urea, manure or animal by-products. They must be raised in conditions that allow them access to the outdoors (appropriate to the species) and appropriate exercise. Ruminants like cows and goats must have access to pasture. Physical alterations (like dehorning, and castration) must be done only to promote the animal's welfare and in ways that minimize pain and

stress. Sometimes animals get sick and need drugs or other treatments. It is forbidden to withhold medical treatment from a sick animal in an effort to keep it organic. Slaughter stock must be raised organically from the last third of gestation. There are several options for transitioning dairy cows.

PROCESSING & LABELING: Strict regulations govern how organic crops and animals must be processed and handled in order to preserve their organic status. Ingredients, processing aids, pest management in the processing facility, and labeling must all follow the organic rule. There must be no opportunity for organic products to mix (or "commingle") with similar non-organic products. Irradiation is prohibited.



The Minnesota Department of Agriculture encourages you to learn more by studying the Rule at www.ams.usda.gov/nop or by contacting any of the organizations listed on the back of this pamphlet.

For more information, contact:
Meg Moynihan, 651-297-8916
 or
meg.moynihan@state.mn.us
www.mda.state.mn.us/esap/organic

The Minnesota Department of Agriculture (MDA) recognizes organics as a choice preferred by many farmers and consumers. This is a rapidly growing sector of the food industry.

We offer organic information, education, training, and assistance in many areas including: production methods, transition, certification, and marketing. We also enforce state misbranding laws.

Organic Advisory Task Force
 This 14-member panel advises the Commissioner of Agriculture about policies and programs that will benefit organic agriculture in the state.

Certification Cost Share Program
 This program refunds of up to \$500 to growers and handlers (processors) to help offset certification costs.

Organic Web Page
www.mda.state.mn.us/esap/organic
 Offers information and quick links to a wide array of organic information sources and organizations, sample record forms, and more.

Other MDA programs and activities are listed on our web page:
www.mda.state.mn.us/esap/organic