Organic Vegetable Production

Organic vegetable farming is a production system that relies on biological processes and natural materials to manage soil fertility and pest populations, and to promote healthy crop growth. With the federal Organic Foods Production Act, use of the term “organic” to describe an agricultural product in the marketplace is regulated. Vegetables sold as “organic” must be grown and handled according to the National Organic Rule and any applicable state regulations. The National Organic Rule prohibits the use of most synthetic chemicals (fertilizers, pesticides, etc.), and requires farmers to write and follow organic production plans, as well as keep farm and field records. Fields used to grow organic crops may not have had any prohibited material applied to them in the previous three years. In addition, USDA-accredited organic certification agents must inspect and certify all operations with more than $5,000 in gross annual income from sales of products labeled “organic.”

Growers interested in transitioning to organic production should educate themselves about practices used in their area and plan carefully. Experience suggests that it can take a number of years for pest populations and soil nutrient cycles to adjust enough for successful organic production. Portions of this guide related to soil sampling, nutrient availability, and crop nutrient requirements include information relevant to organic production, as do the overviews of Insect Management Strategies, Disease Management Strategies, and Weed Management Strategies.

Growers should always check with their organic certification agents before using any product to make sure it meets their certifier’s criteria.

Other organic production resources include:

eXtension, the national extension website, offers resources on organic agriculture at www.extension.org.

Organic Vegetable Gardening Techniques (University of Missouri Extension Guide G6220) provides an introduction to organic production techniques (available from University of Missouri Extension Publications, extension.missouri.edu/publications).

Resource Guide for Organic Insect and Disease Management (Cornell University) provides specific recommendations for pests and diseases of major vegetable crops (available at web.pppmb.cals.cornell.edu/resourceguide).

Appropriate Technology for Rural Areas (ATTRA) offers a number of publications on their website: www.attra.org.

The National Organic Program (NOP) offers a program handbook that provides a list of materials allowed for use in organic production, plus a complete list of accredited certification agents on their website: www.ams.usda.gov/nop.

The Organic Materials Review Institute (OMRI) publishes a list of products they have found to meet certified organic production criteria. For details, visit www.omri.org.

The Sustainable Agriculture Research and Education (SARE) program offers a number of research-based publications about pest management, including organic options. A complete catalog is available at www.sare.org/Learning-Center.

If you desire organic certification, you should contact a certification agent during the period of transition to organic production. The organizations on pages 40-41 have been accredited by the USDA as of September 2018. Contact them directly for information about fees and the certification procedure. The USDA lists all accredited organizations at www.ams.usda.gov/services/organic-certification/certifying-agents.

Consult your local extension office for other resources available in your area.
**Organic Certifiers Servicing the Midwest**

Some states do not have a National Organic Program certification agency headquartered in state. However, multiple certifying agencies service the Midwest region with traveling inspectors. Many take clients on a case-by-case basis, depending on the availability of inspectors and other factors. Here is a list of certifiers that are utilized in the Midwest, with notes on their service range.

**California Certified Organic Farmers (CCOF)**
*Services entire United States, Canada, and Mexico.*
2155 Delaware Avenue, Suite 150
Santa Cruz, CA 95060
831-423-2263
Fax: 831-423-4528
Email: ccof@ccof.org
www.ccof.org

**Ecocert ICO**
*Services entire United States and Canada.*
P. O. Box 158
Plainfield, IN 46168
888-337-8246 (toll free)
Fax: 317-708-0628
Email: info.ecocertico@ecocert.com
www.ecocertico.com

**Global Organic Alliance**
*Services entire United States.*
P. O. Box 530
3185 Township Road 179
Bellefontaine, OH 43311
937-593-1232
Fax: 937-593-9507
Email: goaorg@centurylink.net
www.goa-online.org

**International Certification Services (ICS)**
*Services worldwide.*
PO Box 517
301 5th Avenue SE
Medina, ND 58467
701-486-3578
Fax: 701-486-3580
Email: info@ics-intl.com
www.ics-intl.com

**Iowa Department of Agriculture and Land Stewardship**
*Services Iowa only.*
Organic Certification Program
Maury Wills
502 East 9th Street
Des Moines, IA 50319
515-281-5783
Email: OrganicProgram@iowaagriculture.gov
www.iowaagriculture.gov/AgDiversification/organicCertification.asp

**MOSA Certified Organic**
*Services producers and processor/processors throughout the United States with current clients in California, Florida, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, Utah, and Wisconsin.*
P. O. Box 821
122 West Jefferson Street
Viroqua, WI 54665
608-637-2526
Fax: 608-637-7032
Email: mosa@mosaorganic.org
www.mosaorganic.org

**Minnesota Crop Improvement Association**
*Services Colorado, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin.*
1900 Hendon Avenue
St. Paul, MN 55108
612-626-6305
855-213-4461 (toll free)
Fax: 612-625-3748
Email: mncia@mncia.org
www.mncia.org

**Nature’s International Certification Services (NICS)**
224 East State Highway 56
Viroqua, WI 54665
608-637-7080
Fax: 608-637-7460
Email: nics@naturesinternational.com
www.naturesinternational.com
Oregon Tilth Certified Organic
Services entire United States, Canada, and Mexico.
2525 SE 3rd Street
Corvallis, OR 97333
503-378-0690
877-378-0690 (toll free)
Fax: 541-753-4924
Email: organic@tilth.org
www.tilth.org

Organic Crop Improvement Association (OCIA) International
Services entire United States with additional regional offices in Canada, Mexico and Japan.
1340 North Cotner Boulevard
Lincoln, NE 68505
402-477-2323
Fax: 402-477-4325
Email: info@ocia.org
www.ocia.org

Ohio Ecological Food and Farm Association
Services Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, New York, Ohio, Pennsylvania, West Virginia, Wisconsin, and Virginia.
41 Croswell Road
Columbus, OH 43214
614-262-2022
Fax: 614-421-2011
Email: organic@oeffa.org
www.oeffa.org

Pro-Cert Organic Systems Ltd.
Services entire United States and Canada.
2311 Elm Tree Road
Cambray, ON K0M 1E0
705-374-5602
Fax: 705-374-5604
Email: infoebo@pro-cert.org
www.pro-cert.org

Quality Assurance International
Services entire United States and Canada.
4370 La Jolla Village Drive, Suite 300
San Diego, CA 92122
858-200-9704
Email: info@qai-inc.com
www.qai-inc.com

Yield of Vegetable Crops

<table>
<thead>
<tr>
<th>Crop</th>
<th>Expected Yields in Tons per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
</tr>
<tr>
<td>Asparagus</td>
<td>1</td>
</tr>
<tr>
<td>Bean, snap</td>
<td>2</td>
</tr>
<tr>
<td>Cabbage</td>
<td>13</td>
</tr>
<tr>
<td>Cantaloupe</td>
<td>10</td>
</tr>
<tr>
<td>Cucumber (slicing)</td>
<td>9</td>
</tr>
<tr>
<td>Cucumber (pickling, hand harvest)</td>
<td>6</td>
</tr>
<tr>
<td>Onion</td>
<td>13</td>
</tr>
<tr>
<td>Pepper, green</td>
<td>14</td>
</tr>
<tr>
<td>Potato (fall)</td>
<td>10</td>
</tr>
<tr>
<td>Pumpkin</td>
<td>10</td>
</tr>
<tr>
<td>Spinach</td>
<td>6</td>
</tr>
<tr>
<td>Summer squash</td>
<td>10</td>
</tr>
<tr>
<td>Sweet corn</td>
<td>4.5</td>
</tr>
<tr>
<td>Sweet potato</td>
<td>7</td>
</tr>
<tr>
<td>Tomato (fresh market)</td>
<td>11</td>
</tr>
<tr>
<td>Tomato (processing)</td>
<td>25</td>
</tr>
<tr>
<td>Watermelon</td>
<td>15</td>
</tr>
</tbody>
</table>

This table only provides general yield estimates for new or prospective growers. The USDA-National Agricultural Statistics Service Vegetable Survey provides more accurate information.