This glossary was developed by John Porter, Urban Agriculture Program Coordinator for Nebraska Extension for use by OFMA and other farmers market organizations. This is a reference for farmers market managers, vendors, volunteers, board members and customers, but should not be considered a legal or academic document.

Check out the recording of John’s webinar, Organics, Hybrids and GMOs — Oh My!, for a fun and more in depth discussion of these terms and how to use them.

Glossary of Terms

Common Certification Programs

Certified Organic/Organic – produced according to standards set by the USDA’s National Organic Program (NOP), which require the use of all organic or naturally derived inputs such as fertilizers and pesticides and forbids the use of genetically engineered crops. Such items can be derived from a natural source (manures, plant extracts, fungal/bacterial preparations) or from an elemental/earth source (lime, copper sulfate). Organic certification requires three years of transitional production using only organic inputs, certification by an outside entity or agency, recordkeeping, and various fees. Producers using the term “organic” without the “certified” attached must also be certified organic, except for when selling less than $5000 of product per year (must still follow guidelines and keep records). Value-added foods labeled organic must contain certain percentages of organically grown foods. For more information and application instructions, visit the National Organic Program page. For information on which producers or food makers need to be certified visit this site.

Certified Naturally Grown – certification created as a lower-cost and reduced-paperwork alternative to “certified organic”. Utilizes the same standards of the USDA NOP, but is not administered by the USDA. For more information, visit the CNG website.

Regenerative Organic Certified – new certification for production using regenerative agriculture practices focused on soil health, animal welfare, and social fairness. For more information visit Regenerative Organic.

Demeter USA – certification for the biodynamic processes created by Dr. Rudolf Steiner and followers in 1924 that treat the farm as a “whole organism”. Certification standards include those of the NOP, plus requirements for reduced import of fertility and feedstocks onto the farm (growing on farm where possible), growing according to energies such as the moon phase, and creation of preparations that are used in a “homeopathic” or mystical sense. To be
labeled as “biodynamic” a farm must be certified by Demeter USA. For information visit the Demeter page.

**Certified Animal Welfare Approved** - certification for humane livestock production by the organization A Greener World. Certification requires livestock be grown outside/on pasture, use of sustainable farming practices, and humane slaughtering. For more information visit A Greener World.

**Salmon Safe** – certification for farms, wineries, and more on the West Coast to protect waterways for salmon. Farms on rivers or upland areas are a major focus of the program and farms must be certified organic, biodynamic, or have another similar production certification. For more information visit the [Salmon Safe website](#).

**Production practices / Marketing terms**

**Organically grown** – typically used by producers who are following organic practices but are not officially certified organic. Without requirements to follow NOP standards, practices may deviate from standard organic practices and are up for interpretation by producers and consumers.

**Natural/naturally grown** – there’s no “official” definition of natural or naturally grown and it is open to interpretation by producers and consumers, however it is often used to signify production using practices similar to organic or pesticide-free.

**Sustainable/sustainably grown** – there’s no official definition for marketing use by producers, though sustainable agriculture is defined by the USDA as holistic farming practice that balances environmental stewardship, profitability, and personal/social benefit. The most common use as a marketing term focuses mainly on environmental stewardship. For more information on sustainable agriculture visit the [SARE Program](#).

**Regenerative** – a relatively new philosophy of production practices that focus on environmental stewardship to reverse climate change and/or environmental degradation and social fairness. Most commonly, regenerative practices focus on building soil health. New certification programs such as Regenerative Organic Certified require focus on soil health, animal welfare, and social fairness.

**Biodynamic** – production that involves organic practices and homeopathic or mystical practices. Must be certified by Demeter USA to use the term (see Demeter USA entry for more info).

**Pesticide-free** – production practices that do not use any pesticides, including organic pesticides.
**Chemical-free** – typically used to mean pesticide-free production, but can be confusing and open to interpretation by consumers and producers as it is scientifically inaccurate.

**Controlled Environment Agriculture (CEA)** – produce grown in a system or structure that controls at least one aspect of the environment, such as temperature, light, or water. CEA typically refers to greenhouse, hydroponic, or aquaponic production, but could also refer to growth in a high tunnel or other protective structure.

**Greenhouse/hothouse grown** – grown in a controlled environment using a greenhouse structure that is temperature controlled using heaters and/or chillers. May also include the use of supplemental lighting, hydroponics, or irrigation. A greenhouse may be constructed using glass, rigid plastics, or plastic sheeting supported by a frame.

**High tunnel** – protective structure used for season extension purposes. May resemble a greenhouse structure made from frame and plastic sheeting, with the major difference that it is unheated and has no connected electricity or gas utilities. A water connection may be present to provide water to crops. High tunnels may provide extra weeks or months of growing season. “Hothouse” may refer to high tunnel grown produce, but the use is less common than for greenhouse production.

**Hydroponic** – growth of plants without soil or soil-based media in a water-based solution. Plants receive all nutrients from a fertilizer-enriched water solution. The solution may flow over the roots, as in a “Ebb and Flow” or “Nutrient Film Technique (NFT)” or drip-through system or the roots may reside within the solution as in “Deep Water Culture” or the “Kratky” system. Without soil or organic matter, fertilizers used for hydroponic (and aeroponic) production must contain a complete complement of macronutrients and micronutrients for plants. These solutions can be created from individual elemental chemicals or purchased as a multi-step prepared mix.

**Aquaponic** – a system that combines the growth of plants with the growth of aquatic livestock such as fish, crayfish, or shrimp. The waste of the aquatic animals provides nutrients for the plants instead of the use of a fertilizer nutrient solution as in hydroponics. This system requires a balance of the needs of the plants and animals. The aquatic livestock may be grown as a food product, such as tilapia, an aquatic product, such as fish for pond or aquarium stocking, or just as a nutrient source.

**Aeroponic** – growth of plants without soil or a soil-based media using an aerated mist of a fertilizer-based nutrient solution. Instead of bathing or submerging the roots of plants in the solution, misting nozzles spray the roots with a fine mist at timed intervals.
**Plant types/traits**

**GMO (Genetically Modified Organism)** – plant, animal, or microorganism whose genetic makeup has been modified by the addition or deletion of DNA through genetic engineering or transgenic technology. Common modifications include addition of herbicide resistance, insect resistance, disease resistance, non-browning, or increased nutrients. **Most genetically engineered crops are commodity crops.**

**Hybrid** – organism developed by human-driven crossbreeding from parental organisms with desired traits. Commonly, hybrids do not breed true, meaning that saved seeds revert to traits from the parents and may not resemble the hybrid generation. Hybrids may use scientific techniques for breeding, but do not utilize genetic engineering.

**Open Pollinated** – plant that has genetically stable traits and breeds true, meaning that saved seeds have similar traits to the parent plants. Open pollinated plants are common for seed saving practices.

**Heirloom** – an open pollinated plant variety that has a regional, familial, or historical background or that has been available for more than 50 years.

**Selective breeding** – human-driven development of plant cultivars or varieties for desirable traits. Most commonly selective breeding is accomplished through hybridization but may also be accomplished through selection of desirable traits in open pollinated plants.

**Variety** – plant with distinguishable characteristics that was found naturally occurring or with true breeding characteristics. Commonly used in reference to open pollinated or heirloom plants.

**Cultivar** – plant with distinguishable characteristics that was developed through human-driven hybridization. Commonly used in reference to hybrid plants.