



The Allowed* Use of Commercial Fertilizers, Pesticides, and Synthetic Substances on U.S. Farms Under the USDA National Organic Program

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When consumers hear the phrase “organic” produce, many assume that the farmer who grew the produce did not use pesticides or fertilizers. This is not usually the case. For example, organic farmers are required by law to use cultural practices such as cultivar selection, crop rotation, and physical barriers as the primary tools for pest management. When these methods fail, however, they are allowed to use pesticides, including some synthetically formulated compounds. Non-synthetic and synthetic fertilizers can be also be used to improve soil fertility, plant health, or both, on organic farms. The purpose of this fact sheet is to provide accurate information about those parts of the law that allow the use of fertilizers and pesticides within the organic produce program of the U.S. That law is the Organic Foods Production Act (OFPA), enacted under Title 21 of the 1990 Farm Bill. The OFPA was the act passed by Congress that authorized the USDA to develop the organic regulations contained in the Code of Federal Regulations, Title 7 CFR Part 205.

Conventional farmers don't have the same regulation of their production practices as organic farmers. However, they still must follow regulations concerning pesticide use, worker safety, and protection of the environment. Organic farmers willingly choose to follow specific rules in order to grow and sell a specialty product with a particular, and growing, market niche. Conventional farmers, on the other hand, may legally use both conventional and organic substances as long as their

application meets relevant federal and State regulations. Some split operations use both organic and conventional farming techniques in different areas of the same farm. Regardless of the production method, no farmer can sell any product contaminated by biological, chemical, or physical adulterants, according to the U.S. Food and Drug Administration's Food, Drug and Cosmetic Act (FD&C).

As a farmer or consumer, it is important to know the facts behind marketing claims made by organic farmers, packers, and processors and those who sell organic products. These claims must be verifiable and based on rules of the USDA National Organic Program (NOP).

The National Organic Program

When then U.S. Secretary of Agriculture Dan Glickman announced the NOP final rule on December 20, 2000, he stated, “Let me be clear about one other thing. The organic logo is a marketing tool. It is not a statement about food safety. Nor is ‘organic’ a value judgment about nutrition or quality. USDA is not in the business of choosing sides, of stating preferences for one kind of



This official USDA-AMS logo is a marketing signal to consumers. It is backed by federal law and enforced by the USDA. Farmers using this symbol must closely follow the rules of the National Organic Program (NOP). The NOP is a marketing program, not a nutrition nor a food safety program, such as Good Agricultural Practices (GAPs).

***Words in quotes are used in accordance with USDA's specific definitions and usage.**

food, one set of ingredients or one means of production over any other. As long as rigorous government safety standards are being met, we stand ready to do what we can to help support any farmer and help market any kind of food” (1).**

The NOP, formalized in 2002, is a marketing program managed by the U.S. Department of Agriculture’s (USDA) Agricultural Marketing Service (AMS). A

fuller discussion of the NOP can be found in the federal government’s regulation, Title 7 CFR Part 205., at www.ecfr.gov. A National Organics Standards Board (NOSB) advises USDA on organic issues. It is a citizens’ advisory board consisting of four farmers/growers; three environmentalists/resource conservationists; three consumer/public interest advocates; two produce handlers/processors; one retailer; one scientist, either a

Selected terms from the final rule of the National Organic Program

Agricultural inputs. All substances or materials used in the production or handling of organic agricultural products.

Allowed synthetic. A substance that is included on the National List of synthetic substances allowed for use in organic production or handling.

Claims. Oral, written, implied, or symbolic representations, statements, or advertising or other forms of communication presented to the public or buyers of agricultural products that relate to the organic certification process or the term, “100-percent organic,” “organic,” or “made with organic (specified ingredients or food group(s)),” or, in the case of agricultural products containing less than 70 percent organic ingredients, the term, “organic,” on the ingredients panel.

Commercially available. A production input that can be obtained in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan.

Fertilizer. A single or blended substance containing one or more recognized plant nutrient(s) which is used primarily for its plant-nutrient content and which is designed for use or claimed to have value in promoting plant growth.

Manure. Feces, urine, other excrement, and bedding produced by livestock that has not been composted.

Nonagricultural substance. A substance that is not a product of agriculture, such as a mineral or a bacterial culture, that is used as an ingredient in an agricultural product. For the purposes of this part, a nonagricultural ingredient also includes any substance, such as gums, citric acid, or pectin, that is extracted from, isolated from, or a fraction of an agricultural product so that the identity of the agricultural product is unrecognizable in the extract, isolate, or fraction.

Nonsynthetic (natural). A substance that is derived from mineral, plant, or animal matter and does not undergo a synthetic process as defined in section 6502(21) of the Act (7

U.S.C. 6502(21)). For the purposes of this part, “nonsynthetic” is used as a synonym for “natural” as the term is used in the Act.

Organic production. A production system that is managed in accordance with the Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.

Pesticide. Any substance which alone, in chemical combination, or in any formulation with one or more substances is defined as a pesticide in section 2(u) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136(u) et seq.).

Prohibited substance. A substance, the use of which in any aspect of organic production or handling is prohibited or not provided for in the Act or the regulations of this part.

Split operation. An operation that produces or handles both organic and nonorganic agricultural products.

Sewage sludge. A solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes but is not limited to domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

Synthetic. A substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes.

****A list of the sources referenced in parentheses may be found at the end of this document.**

CFR. Title 7: Agriculture, Part 205 (2)

toxicologist, ecologist, or biochemist; and one USDA-accredited certifying agent. The members of this board advise the USDA on organic issues. The board also makes recommendations on farming practices, fertilizers, and pesticides that can be used on certified organic farms in the U.S. These recommendations extend to foreign farms selling to U.S. markets with the U.S. organic logo, and to those selling through an international equivalency program. Citizens can also provide feedback to the NOSB. The NOP allows practices and materials that are permitted under the USDA organic regulations. The NOP is mainly a prescriptive program that tells farmers they must do certain tasks to acquire and maintain their organic certification. In the marketplace, having produce labeled with the organic logo can be of substantial financial value to the organic farmer and processor, compared with the conventional farmer. According to a 2013 study from Cornell University (3), consumers are willing to pay up to 23% more for the perceived “health-halo effect” of organic-labeled products, even though the NOP makes no health claims.

The purpose of this government-backed marketing program is to make sure that foods labeled as “organic” or as being from a “certified organic farm” meet these business claims. Organic farms with revenues over \$5,000 a year must have an on-site certification audit each year to verify that they are following the NOP and thus deserve to market their products as “certified organic.” Farms making less than \$5,000 a year that want to advertise or claim their foods as organic must follow the same rules as the larger farms – processes, inputs, record keeping. Although the smaller farms are not required to have an annual audit, they must be prepared for one (USDA-AMS, NOP Program Handbook, September 3, 2013) (4).

Understanding the allowed use of fertilizers and pesticides on organic farms

One area of organic farming that is often misunderstood is the “allowed” use of “commercial” fertilizers and “synthetic” pesticides on certified organic farms. Both agricultural inputs can be used under the NOP, but they must comply with USDA organic regulations. Some materials are prohibited because they are not on the allowed lists. Adherence to these U.S. government restrictions is what makes a certified organic product

In general, it is unlawful for a commercial organic or conventional farmer to make and/or apply their own pesticides if the food product will be sold or given to a non-family member either on or off site. According to EPA, doing so means the “distribution of an unregistered pesticide” by the farmer (8). The pesticide product would not have the EPA-approved label, including all of the required, field-tested safety precautions. The only exceptions to this statement would be products on the EPA’s 25(b) list of Minimum Risk Pesticides (http://www.epa.gov/opppdpd1/biopesticides/regtools/25b_list.htm).

In addition, organic and conventional farmers *must* use organic pesticides that are labeled for *commercial* use, not “home garden” or “residential” use. Commercial pesticides, organic or conventional, are required by law to have a label with extensive human and environmental safety and use-related information. Consumer labels don’t have the same requirement, though some might provide safety information. Thus, according to EPA’s Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), all farmers must use commercial versions of pesticides, and within the USDA-NOP, the EPA FIFRA must be obeyed. Violation of FIFRA means that an organic farmer could have their NOP certification withdrawn for a period of time. The result would be that the farmer could no longer market their product as “USDA-certified organic.”

unique. As of 2013, over 600 commercial suppliers of over 2,000 organic fertilizer, soil amendments, and pesticides were listed on the Organic Materials Review Institute’s (OMRI) website, www.omri.org.

Fertilizers (plant nutrients) and soil amendments

Plants extract nutrients from the soil for their growth, protection, and reproduction. These nutrients need to be replenished, typically by fertilizers, composts, or the use of cover crops; otherwise, production will diminish. The NOP mandates the attributes of fertilizers they allow in the “Soil fertility and crop nutrient management practice standard,” subsection 205.203 of Title 7 the Code of Federal Regulations Part 205. Commercial fertilizers can be used if their ingredients are on the “National List of synthetic substances allowed for use in organic crop production, §205.601” (§205.203). They can also be used if they are natural (nonsynthetic) and do *not* appear in §205.602, according to §205.105(a). Commercial organic fertilizer products and their producers can be found in

Table 1. Naturally occurring (nonsynthetic) and synthetic materials allowed as fertilizers and soil amendments for the commercial organic production of produce (as per label restrictions)

Non-synthetic/naturally occurring (manufactured and/or mined)	Synthetic (manufactured)
Animal manure	Aquatic plants (alkali extracted)
Blood meal	Boron
Bone (and meat) meal	Fish products (liquid, pH adjusted with acid)
Calcium carbonate/ limestone (mined)	Humic acid (alkali extracted)
Calcium chloride (restricted under §205.602)	Iron phosphate (molluscicide use only)
Compost: animal manure or plant-based	Iron sulfate
Decomposing crop residue	Lignin sulfate
Feather meal	Micronutrients (such as zinc sulfate)
Fish meal/shrimp	Magnesium sulfate
Fulvic acid	Newspaper
Guano (mined)	Sulfur (elemental)
Gypsum (mined)	Sulfurous acid
Humates / Leonardite (mined)	Vitamin B1, C, E
Peat	
Potassium magnesium sulfate, potassium sulfate (mined)	
Rock phosphate (mined)	
Seaweed/kelp	
Worm castings	

Source: OMRI (6) and WSDA (7); subject to change.

either the Organic Materials Review Institute’s (OMRI) Products List or the WSDA Brand Name Material List (<http://agr.wa.gov/foodanimal/organic/>). Fertilizer, soil amendment, and pesticide products can be WSDA Registered, OMRI Listed, or NOP compliant. Basically, an organic grower must use soil-amendment products from these lists unless allowed by other sections of the NOP rule or otherwise approved by their certification agency. For example, the proper on-farm recycling of animal manures as a soil amendment is covered under “Soil fertility and crop nutrient management practice standard” (§205.203). In addition, the grower’s certifying agent must approve the use of the product as part of the grower’s organic system plan. Thus, the statement “Organic farmers cannot use commercial fertilizers” is incorrect. They can use NOP-allowed commercial fertilizers. Table 1, from OMRI (6) and WSDA (7), gives examples of naturally occurring (non-synthetic) and synthetic organic fertilizer sources. Composting, grinding, extraction, mining, or various other types of processing create these materials.

Note that the NOP forbids the use of human sewage sludge (biosolids) from a municipal wastewater treatment facility on an organic operation (§205.105 (g)). In addition, the use of raw or composted human waste generated on the farm may not comply with NOP requirements. Growers must manage plant and animal materials in a manner that does not contribute to the contamination of crops, soil, or water by pathogenic organisms (§205.203(c)). This latter practice is strictly enforced in Good Agricultural Practices (GAP) programs, and is an automatic audit failure in third-party GAP audits[^]. In contrast, recycled or reclaimed water from those same wastewater treatment plants can be used for organic production if it has been reviewed and approved by the farm operation’s certifier.

Pesticides

A potentially confusing aspect of the NOP is that pesticides are described as “restricted” on an organic farm. The word “restricted,” however, is also used by

[^] GAPs are good farm food handling practices not required by the NOP. They are science-based, risk-reducing health, hygiene, and sanitary habits and applications. They apply to workers and owners in relation to growing, harvesting, packing and transporting produce. They also include best practices regarding food packing areas and food contact surfaces. Managing domestic small and large animals, and wild pest entries and their manures, are critical components of a professional GAP program. Irrigation, hand wash, and produce rinse water quality is also part of a GAP program. GAPs overlap with the NOP on the legal and documented use of fertilizers and soil amendments, and of pesticides.

the U.S. Environmental Protection Agency (EPA) for restricted use pesticides (RUPs). These products require the person who purchases, possess, applies, or who supervises their application, to be a state-certified pesticide applicator. In the case of organic pesticides, however, “restricted” means the pesticides should be used as a last resort. The NOP requires organic farmers to try and use non-pesticide methods to manage pests before using a pesticide (§205.206 – Crop pest, weed, and disease management practice standard). The use of these methods must also be documented. Further, the pesticides used are limited to those allowed by the NOP and must be used according to their labeled instructions. As with all commercial pesticides, whether used for organic or conventional farming, except for pesticide ingredients on the EPA 25(b) list of Minimal Risk Pesticides, the crop, crop group, or site must be on the pesticide label before it can be legally applied. Additionally, the NOP requires organic farmers to practice crop rotation as a pest and nutrition management strategy (§205.205 – Crop rotation practice standard).

The EPA defines a pesticide, organic or conventional, as “any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.” Pests can be insects; mice and other animals; unwanted plants (weeds); prions (protein-based infectious agents); or microorganisms such as fungi, bacteria, and nematodes. Under U.S. law, a pesticide is also any substance or mixture of substances intended for use as a plant growth regulator, defoliant, or desiccant. The following list of pesticide categories contains general pesticide types found on the market today. *The use of pesticides in some of these categories by organic farmers is not allowed.*

Types of pesticides available in the marketplace

- Algacides – used to kill or slow the growth of algae
- Antimicrobials – used to control disease-causing microorganisms such as fungi and bacteria
- Desiccants – used to dry up living plant tissues
- Defoliants – used to cause plants to drop their leaves
- Disinfectants – used to control microorganisms on non-living surfaces
- Fungicides – used to control fungal problems like molds, mildew, and rust
- Herbicides – used to kill or inhibit the growth of unwanted plants (weeds)
- Insecticides – used to kill insects
- Insect growth regulators – used to disrupt the growth and reproduction of insects
- Miticides – used to control mites that feed on plants and animals
- Molluscicides – used to kill slugs, snails, and other mollusks
- Mothballs – used to kill fabric pests by fumigation in sealed containers
- Ovicides – used to destroy eggs of insects and mites
- Pheromones – biologically active chemicals used to attract insects or disrupt their mating behavior
- Plant growth regulators – used to alter the growth of plants
- Repellents – used to repel unwanted pests, often by taste or smell
- Rodenticides – used to kill rodents like mice, rats, and gophers
- Wood preservatives – used to make wood resistant to insects, fungi, and other pests

Note: This list slightly modified for readability (5).

The EPA’s Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) regulates the production and use of pesticides on conventional and organic farms. The national rules for pesticide handlers/applicators and those working around pesticides, called the Worker Protection

“Naturally occurring” or “non-synthetic” does not mean “non-toxic” or safe as drinkable water, nor does a product having an OMRI or State of Washington label mean “without risk.” While the pesticide neem, for example, comes from the neem tree (*Azadirachta indica*), the label still contains the phrase: KEEP OUT OF REACH OF CHILDREN and has the EPA-required safety precautions. The Safer® Brand neem label notes how this organic pesticide can kill bees, so this naturally occurring product must also be used with an understanding of the potential environmental impact it might cause. The same is true with boric acid and sulfur; they must be used with care. All pesticides are inherently toxic to varying degrees; there is no such thing as a “non-toxic” pesticide—to be toxic is their job. Always apply pesticides per label instructions.

Table 2. Naturally occurring (non-synthetic) and synthetic materials that are allowed in pesticides for commercial organic produce production (as per label instructions)

Non-synthetic / naturally occurring	Synthetic (manufactured and/or mined)
Acetic acid (vinegar)	Ammonium carbonate (as bait)
<i>Bacillus subtilis</i> , <i>Bacillus thuringiensis</i> , and other allowed <i>Bacillus</i> bacteria	Ammonium soaps
Botanical extracts (e.g. garlic, chili, rosemary, mint, etc.).	Boric acid / orthoboric acid, and borax (disodium octaborate tetrahydrate / sodium tetraborate decahydrate)
Chitin (from the shells of crustaceans and other sources)	Chlorine materials
Citrus (extract)	Copper (fixed), copper hydroxide, copper oxychloride, copper sulfate (Bordeaux mixtures)
Ethanol (ethyl alcohol)	Ethylene
Gibberellic Acid	Ferric phosphate
Neem oil (Azadirachtin)	
<i>Pseudomonas syringae</i> , <i>Pseudomonas fluorescens</i> , and other allowed <i>Pseudomonas</i> bacteria	Hydrogen peroxide
Pyrethrins	Isopropyl alcohol
Soybean oil (and other vegetable oils)	Lime-sulfur
<i>Saccharopolyspora spinosa</i> (bacteria) (aka spinosad)	Oils (horticultural: crop, petroleum, mineral, and paraffinic based)
	Peracetic acid
	Pheromones
	Soap (horticultural, sodium/potassium salts + fatty acid)
	Sulfur (elemental)

Source: OMRI (6) and WSDA (7); subject to change.

Standard (WPS), are the same for all types of agricultural production. The NOP, however, only allows the use of specified pesticides or active ingredients on certified organic farms. The OMRI website (www.omri.org), for example, lists over 300 allowed pesticide products. Many have similar active ingredients, however, so the number of unique pesticides is less than 300. Active ingredients are the portion of the pesticide product that affect the pest. All pesticides have some level of toxicity and can be harmful to humans, animals, and the environment. Pesticides create active residues that last for varying lengths of time. This is one of the reasons pesticides must be used according to the labeled rate and quantity. All pesticides need to be applied with care and always per the label instructions. No exceptions. The labels are there to protect pesticide handlers/applicators, workers, consumers, and the environment. On commercial farms, the EPA requires that farmers use pesticide products specifically labeled for “agricultural use” and not for “home and garden” use.

In order to create sufficient amounts of organic pesticides for farmers and consumers nationwide, they must be manufactured in commercial facilities, under controlled conditions. Commercial quantities of organic pesticides are made or synthesized by extracting substances from a plant. They can also be made or manufactured by industrial processes from commercially available chemical supplies. Some of these ingredients, such as boric acid and elemental sulfur, are also mined from the earth. See Table 2 for examples of active ingredients allowed for use in organic pesticides.

Chitin and neem are naturally occurring, but others, including hydrogen peroxide, copper oxide, copper oxychloride, and peracetic acid, are not. At least, they are not naturally available in the quantities needed for national commercial use and therefore must be manufactured. Thus, the statement “Organic farmers cannot use commercial pesticides” is incorrect. The Organic Rule (§205.601) is specifically called “Synthetic substances allowed for use in organic crop production.” It is more accurate to say, “Organic farmers can only use pesticides that are on the National List of Allowed and Prohibited Substances, or are allowed somewhere else in the Organic Rule.”

The OMRI Status page of the OMRI website (<http://www.omri.org/suppliers/omri-status>) not only

lists allowed organic pesticides, it lists those *allowed with restrictions*. This means that only under certain circumstances can a particular allowed pesticide product be used. Farmers looking for a pesticide to use have three options: 1) consult with OMRI or WSDA, 2) get their certifier to review the formulation, or 3) consult with EPA. In all three cases, the certifying agent must still approve the use of the product as part of the review of the operation's organic system plan (see NOP Program Handbook, Policy Memo 11-4).



Look for EPA's logo to be sure the pesticide is allowed for certified organic production.

Postharvest disinfectants and sanitizers

Another category of chemical products or processes available to organic and conventional farmers is postharvest disinfectants and sanitizers. These products are used for rinsing, cleaning, and disinfecting surfaces and rinse water. Many of these products are disinfectants, a type of pesticide. Though not mentioned specifically in the NOP, they are found on the OMRI website under "Processing Sanitizers and Cleaners." At this time, 86 products are listed. Their active ingredients include chlorine, peracetic acid, hydrogen peroxide, potassium hydroxide, microorganisms, etc. A common misconception is that chlorine-based materials cannot be used in organic production or postharvest handling. They can be, if used as allowed in the NOP. As with all registered pesticides, the label is the law. Therefore, chlorine products and other NOP-compliant sanitizers and disinfectants must always be used according to label directions. This means they can only be used when a crop, crop group, or site is on the label.

Other aspects of organic production

This fact sheet is not a comprehensive treatment of what is allowed under the NOP. There are, however, a few uncertainties that often arise and need addressing.

Old land historically in conventional agriculture

The NOP mandates a 36-month waiting period between the last use of a "prohibited" substance (e.g., a

conventional pesticide or fertilizer) and the beginning of a farm's organic certification period. So if a piece of land was formerly in conventional sugar or pineapple production, for example, it can be ready for organic certification in 36 months if all other paperwork and conditions are acceptable.

"No spray" vs. "certified organic"

When any farmer claims that they are not spraying, generally, they are implying that no pesticides are being used, not even those on the EPA 25(b) list of Minimum Risk Pesticides. The expression "no spray" is not a government-regulated term. To make a product claim that is false, however, would alert State and federal consumer-protection authorities. A certified organic farm could adopt no-spray practices by not applying any pesticides by spray, but they are not required to do this by the NOP. Conversely, claiming that a farm does not spray pesticides does not mean that they are following all required NOP rules. In addition, "no spray" is not a Good Agricultural Practice, or a form of "food safety," as the U.S. Food and Drug Administration is currently using the term. A consumer buying from a farm claiming that no pesticides are used may consider asking how pests are managed, especially if the produce has little pest damage.

"Natural" and "green" vs. "certified organic"

"Natural" and "green," like "no spray," are unregulated terms used to market a product. They are meaningless in a regulatory sense, as they have no U.S. government-approved definitions. In contrast, "certified organic," is a regulated marketing term.

"Permaculture" and "biodynamic" vs. "certified organic"

"Permaculture" and "biodynamic" are unregulated food production methods. Some of their management decisions and inputs may not fit into the regulated framework of the NOP. Therefore, these two methods cannot automatically be equated with the term "certified organic."

Know what you are paying for at the market

As a consumer, how can you tell if a product is actually organic? The NOP, like many one-day audit systems, is an honor system. This is also the case for GAP audits for food safety. The annual audit validates the farm's

processes by observation and paperwork, not the products themselves. Certifying agents must annually sample produce from at least 5% of the farms they certify (§205.670(b)). There is no random sampling requirement for exempt organic farms. Of the certified farms sampled, the produce is sent to an ISO-accredited laboratory, which tests for prohibited substances, such as unallowed or illegal pesticide residues. In Hawai‘i, the required 5% was about 7 out of 140 certified organic farms in 2012. Effective September 12, 2012, the NOP also strongly encourages auditors to annually conduct unannounced audits on 5% of the farms they certify (9). Once a farm selling over \$5,000 a year of certified organic produce has been successfully audited, the producer can apply the USDA certified organic logo to their products.

The round, green U.S. organic certification logo is usually obvious on most produce and processed products. In addition, organic certification is represented by a “9” before the other four digits of the Universal Product Code (UPC), as shown in the graphic below.

Can any farmer legally claim to customers, in words or writing or by display, that their products are organic if they are not certified?

No. Only a legally exempt farm or business with sales less than \$5,000 a year can use the marketing term “organic” if they have followed the NOP regulations (processes, inputs, and record keeping) and are prepared for an audit. They cannot, however, use the USDA organic logo.



Banana on left, #4011, is non-organic. Banana on right is organic, as indicated by the “9” before the Universal Product Code, the UPC bar code.

Farms with sales over \$5,000 a year that have passed the mandatory annual organic audit can use both the enhanced marketing term “organic” and the logo. No other farms, even if they use some organic practices, can use the logo or the terms “organic” or “certified organic.” If they appear in any form as an adjective it is misleading and considered fraud, which is punishable by federal law under the NOP (§205.310). Remember, the NOP is a *federal marketing program*.

Summary

Farming under the NOP and consuming products marked with the NOP logo are the personal choices of two parties: farmers and consumers. Organic farmers are allowed to use narrow lists of farm-made and commercially produced non-synthetic and synthetic fertilizers, soil amendments, and pesticides (within EPA FIFRA rules). They can also use some commercially produced chemical disinfectants, sanitizers, and processing aids. It is their choice as commercial organic farmers whether to use an allowed product or not. They must, however, document these products for their annual review by a USDA-accredited certifying agent. Certified organic farms are listed here: <http://apps.ams.usda.gov/nop/>. The integrity of the NOP rests with each organic farmer and their specific farm-raised product labeled “USDA Organic.”

Sources

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More information

“Organic” Pesticides: What’s the Cost? http://www.ctahr.hawaii.edu/sustainag/news/articles/V5-CoxRadovich-org_pesticide.pdf

Organic Certification: Getting Started. <http://www.ctahr.hawaii.edu/sustainag/news/articles/V15-Radovich-OrgCert.pdf>

Organic Trade Association. <http://www.ota.com/pp/legislation/backgroundunder.html>

EPA’s Labeling of Pesticide Products under the National Organic Program (NOP). <http://www.epa.gov/opbppd1/biopesticides/regtools/organic-pr-notice.htm>

Can I Use This Pesticide on My Farm? http://lee.ifas.ufl.edu/AgNatRes/Pubs/‘Pesticides’_for_organic_farms.pdf

Will the Real Organic Pesticide Please Stand Up? <http://scienceinafrica.com/old/index.php?q=2004/september/organic.htm>

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