**HS966** 



# How are Organic Farming Inputs Evaluated?<sup>1</sup>

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USDA implementation of the National Organic Program (NOP) in 2002 has helped US organic farmers by codifying organic farming rules but has also contributed to the sometimes conflicting array of national and international standards. Moreover, the status of allowed, regulated, and prohibited organic farming inputs is not permanent, subject to ongoing evaluation and sunset or expiration deadlines of 5 years or less. As would be expected, entrepreneurs and consultants, noting the growth of the organic farming sector, are offering certification services that comply with US and international organic standards, especially for lucrative export markets like the European Union and Japan, whose standards may differ from US standards. By December 2002, there were 74 USDA accredited agencies, with 21 U.S-based and 34 foreign agencies also undergoing accreditation. One agency, OneCert, (http://www.onecert.net), includes requirements of the US, European, Japanese, Quebec, Swiss, and international standards and offers a free booklet that can be downloaded (Table 1).

Where does this leave organic farmers, producing for domestic and/or export markets, who want assurance their farming inputs are acceptable on all markets? In the past, farmers could ask their organic certifying agencies about production practices and farming inputs. Now the organic certifying agencies and their representatives can tell farmers what they're doing wrong but cannot make corrective recommendations. To deal with this, some agencies have developed legally separate 1) outreach or educational units and 2) certification operations. These outreach or educational units can provide recommendations.

Our purpose here is to not to list organic farming inputs but to explain how these materials are evaluated and where to find current online lists of inputs and regulations. All Web sites mentioned are listed in Table 1.

## **Two Major Information Sources**

Within the U.S. there are two major sources of information about organic farming inputs: 1) the USDA generic National List within the National Organic Program and 2) the generic materials list and the brand name products list published by the Organic Materials Review Institute (OMRI). The National List is approved by the Secretary of Agriculture with advice by a 15-member National Organic Standards Board (NOSB), appointed for five-year terms.

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#### **NOSB** and National List

The NOSB also advises the Secretary of Agriculture on other aspects of implementing the national organic program. The current board is comprised of four farmers/growers, two handlers/processors, one retailer, one scientist, three consumer/public interest advocates, three environmentalists, and one certifying agent who sit on various committees, including those on compliance, accreditation, certification; handling; materials; livestock and crops; policy and international issues. This organizational structure grew out of the Organic Foods Production Act of 1990, part of the 1990 Farm Bill. As mentioned above, a "sunset" provision originally provided for materials to remain on this list for five years but this time could be reduced. Therefore, this is more of a list in process, subject to petitions and rule changes and will be continually revised.

The National List contains both synthetic and nonsynthetic materials that can be used in organic production. For example, synthetic chlorine materials can be used but chlorine residues in water cannot exceed the maximum residual disinfectant limit under the Safe Drinking Water Act (10ppm). Nonsynthetic materials like ash from burning manure and tobacco dust (nicotine sulfate) cannot be used. Allowed materials can be used as needed. Regulated materials like herbicides containing acetic acid, clove oil, and thyme oil, can also be used, pending approval by the relevant certifying agency and prohibited materials like genetically modified organisms (GMOs) can not be used. In many respects the National List is a primary or generic list, identifying the type of materials that can be used like composted manure, elemental sulfur, and mulches but does not contain brand name products or manufacturers. This is where OMRI comes in.

#### OMRI

OMRI is a 501(c)(3) nonprofit organization that has no official connection with the USDA National Organic Program. However, OMRI reviews and approves brand name materials for use in organic production, processing, and handling according to the standards established under the National Organic Program. This brand name, third-party review is

conducted by an independent review panel that evaluates a product's compliance with the generic National List of the National Organic Program. Approved products are listed in crop, livestock, and processing categories. Approval by OMRI "assures their suitability for use in certified organic production," and is probably the most convenient list for growers to use. However, recent EPA public notices in the Federal Register (March 5, 2003, page 10477) provide guidelines for pesticide manufacturers to label their products for organic use without going through the OMRI process if the pesticide ingredients meet National Organic Program standards. Accordingly, if a product is not listed by OMRI, it may still be allowed under the National Organic Program.

Note also that both the National Organic List and the OMRI list evaluate materials primarily for their ingredients or constituents but not for their efficacy. OMRI also evaluates products based on information provided by the supplier and does not claim to guarantee product analysis or registration use as a pesticide.

The National List can be accessed by doing an internet search for the "National Organic Program" or by going to the web page listed in Table 1. The OMRI list is also available at http://www.omri.org/. Complete OMRI lists can be obtained by subscribing to OMRI for subscription fees ranging from \$50 (farmer) to \$200 (business). The OMRI lists are also copyrighted and therefore cannot be copied, requiring farmers, county agents, and other agricultural professionals to subscribe to obtain their own copies. Costs for reviewing materials for the OMRI list are based on gross company sales and the type of product such as composts, EPA registered pesticide, processing aids, etc.

#### National vs. International Standards

International organic standards may differ from US national organic standards and those exporting organic produce should become familiar with the standards of the International Federation of Organic Agriculture Movements, the European Union, the International Federation of Organic Agriculture Movements, Canadian Organic Standards, and Japanese Organic Standards (Table 1). The

International Federation of Organic Agriculture Movements (IFOAM), with headquarters in Germany, establishes international standards, accreditation procedures and policies and is more or less an international organic farming lobbying group, comparable to the Organic Trade Association within the US.

The European Retail Parties Good Agricultural Practices (EUREPGAP) is a global partnership that establishes standards and a verification framework for fruit, vegetable, ornamental producers and others.

The Japanese Agricultural Standards (JAS), formulated by the Japanese Ministry of Agriculture, Food and Fisheries recognizes USDA's national organic standards for the production, handling and processing of plant-based organic agricultural products. However JAS standards do not allow some materials permitted under the USDA standards like alkili-extracted humic acid, lignin sulfonate and potassium bicarbonate, used in raw or processed organic food exported to Japan. On the other hand, in the past, JAS standards have allowed GMOs in some fertilizers and soil inputs in materials but prohibit the use of GMO seeds and seedlings, some pest control materials, and some processing aids. Given the high demand for organic foods and drinks in Japan, the number of JAS approved certification agencies has increased from 30 in 2001 to over 130 in 2002. As organic sales have increased, so have the number and complexity of organic farming standards, regulations, rules, and certifying agencies. Fortunately, groups like OneCert, summarize different US and international standards, including US National Organic Program, European Regulations, Japan Agricultural Standard, Quebec Organic Reference Standards, Bio Suisse Standards, IFOAM Basic Standards and others.

### **Consulting Rules**

Another complicating factor is that according to National Organic Program Rules, certifying agents and their inspectors can no longer act in a consulting role. This will create situations in which a grower will be informed of failure to comply with a particular regulation of the National Organic Program but cannot be advised, either by the inspector or certifier, about how to remedy this situation. This procedure

was established to ensure that the decision to certify an operation is made by a person different from the one who conducted the review of documents and on-site inspection. Accordingly, some organic certification agencies have developed separate certification units and separate outreach or education units, the latter of which can consult on such problems. Extension agents, consultants, and others can also consult with applicants for organic certification about certification problems. This obviously creates a demand, and a need for extension agents to become more knowledgeable about complex organic farming standards.

#### Conclusion

As national and international organic production and markets increase, organic farmers, packing houses, and processors will have to become more knowledgeable about organic farming standards. When pesticide regulations became more complex, large farming enterprises, corporations, and land grant institutions hired pesticide coordination officers or consultants. This may also be the trend in organic farming.

 Table 1. Sources of online information about organic farming inputs and regulations.

Source	Abbreviation	Internet Address
National Organic Program	NOP	http://www.ams.usda.gov/nop/NOP/standards.html
Organic Materials Review Institute	OMRI	http://www.omri.org/
Japanese Organic Standard of Organic Agricultural Products	JAS	http://www.maff.go.jp/soshiki/syokuhin/hinshitu/ organic/eng_yuki_59.pdf
OneCert		http://onecert.net
European Retail Parties Good Agricultural Practices	EUREPGAP	http://www.skalint.com/homepage/services/ certificationprograms/eurepgap/eurepgap.html
International Federation Organic Agricultural Movements	IFOAM	http://www.ifoam.org
Organic Trade Association	OTA	http://www.ota.com