

Understanding Organic

Aloha mai kākou,

This is first in a regular series of columns on organic agriculture. The intent of these columns is to improve understanding in those unfamiliar with organic production and to provide a resource to growers interested in or currently producing organically. Let us know what you want to see featured by emailing theodore@hawaii.edu

The primary goal of organic agriculture is to enhance biological cycles in the soil and above-ground to meet our food and fiber needs in the short term, while sustaining the economic, natural and human resources required to ensure productivity in the long term. Resource cycling is also very important. Organic farming has its roots in indigenous cropping systems around the world, but really is a modern agricultural movement that coalesced in the first half of the 20th century. Since 2002, organic is also a labeling term in the U.S. that certifies a product has been produced through approved methods that integrate cultural, biological and mechanical practices. While synthetic fertilizers, sewage sludge, irradiation and genetic engineering may not be used, organic growers strategically incorporate new scientific knowledge and technology into their production systems via inoculants, precision irrigation, renewable energy and many other ways. It is important to note that not all synthetic inputs are prohibited in organics, and a limited number of pesticides may be used as a last resort to control pests if other preventative measures fail.

Organic agriculture has been big business in the U.S. since the 1980s and total organic sales was valued at \$35 billion in 2014. In Hawai'i, 262 farms (129 certified, 97 exempt, 36 transitional) had at least some acreage under organic production with farm gate sales value of \$6.3 Million according to the 2012 USDA Ag census. Recent annual growth rates have been ~5%. Total contribution of the industry to Hawai'i's economy is unknown. Exempt growers make <\$5,000 in total annual organic sales and are not required to be certified to sell as organic, while transitional growers cannot sell as organic. The University of Hawai'i's College of Tropical Agriculture and Human Resources manages three acres of organic land (established 1993, certified since 2009) at the Waimanalo Research Station, and certified organic research acreage is expanding statewide thanks to the support of HDOA and others.

All agriculture has benefitted in some way by the expansion of the organic sector in recent years, particularly since the dramatic increases in input costs in 2008. For example, low impact pesticides developed for the organic market are now being used by many conventional growers focusing on sustainability. Also, the organic sector has been a strong advocate for the development of Hawai'i based recommendations for cost effective cover cropping, composting and nutrient cycling that have been adopted across agricultural systems. While certified organic agriculture is not the only option for sustainable food production in the state, it can be a vibrant, evidence-based approach to food production; an approach that is here to stay, and one that we can all learn from. ■



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Resources for organic farming and gardening in Hawai'i

UH/CTAHR Organic

www.ctahr.hawaii.edu/organic/

HDOA Organic cost share program

hdoa.hawaii.gov/add/md/organiccostshare/

Hawai'i Organic Farming Association

www.hawaiiorganic.org

USDA AG Census

www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1_Chapter_2_US_State_Level/st99_2_042_042.pdf

USDA National Organic Program

www.ams.usda.gov/AMSV1.0/nop

USDA Economic Research Service statistics

www.ers.usda.gov/data-products/organic-production.aspx

Suggested Reading

Growing Organics in Hawai'i.

2014. Kohala Center.
www.kohalacenter.org/archive/laulima/oiag/HiOrganicIndustry_FinalReport_2014.pdf

Overview of Organic Foods Systems in Hawai'i.

2009. UH/CTAHR.
www.ctahr.hawaii.edu/oc/freepubs/pdf/SA-3.pdf

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

2013. UH/CTAHR
www.ctahr.hawaii.edu/oc/freepubs/pdf/FST-56.pdf

The New Organic Grower.

1995. Elliott Coleman. Chelsea Green Publishers.

Agroecology:

The ecology of sustainable food systems.

2006. Stephen Gleissman. CRC Press.

An Agricultural Testament.

1940. Sir Albert Howard. Oxford University Press.