

Farmers Rally to Stop USDA from Certifying Organic Hydroponics



The marchers led by Enid Wonnacott, Executive Director of NOFA VT and organic farmer Kate Duesterberg of Cedar Circle Farm. Photo courtesy: David Chapman

Organic without Soil Is Like Democracy without People

Introduction

Organic farmers from New England rallied in East Thetford, VT on October 30 to protest the eroding of organic standards by the U.S. Department of Agriculture (USDA), focused, in particular, on USDA's decision to permit organic labeling of hydroponic fruits and vegetables. Farmers descended on the National Organic Standards Board (NOSB) in the Fall of 2015 to challenge the allowance of hydroponics in organic. Since that time, the USDA-convened Hydroponic and Aquaponic Task Force (HTF) has issued a report, which may have elevated the confusion on an issue that the NOSB addressed in 2010 when it upheld the requirement that organic certified production must be soil-based.

The reports of the Task Force—two subcommittees of the Task Force wrote separate reports that were published under one cover—provide good evidence that hydroponics is not, and cannot be, organic. The subcommittees—the 2010 NOSB Recommendation Subcommittee (2010 SC) and the Hydroponic and Aquaponic Subcommittee (HASC)—have very different viewpoints. The former represents the view that organic production must be in the soil, and the second promotes certification of “organic” hydroponics. The confusion is heightened by a table in the document with columns labelled “NOSB 2010 Recommendation Summary” and “Task Force Analysis.” The format delivers an extremely misleading impression that the whole HTF supports the certification of “bioponics” as organic.

Without any confusion of message, farmers are saying no to hydroponic crops displaying the organic label. U.S. Senator Patrick Leahy, the prime sponsor of the federal organic law, joined the rally to say, “I know the fight we had to go through to get the original organic regulations passed,” he said. “The *Organic Food Production Act* [OFPA] is one of my proudest pieces of legislation. Every so often someone will try to undercut it. We know what grown in the soil means, and we know what hydroponic means. I want ‘organic’ to mean organic!” OFPA is clear that required systems plans are focused on the soil, stating (7 USC 6513, Organic Plan), “An organic plan shall contain provisions designed to foster soil fertility, primarily through the management of organic content of the soil through proper tillage, crop rotation, and manuring.”

The U.S. government is alone among developed countries in granting the much-desired “organic” label to hydroponic growing. Hydroponic production is a soil-less process that has long been the norm in conventional greenhouse production. Now it is fast becoming the norm in organic certification for several major crops, such as tomatoes and berries. Hydro plants are fed via fertilized irrigation water. This process has long been embraced by conventional greenhouse producers for its simplicity, high yields, and low costs. Experts say the explosive growth in hydroponic imports may force some organic farmers out of business in as little as five years.

A Vermont organic tomato farmer who served on the USDA Hydroponic Task Force, Dave Chapman, told the rally that the hydroponic incursion has become an “invasion,” as hydroponic producers worldwide discover that they can now gain access to America’s coveted organic market. Peppers from Dutch greenhouses that could never be certified as organic in Holland become “organic” when they cross the border. Hydroponic lettuce and tomatoes from Mexico and Canada are now pouring into the U.S. Driscoll’s, the world’s largest berry grower, now has over 1,000 acres of hydroponic berry production.

“The federal standards are being taken over by the hydroponics industry,” said Mr. Chapman, who noted that Driscoll’s is one of the

most powerful voices on the NOSB and in USDA’s National Organic Program. He continued: “Unless we can fight back, ‘organic’ will soon become meaningless. This hydroponic invasion has been almost invisible to the farmers and eaters of America, as no hydroponic food is labeled as such. The more that I learned serving on the USDA Task Force, the worse it got. Who knew that over 1,000 acres of Driscoll’s “organic” berries were actually hydroponic? None of us knew.”

The NOSB should take this matter up and reaffirm its 2010 decision to keep the soil in organic. **Let the Secretary of Agriculture know how you feel about the foundational importance of soil and soil biology in organic production: <http://bit.ly/soilisorganic>.**

Letter sent to the NOSB on October 26, 2016.

Dear NOSB Members,

Reading the testimony submitted to the NOSB on the debate around organic certification, we saw a comment that contained inaccurate statements that should be corrected. On August 3, Peter Jens submitted testimony on behalf of PuraNatura Foundation, a European pressure group lobbying in favor of the hydroponics industry. His letter included some misleading information. We feel it is necessary to submit this comment to shed some light on PuraNatura’s statement and give you an accurate picture of what is being discussed in the European Union (EU) on organic production.

According to the contribution by PuraNatura Foundation, the description of the organization’s growing techniques as using hydroponics in the Hydroponic and Aquaponic Task Force Report is wrong. Specifically, PuraNatura Foundation states that “*the text describes us as using hydroponics which is blatantly wrong,*” *emphasizing their growers’ use of “containers with a healthy mix from soil, compost, coco coir and peat.”* In addition, PuraNatura Foundation claims there is “*widespread use of out-of-soil growing practices throughout Europe.*” Both statements represent misinformation and need to be clarified.

Misinformation 1 –PuraNatura Foundation’s growing techniques are not hydroponic:

Growing on substrates such as coco coir is typical of modern conventional hydroponic practices, and coco fiber marketed towards commercial greenhouse producers is sold as a “hydroponic” substrate. The USDA Hydroponic Task Force subcommittee seeking to clarify the 2010 NOSB recommendation clearly accepted that the term “hydroponic” included growing on plant fibre substrates, and was not limited to mineral substrates such as rockwool. It is misleading to describe the cultivation in such growing media as comparable to natural living soil or non-hydroponic systems, in which the fertility is primarily derived from the natural release of nutrients through the gradual decay of organic matter and the myriad interactions with the soil ecosystem.



Pete Johnson of Pete’s Greens leads the tractors. Photo courtesy: David Chapman

The cultivation of plants in growing media, such as coconut husks and peat moss (plant fibre) substrates, does not allow plant roots to come into contact with the ground (soil and subsoil), and neither do these substrates represent living soil. When growing in such substrates, the nutrients are transported to the plants via a fertilizer solution in the irrigation, rather than coming from the substrate itself. The small volumes of substrate used in such systems would never be able to support crop growth without the use of liquid fertilizers from external sources as the primary source of fertility.

There are numerous examples of Dutch greenhouse growers producing crops on such substrates and marketing their hydroponically grown products as organic in the U.S., while these same crops are not permitted to be called organic in Europe. These same greenhouse growers are marketing the same products as hydroponic in Europe. Some of these greenhouse operators are affiliated with the PuraNatura Foundation.

Misinformation 2 –There is a widespread use of out-of-soil growing practices throughout Europe:

This is simply untrue. In the EU, Regulation 834/2007/EC sets the legal framework for organic production and includes a clear reference to soil-bound in organic production. Reg. 889/2008/

EC, which implements Reg. 834/2007/EC, goes even further as it was adopted to harmonize organic production practices among Member States and to introduce a ban on hydroponic techniques.

For most EU countries, growing in soil is interpreted as requiring that the cultivation of fruit and vegetables happens in the upper layer of the earth's crust, which is to say, in the ground. This approach is very much in line with the original definition of organic production, which considers that all organic growing should happen in the ground and should be soil-bound. In this way, these countries support a consistent communication to European consumers on the production methods of plants. They follow the core principle of organic agriculture, which is that the soil feeds the plant, the plant feeds the animal, and the animal feeds the soil.

However, a very few EU countries (representing only around 4% of the EU population) started to tolerate certain types of out-of-soil (container) techniques in organic production, which has created a lack of harmonization in organic practices in Europe.

This confusion paved the way for the European Commission to submit in 2014 a legislative proposal reviewing Reg. 834/2007/EC, for which negotiations between EU institutions (Parliament and Council) are expected to conclude in December 2016.

The current trends of discussions in the European Union support a clear position in favor of soil-bound organic production for ALL EU countries, and of a ban of all hydroponics in organic production.

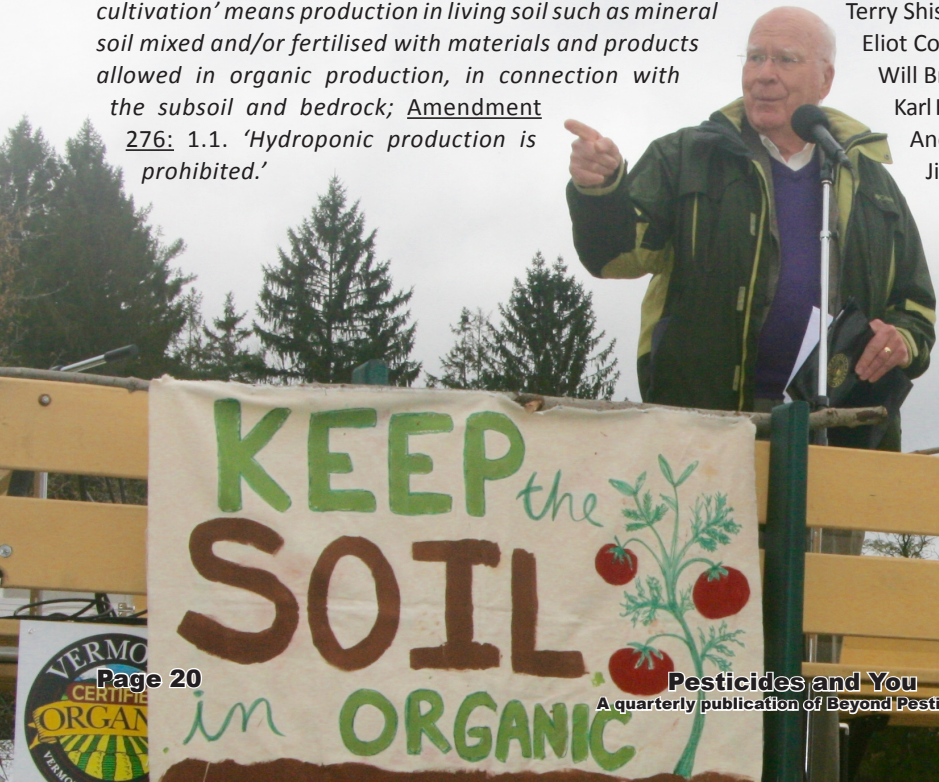
In mid-October 2015, the European Parliament Committee on Agriculture and Rural Development (COMAGRI) expressed its position for a stricter and clearer definition of soil-bound production and confirmed the prohibition of hydroponics in European organic agriculture, voting in favor of the following amendments: Amendment 102: (43e) 'soil-bound crop cultivation' means production in living soil such as mineral soil mixed and/or fertilised with materials and products allowed in organic production, in connection with the subsoil and bedrock; Amendment 276: 1.1. 'Hydroponic production is prohibited.'

Decision makers in the EU are standing with the positions of IFOAM-Organics International EU, the association that represents the interest of the organic sector in Europe. In IFOAM EU's position paper (2013) it is stated that "the main principle of organic greenhouse production: greenhouse production must be in living soil (mineral soil mixed and/or fertilised with materials and products included in Annex I of regulation (EC) No 889/2008) in connection with the sub-soil and bedrock."

As NOSB members, you have the chance to pave the way for clear standards in organic production. Your decisions will either create international alignment or will further cause international fragmentation. We urge you to pay attention to the arguments you will be confronted with and fight to keep our soil in organic, and organic in the soil!

Signed by:

- Dave Chapman, Long Wind Farm
- Jeff Moyer, Former Chair NOSB, Executive Director, Rodale Institute
- Eric Sideman, Ph.D., Former NOSB, Hydroponic Task Force
- Jay Feldman, Former NOSB, Executive Director Beyond Pesticides
- Joan Gussow, Ph.D., Former NOSB
- Goldie Coughlan, Former NOSB, board member of Cornucopia Institute Beyond Pesticides
- The Biodynamic Association
- Northeast Organic Farming Association (NOFA) NY
- Adrianna Natsoulas, Executive Director, NOFA NY
- Liana Hoodes, Former director, National Organic Coalition
- Tom Beddard, Lady Moon Farms
- Will Raap, Founder, Gardeners Supply
- Alan Schofield, President, Organic Growers Alliance
- Stuart Hill, Ph.D., Retired professor of soil zoology McGill University
- Davey Miskell, Miskell's Premium Organics
- Fredrich Jobin-Lawler, Abri Vegetal Farm
- William Liebhard, Ph.D., Emeritus prof UC Davis, Former chief scientist Rodale Institute
- Thea Maria Carlson, Co-Director, The Biodynamic Assoc
- Barth Hall, P. Ag, Prairie Star Farm
- Anais Beddard, Lady Moon Farms
- Terry Shistar, Ph.D., Board member Beyond Pesticides
- Eliot Coleman, Four Seasons Farm
- Will Brinton, Ph.D., President, Woods End Laboratories
- Karl Hammer, Farmer, President, Vermont Compost Company
- Andrea Hazzard, Hazzard Free Farm Grains and Beans
- Jim and Megan Gerritsen, Wood Prairie Family Farm



U.S. Senator Patrick Leahy (D-VT) speaks at the rally. Photo courtesy: David Chapman