The Allowance of Green Waste in Organic Production Systems

In 2009, the California Department of Food and Agriculture (CDFA) found bifenthrin residues in samples of three different commercial green waste composts. Bifenthrin is a synthetic pyrethroid insecticide that is prohibited under the NOP regulation. Acting under their authority as a State Organic Program and under advisement from the National Organic Program, CDFA advised organic producers and accredited certifying agents in California that these three green waste composts were not allowed to be used in organic crop production.

In the fall of 2009, the NOP sent a draft policy to accredited certifying agents that addressed pesticide residues in compost. We received six comments, all of which urged the NOP to take an alternative approach. In January 2010, a meeting was held in Monterey, California to discuss the draft policy and other alternatives.

In March 2010, the NOP received compost test results from CCOF, an accredited certifying agent. Samples were collected from crop fields where green waste compost had been applied in July 2009, at the rate of 5-6 tons per acre. The green waste compost had been tested in December 2009 and showed bifenthrin residues of 0.09 ppm. Bifenthrin residues were not detected in any of the soil or crop samples, collected in February 2010, at a limit of detection of 0.01 ppm.

After considering comments and the sample results, the NOP is providing this information to certifiers, certified producers and other interested parties concerning the use of green waste and green waste compost in organic production systems.

Definitions
- Green waste is biodegradable waste that can be composed of garden or park waste, such as grass or flower cuttings and hedge trimmings, as well as domestic and commercial food waste. Green waste is often collected in municipal curbside collection schemes or through private waste management contractor businesses.
Compost, as defined in the NOP regulations at 7 CFR 205.2, is the product of a managed process through which microorganisms break down plant and animal materials into more available forms suitable for application to the soil.

- Feedstocks are bulk raw materials that are mixed together during the composting process.

Instructions

The Organic Foods Production Act of 1990 (OFPA), 7 U.S.C. Section 6501, et. seq., as amended, as implemented in 7 CFR Part 205, National Organic Program (NOP) Final Rule, regulates the production, handling, processing, and labeling of all raw or processed agricultural products to be sold, labeled, or represented as organic in the United States.

The NOP regulations support the use of composted plant and animal materials to maintain or improve soil organic matter. According to 7 CFR 205.203(c):

*The producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances.*

Approved feedstocks for compost include:

- Plant and animal materials, such as, crop residues, animal manure, food waste, yard waste;
- Nonsynthetic substances not prohibited by 7 CFR 205.602;
- Synthetic substances specifically allowed for use as a compost feedstock per 7 CFR 205.601.

Compost that is produced with prohibited feedstocks such as urea, recycled wallboard, or sewage sludge is prohibited. The NOP does not allow the use of compost that contains synthetic substances that are not on the National List. 7 CFR 205.203(e) states:

*The producer must not use: (1) Any fertilizer or composted plant and animal material that contains a synthetic substance not included on the National List of synthetic substances allowed for use in organic crop production;*
However, the NOP regulations were established with recognition that background levels of synthetic pesticides may be present in the environment and, therefore, may be present in organic production systems. This is referred to as unavoidable residual environmental contamination (UREC) in the regulations. Furthermore, the NOP standards are process based and do not mandate zero tolerance for synthetic pesticide residues in inputs, such as compost. Compost that is produced from the approved feedstocks, listed above, is acceptable for use in organic production, provided that any residual pesticide levels do not contribute to the contamination of crops, soil or water.

Green waste and green waste compost that is produced from approved feedstocks, such as, non-organic crop residues or lawn clippings may contain pesticide residues. Provided that the green waste and green waste compost (i) is not subject to any direct application or use of prohibited substances (i.e. synthetic pesticides) during the composting process, and (ii) that any residual pesticide levels do not contribute to the contamination of crops, soil or water, the compost is acceptable for use in organic production.

Approval

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