Copper Compounds

Summary

Support the Crop Committee's addition of a periodic testing requirement to ensure that copper residues do not build up in the soil to the extent that they pose a threat to soil-dwelling organisms.

Include language in the recommendation implementing the committee's intention to "work with the National Organic Program to advance guidance that ensures that organic operations are strictly meeting, and to the extent possible, exceeding the standards established by the product label in meeting principles of sustainability and a sustainable work environment for all those who work in organic production."

Change the listing to reflect the crops and diseases where copper compounds are used so that future sunset examinations can make a more informed decision.

More Details

A number of copper-based compounds are permitted for plant disease control in organic production. While recognizing the long history of use of these copper-based fungicides in organic production, we have many concerns about the ecological and human-health impacts of their use.

Ecological Impacts

The Technical Review documented a number of ecological impacts on the terrestrial ecosystem. These include:

- toxic impacts on all forms of life from copper mining,
- threats to honeybees,
- possible phytotoxicity,
- toxic effects on earthworms, fungi (including mycorrhizae), bacteria, and most soil animal life, and
- a potential to build up in soil and decrease the productivity and filter and buffer capacity.

Copper compounds have the potential to destroy aquatic ecosystems, and therefore must be kept out of waterways.

Human Health Impacts

Human health effects include corrosivity, liver disease, anemia, reproductive effects, mutagenicity at high doses, equivocal tumorigenicity, and effects on testes and other endocrine glands. It is especially hazardous to workers and those with Wilson's disease.

EPA requires a reentry interval of up to 48 hours following application and personal protective equipment during application. Although copper compounds are known to be irritating and corrosive to mucous membranes, the respiratory tract, and particularly the eyes, not all labels require eye and respiratory protection. Enforcement of the Worker Protection Standard has been notoriously lax and cannot be depended on to protect farmworkers.[1] A number of reports have concluded that organic farms are not sustainable for farmworkers, even though they offer improved conditions in some respects.[2] So, we support the Committee's intention to work with the NOP to produce guidance that ensures that "organic operations are strictly meeting, and to the extent possible, exceeding the standards established by the product label in meeting principles of sustainability and a sustainable work environment for all those who work in organic production." We would like the Board to adopt this intention formally as well.

Need

The listing for coppers does not specify the crops and diseases where it may be used. We believe that the NOSB cannot make an informed decision about the need for these chemicals without performing a specific analysis of need. Furthermore, OFPA requires ((7 U.S.C. 6517):

> Content of List. The list established under subsection (a) of this section shall contain an itemization, ***by specific use or application***, of each synthetic substance permitted under subsection (c) (1) of this section or each natural substance prohibited under subsection (c)(2) of this section. [Emphasis added.]

This requirement is not being met in the case of the listing for coppers because the "specific use or application" is missing.

Recommendations:

We support the Crop Committee's addition of a periodic testing requirement to ensure that copper residues do not build up in the soil to the extent that they pose a threat to soil-dwelling organisms.

We would like to see the NOSB include language in the recommendation implementing the committee's intention to "work with the National Organic Program to advance guidance that ensures that organic operations are strictly meeting, and to the extent possible, exceeding the

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[1] See for example, Farmworker Justice and Oxfam America, 2010. Weeding Out Abuses: Recommendations for a law-abiding farm labor system. http://www.fwjustice.org/files/immigration-labor/weeding-out-abuses.pdf

[2] Aimee Shreck, 2005. Farmworkers in organic agriculture: Toward a broader notion of sustainability. UC Sustainable Agriculture Research and Education Program, Vol. 17 No. 1 http://www.sarep.ucdavis.edu/newsltr/v17n1/sa-1.htm

Ron Strochlic, Cathy Wirth, Ana Fernandez Besada, Christy Getz, 2008. Farm Labor Conditions On Organic Farms In California. http://www.cirsinc.org/Documents/Pub0608.1.pdf

standards established by the product label in meeting principles of sustainability and a sustainable work environment for all those who work in organic production."

We would like to see the listing changed to reflect the crops and diseases where it is used so that future sunset examinations can make a more informed decision.

For More Information and To Submit Comments

More information about copper compounds can be found in the Crops Committee section of the NOSB meeting packet, and under the listings for coppers, fixed and copper sulfate in the NOP Petitioned Substances Database.

You may submit comments at the Regulations.gov website. Please identify your comments with "CC: coppers". You will have 20 minutes to type comments of 2000 *characters* or less, or you may upload a file. You may see a list of all comments that have been submitted on all proposals here.