

Formal Recommendation
From: National Organic Standards Board (NOSB)
To: the National Organic Program (NOP)

Date: October 29, 2015

Subject: Annotation change for Micronutrients at §205.601(j)

NOSB Chair: Jean Richardson

The NOSB hereby recommends to the NOP the following:

Rulemaking Action: X

Guidance Statement:

Other:

Statement of the Recommendation:

The recommendation is to change the annotation for micronutrients from:

205.601 (j) - As a plant or soil amendment.

(6) Micronutrients - not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil Deficiency must be documented by testing.

to:

205.601 (j) - As a plant or soil amendment.

(6) Micronutrients - not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Deficiency must be documented.

Rationale Supporting Recommendation (including consistency with OFPA and Organic Regulations):

NOSB opinion and public comment during the sunset review indicated that limiting the use of micronutrients by soil testing is outdated. There are a number of other accepted ways to determine deficiencies, including tissue testing, professional opinions from agronomists and crop advisors, extension publications, and regional knowledge. It is expected that the evaluation by ACAs of the need for micronutrients will continue to verify that the annotation is being complied with sufficiently.

NOSB Vote:

Motion to change the annotation for Micronutrients as follows:

205.601 (j) - As a plant or soil amendment.

(6) Micronutrients - not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Deficiency must be documented.

(i) Soluble boron products.

(ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt.

Motion by: Zea Sonnabend

Seconded by: Francis Thicke

Yes: 12 No: 1 Abstain: 1 Absent: 0 Recuse: 0

Outcome: Motion passed

**National Organic Standards Board
Crops Subcommittee
Proposed Annotation Change
Micronutrients, 7CFR 205.601 (j)(6)
July 7, 2015**

Introduction

Micronutrients are widely used, but in tiny amounts, by organic farmers to correct deficiencies in areas with regional deficient soils or crops with particular micronutrient needs. The existing annotation is not optimal to reflect the way organic farmers stay ahead of their problems, because it requires a corrective action once the system is out of balance, rather than a proactive action to keep an organic agroecosystem in balance. The limitation to only soil testing for deficiency is outdated and needs a more comprehensive approach.

Background

205.601 (j)(6) - As a plant or soil amendment.

Micronutrients—not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing.

- (i) Soluble boron products.
- (ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt.

Relevant areas in the Rule

205.601 (j) - As a plant or soil amendment.

(6) Micronutrients—not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Soil deficiency must be documented by testing.

- (i) Soluble boron products.
- (ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt.

Discussion

Public comments were requested and received on the first posting (April 2015) for the Sunset 2017 Micronutrients listing. The question was posed: "Does the current annotation apply to today's practices and procedures?" A dozen or more responses from growers and certifiers indicates that the soil deficiency testing sentence was outdated. A number of other viable ways to determine deficiencies of micronutrients were offered by commenters, including:

- Tissue testing.
- Known regional deficiencies, such as zinc, iron, and boron that are confirmed by cooperative extension agents and publications.
- Professional crop advisors and agronomists who know the nutrient needs of specific crops and regions and will write recommendations for correction before the problem of deficiency occurs.

In addition it was pointed out by commenters, "Although the need for micronutrient use can be demonstrated through soil and/or plant analysis, please consider that waiting for a deficit situation to

prove the need is not healthy approach for crops. It is the equivalent of not feeding people fruits and vegetables until they are deficient in vitamins."

It was also pointed out that there may be a complex combination of soil biological components that inhibit the uptake of a particular micronutrient into the plant, even though a soil test shows that the micronutrient is present in adequate amounts in the soil. In these cases a professional agronomist or crop advisor could figure out that a nutrient was deficient even if a soil test doesn't show it.

It is also worth mentioning that several growers from the western (arid) states indicated that even with decades of intense soil building with compost and organic matter, there has been little improvement in the micronutrient concentration in soils at the levels needed for tree fruits.

Therefore a simple change to the annotation is being proposed. Instead of the sentence, "Soil deficiency must be documented by testing," we are proposing, "Deficiency must be documented." This change allows for the deficiency to be documented by other types of testing, professional recommendation, or published information specific to a crop or region.

Recommendation

Motion to change the annotation for Micronutrients as follows:

205.601 (j) - As a plant or soil amendment.

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(i) Soluble boron products.

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Subcommittee Vote

Motion by: Zea Sonnabend

Seconded by: Francis Thicke

Yes: 5 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Approved by Zea Sonnabend, Subcommittee Chair, to transmit to NOSB August 25, 2015