

Action Opportunities Worksheet



Team: Secondary nutrients (Ca, Mg, S, Organic Matrices, Sampling...)

Near Term

- Humic and fulvic acid methods
 - - UPDATE: The Humic and Fulvic acid going through the ISO process – need labs for collaborative study
- Finding a reference standard for a high (80-90%) sulfur. There is a standard available – sulfur flour, which is 98% (fisher, sigma, etc)
- How do we prove that there is no need for matrix dependent curves when utilizing combustion with TCD detection.
- Handling of microbial products
 - collection of methods used by state labs

Long Term

- Microbial plate count
 - Monitor commercial lab methods
 - Feedback from producers
 - SUIP ???
 - Committee for Biostimulants ?

Action Priorities Worksheet



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Not Capable/High Priority

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Capable/High Priority

- Total S
 - Combustion – SLV published
 - Method must be able to operate with a single calibration, as opposed to separate curves for different matrices.
 - Standard – John Peterson

Not Capable/Low Priority

Capable/Low Priority

- Microbial products – contact current labs for info on analysis of specific microbial species.
 - Dr. Ames, Dr Michael Carigelli – USDA-ARS cavigelM@ba.ars.usda.gov
 -
- Organic matrices: No existing QC; wood chips, feathers, etc.
 - Natural non-synthesized material testing of minerals
 - Magruder special sample? Dried ground compost?
 - Magruder sample particle size and uniformity? Can be an issue with



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1	Action Idea: Total Sulfur via combustion SLV	Champion: Sandy, Mel	Date Started: 2/2012	
			Target Completion: 2/2017	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
Prepare for SLV for total S via combustion:		Elementar	published	✓
Request for collaborators for MLV		Elementar	May 2016	
Submit NWIP to ISO-TC134		HR / Elementar	May 2016	

2	Action Idea: Humic & Fulvic acid method	Champion:	Date Started: 2/2012	
			Target Completion: 2/2017	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
SLV – published in JAOAC			completed	✓
Method submitted to ISO-TC134		L. Mayhew	April 2015	✓
MLV in progress – practice samples submitted		L. Mayhew	April 2016	



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3	Action Idea: Natural, non-synthesized material preparation study	Champion: Deb	Date Started: 2/2012	
			Target Completion: 2/2017	
WHAT needs to be done?		WHO will do it?	WHEN will it be done? ✓	
Include more organic/natural materials in the Magruder program		Bill Hall	8/2012	√
Review data from some organic samples, determine next steps		Frank / James/ Hugh	Aug 2016	
contact James Bartos on issues with these sample types			Aug 2016	
Contact USDA RE: N-P-K results on biochar samples				

4	Action Idea: Handling of microbial products	Champion: HR	Date Started: 2/2012	
			Target Completion: 2/2017	
WHAT needs to be done?		WHO will do it?	WHEN will it be done? ✓	
Polling of commercial entities on methods				
Handling of products – transport, storage, stability, etc.				
Check with PGR AI's e.g. hormones, Dr. Kloepper Auburn				
Eco-technologies, Amherst MA, Biofertility, Dr. Haim Gunner 413-253-7200				
SUIP for these products ???				



Action Assignments



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<input type="checkbox"/> Action Idea:	Champion:	Date Started:	
		Target Completion:	
WHAT needs to be done?	WHO will do it?	WHEN will it be done?	<input checked="" type="checkbox"/>

<input type="checkbox"/> Action Idea:	Champion:	Date Started:	
		Target Completion:	
WHAT needs to be done?	WHO will do it?	WHEN will it be done?	<input checked="" type="checkbox"/>