

Action Opportunities Worksheet



Team: SR/Beneficial

Near Term

Silicon – Champion Steve a preferred method has been identified and being fine-tuned

Methodology proof of SR for nutrients, specifically P – Contact Carolina for additional work on specific products and applications.

SR Micros (polymer coated compound) – 7 day Dissolution test – Use SR, method but may need a new champion. Chinese, Japanese, Scotts,

Engage Sadepan to cooperate with method validation and development.

Contact Bob Ames...

Sampling – Bulk Bag Study Submission

FFAA Study Take Comments ->180 seconds, Astroturf vs catch pans how much to catch,

Liquids - Don't go there!

Sizing – Sieves vs Auto Sieve vs Electronic, More BB Workshop, Automated Sieve analysis and calculations

Sample Prep Grinding, recommendations, grind size and Dust control addition impacts micros analysis heat, DCA, impacts

Long Term

Identify analytical method for Biochemical substances (byproducts of microorganisms) identify substances and quantify in a concentrate applied to fertilizer or soil (soil amendment now want to claim as a beneficial substance). Range of products that could be registered (e.g. phosphatase enzymes). Add biochemistry additive without organism to see if it is efficacious a problem pull biochemical and analyze. Reference product might show difference in the extract.

Model to correlate EEF's to NUE - Call Dr. Reitz IPNI/FAR – Collect use and yield/ environmental data conduct correlation study – **Sounds like a good idea! Pass on to Harold Reetz**

Additive method that would measure products that **extend availability** of nutrients and tests that could validate the effectiveness Bill will find Avail proposed def. email. **Mel the draft Modified Availability Term for SR contact SFP**

Slow Release Water Soluble N

Method develop for measuring controlled release content (HPLC, C 13, NMR) Research CEN Method, contact Hojjatie, Champion- Kurt Gabrielson GP

Slow Release Water Soluble N

Method development to correlate % CRN to soil incubation method - SLV on soil method - possible variation with more soil or other media to increase CEC to assess liquid WSSA materials. Kurt will investigate media to mimic higher retention capacity soils.

VRT Calibration and delivery,

Definitions, SRC, Release of UF and MU's Need Standard, Salt out temp for Liquid SR materials

Action Priorities Worksheet



Team:

Not Capable/High Priority

Capable/High Priority

Not Capable/Low Priority

Capable/Low Priority



Team:Samp/SR

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1	Action Idea: Complete SLV on SR Method	Champion: C. Medina	Date Started:
			Target Completion:
WHAT needs to be done?	WHO will do it?	WHEN will it be done?	✓
Prepare and write the SLV Journal Article. Carolina	C. Medina	6/12	✓
Compare completed tasks versus AOAC checklist See BH	Bill	03/12	✓
Write proposal for SLV circulate to LS committee & AOAC	Bill	05/12	✓
Particle size testing protocol study to determine sampling and sample prep Don Storer or Fred to get Donna Brown Agrium, Sylacauga info. Bill will get contact info.	Bill /Donna	05/12	✓
Complete ambient correlation method written up in AOAC format. Reviews by Mel & Hugh	Carolina & Bill	6/12	✓
Additional contact/newsletter update: SSSA (Joe S., Alley) USDA NRCS, FLDEP, Brazil, CEN, AUS, IPNI (Snyder), Agrium, Lebanon, Florikan, Synagro, (Biosolids & compost & litter groups), Japan, ICL, BASF, Aglukon, Chinese, FL, CN, AR (Robbins), CA, TX, MN, MD, MI, WI, NY, LA, WA	Bill & Mel	05/12	✓
Have group review samples to include in study (Input needed – WSSR Michael, Everris, Sadepan	Hugh, McMurry, Blaylock, Lucas	05/12	
Verify that P, K Sec & Micro's are continued in work	Bill & Carolina	6/11	✓
Submit SLV method validation to AOAC	Bill & Carolina	6/12	
Send Nancy Carolina's Dissertation	Bill	2/28	✓
Get agreement on funding Nancy's time via TFI	Bill	3/15	✓
Rhonda source for sample size determination	Bill	3/15	✓

2	Action Idea: Silicon – Identify a Champion and a preferred method to study	Champion: Steve Miranda & Dennis Sebastian	Date Started:
			Target Completion: 2/12
WHAT needs to be done?	WHO will do it?	WHEN will it be done?	✓
Contact Sebastian champion? Contact Dr. Korndorfer	Steve	05/10	✓
Electronic copy available of proposed methods	Dennis	04/11	✓
Contact P. Johnson Re: Terms & Labeling Agenda	Steve	05/11	✓
Hound Bill Hall to send Si method files to Steve	Steve	Done	✓

Contact S. Siegel on his recollection of Si methods	Steve	Done	√
Attend next AAPFCO and Lab Serv. meeting in DC 08/09	Steve	Done	√
Optimization of revised method -	Korndorfer	Done	√
John, will check with USDA about grant \$\$	J Yzenas	4/30/13	
Collect materials for Colab Study. & Thornton Labs	Mary & Dennis	4/30/13	
Investigate Joint ISO AOAC Pathway	Bill & Hugh	8/13	
Follow-Up: Call TBD after visit with Dr. Korndorfer	Dennis	4/11	√
Complete and Submit Journal Article to AOAC	Nancy & Dennis	4/12	√
Investigate alternate path for method validation	Steve	4/12	√

Team:

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3	Action Idea: Water Soluble Slowly Available N Method develop for measuring controlled release content (HPLC, C 13, NMR) Research CEN Method	Champion: Contact Kurt	Date Started:	
			Target Completion:	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
Contacts , Leon Terlingen, Gary Schmunck & Greg Volgas, Helena Chem.		Mike	06/12	√
Develop soil method modification to determine release rate for WSSAN products. Update in 08/09		Mike	06/12	√
Research current HPLC methods (US 2003.14 and CEN 15705) for quantitation. May need standards.		Mike	6/12	√
Contacts: Claire Reinbergen 800-648-7626 Growth Prod. Kurt Gabrielson-770-593-6848 kurt.gabrielson@kochind.com		Bill	3/12	
Mike will work with Bill and Nancy to gather data & prepare journal article & investigate method modification approach.		Mike & Bill	5/12	√

4	Action Idea: Methodology proof of SR for nutrients, specifically P & K	Champion: Richard Vincent	Date Started:	
			Target Completion:	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
Contact Dr. Sartain (UF) on specific product applications – support making claims for SR P & K		Bill	3/11	
Plan Accelerated work for Milorganite		Bill	04/11	
Research if data supporting SR portion (total – available) of product has agronomic benefit exists.		Bill	05/11	
Reg – Can total P be added to the label? Yes , if agronomic data can be provided that the non – “method” available portion is available over time can a SR claim be made? What data would be needed? Joe SR & labeling agenda		Bill/Joe/Teresa + Lynn Sheridan	5/11	√

Research data for biosolids and other organic sources to see if P availability data exists. Contact Converted Organics for data.	Richard	06/12	
Organically complexed S Contact Sola	Bill	02/23/12-10:00	√
Elemental S as SR S	Bill	02/23/12-10:00	√
Contributors – Scotts, Everris, Chisso, Sidepan, Florikan, John Deere, Chinese SCU & PSCU, Lebanon, (Methex), ICL	Bill	8/12	
Bill will pull data for P, K, Sec and Micros into a presentation	Bill	8/12	

5	Action Idea: Identify analytical method for Biochemical substances (byproducts of microorganisms) (soil amendments want to claim as beneficial substance)	Champion: Bob Ames	Date Started:	
			Target Completion:	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
Identify beneficial or Microbial substances and quantify in a concentrate applied to fertilizer or soil.		Ames	TBD	
Check Contaminants FAME & ?		Ames	Ongoing	
Check with PGR AI's e.g. hormones, Dr. Kloepper Auburn		Ames	Ongoing	
Eco-technologies, Amherst MA, Biofertility, Dr. Haim Gunner 413-253-7200		Steve/Bob	03/11	
MI St. & UK Study reference		Mel/Bob	03/11	
AOAC contact Scott Coates AOACI research institute		Ames	03/11	
Contacts: SSSA, USDA (Dr. Sarah Wright), Biological's group, International (Chinese) ,		Ames	4/11	
Procedure for Plate counts (CFU's/??), ID defined beneficial organisms, Organism list - species, quantity TBD		Ames/Hugh	2011	
Product on soil affects, not plant response? Tri-Societies?		Joe	2012	
Bill will contact AMS to offer specific invitation to Forum		Bill	3/12	

CEN Coordinating available phosphate

6	Action Idea: Residual Coatings	Champion:	Date Started:	
			Target Completion:	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
Need protocol describing environmental fate of coatings				
Contact Canada for information		Roger Alan B.	4/12	
Contact EU- Leon Terlingen (ICL)		Bill	3/13	
UK, Bill will send reminder		Mel	4/12	
Saito JAC in Japan		Bill	6/13	

7	Action Idea: Humic Substances/Humates	Champion:	Date Started:	
			Target Completion:	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
Contact Lawrence Mayhew about obtaining standards and current methodologies Need to work through Forum		Roger/Bill	4/12	
Chelated and Sucrate sources analysis FL is only one testing regularly. On FL Website for review. Ca ?		Patty	07/12	
Microscopic analysis methods? Contact FL for Info/method		Patty & Roger	4/12	
Worldwide Extraction procedure for all nutrients!!! Make clear recommendation on how to phrase the issue. Possible call with Frank Sikora.		Bill, Rhonda, Mel & James	7/12	

8	Sampling – FFAA Study Take Comments ->180 seconds, Astro turf vs catch pans how much to catch,	Champion: Bill - Patty	Date Started:	
			Target Completion:	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
Bulk Bag Study Submission, Submit FFAA – Take comments before Phase II; Plan Phase III plant scale test - When Where What Blends? Safety?		Bill & Mike H. Bill & Harold	Summer?	

9	Sizing – Sieves vs Auto Sieve vs Electronic, More BB Workshop, Automated Sieve analysis and calculations	Champion:	Date Started:	
			Target Completion:	
WHAT needs to be done?		WHO will do it?	WHEN will it be done?	✓
List of options and equipment – AOAC validation? Sieve vs Electronic study		Bill & Harold		

10	Sample Prep Grinding, recommendations, grind size and Dust control addition impacts micros analysis heat, DCA, impacts	Champion:	Date Started:
			Target Completion:
WHAT needs to be done?		WHO will do it?	WHEN will it be done? ✓

11	Review and harmonize SR/CR Definitions and terms – Eliminate T29? Occluded where does it fall?	Champion:	Date Started:
			Target Completion:
WHAT needs to be done?		WHO will do it?	WHEN will it be done? ✓