

Microbe Inotech Laboratories (MIL) ran a bacteria count test for our product Soysoap. The product was labeled and sent to MIL as Wakeup and Wakeup Beta, and you see it mentioned in this report. As the report shows there the bacteria multiplied and increased when tested at 24 and 48 hours. Beta even increased the bacteria growth over the control.

REPORT OF ANALYSES

PREPARED BY:

MICROBE INOTECH LABORATORIES, INC.



the MiL, Inc.

Celebrating 20 Years of Excellence in Microbiology and Service

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TESTING ON HOW THE PRODUCT WAKE UP AFFECTS THE BIOLOGICAL ACTIVITY OF AGRISERUM AND PIT POWER.

THE FOLLOWING TEST WAS CONDUCTED ON 4/21/2011:

3 FIVE GALLON BUCKETS WERE WASHED THOROUGHLY. TWO GALLONS OF CLEAN WELL WATER WAS ADDED TO EACH 5 GALLON BUCKET. BUCKET NUMBER ONE WAS LABELED CONTROL, BUCKET NUMBER 2 WAS LABELED WAKE UP, and BUCKET NUMBER 3 WAS LABELED WAKE UP BETA.

ONE OUNCE OF WAKE UP WAS ADDED TO BUCKET NUMBER 2. ONE OUNCE OF WAKE UP BETA WAS ADDED TO BUCKET NUMBER 3. NEXT THREE OUNCES OF AGRISERUM WAS ADDED TO BUCKET NUMBER ONE (CONTROL), THREE OUNCES OF AGRISERUM WAS ADDED TO BUCKET NUMBER 2 (WAKE UP), THREE OUNCES OF AGRISERUM WAS ADDED TO BUCKET NUMBER 3 (WAKE UP BETA). THE BUCKETS WERE ALL STIRRED. NEXT A 12 OUNCE SAMPLE WAS REMOVED FROM EACH BUCKET AND PUT IN A SAMPLE BOTTLE. THE SAMPLES WERE THEN TRANSPORTED TO MICROBE INOTECH LABORATORIES IN ST. LOUIS, MO. NOTE THE SAMPLES WERE MIXED TOGETHER APPROXIAMTLY 2 PLUS HOURS BEFORE TESTING.

	RESULTS	
	24HR	48HR
CONTROL	4.46×10^6	8.52×10^6
WAKE UP	5.85×10^6	7.85×10^6
WAKE UP BETA	6.73×10^6	1.31×10^7

Microbe Inotech Laboratories, Inc.
Summary Report of Analysis
[MILB – 7897A]

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April 25, 2011

Description and Chain of Custody Record Information:

- Thursday, April 21, 2011 – 12:31PM: Received by Client delivery three (3) liquid samples for Total Heterotrophic Plate counts (TPC).
- Mil Report and Invoice Number: MILB-7897A

Processing:

Within 20 minutes of reception an aliquot from each sample is checked for weight or volume and serially diluted. The dilutions are aseptically transferred in a laminar flow biological cabinet and plated in the following manner(s):

- [Standard Bacterial Plate Count 9215 - standard spread plate method] Within 20 minutes of reception an aliquot from each sample is checked for weight or volume and serially diluted. The dilutions are aseptically transferred in a laminar flow biological cabinet and plated onto previously prepared and dried TSA medium (for bacterial enumeration) in Petri plates. Observations for Colony Forming Units per 1 milliliter (CFU/mL) are made after 24 and 48 hours of incubation at 30°C for bacterial counts.

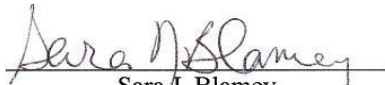
Results:

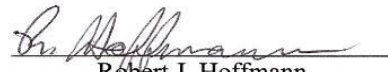
DATA: Results Reported as Colony Forming Units per 1 milliliter of sample (CFU/mL)			
Sample Number	Sample Name	Results	
		24HR	48HR
7897A-1	Control	4.46 x 10 ⁶	8.52 x 10 ⁶
7897A-2	Wake Up	5.85 x 10 ⁶	7.85 x 10 ⁶
7897A-3	Wake Up Beta	6.73 x 10 ⁶	1.31 x 10 ⁷

Approximate Percentages of Strain Types in Each Sample:

<u>Sample</u> → <u>Strain</u> ↓	<u>Aerobic Strains from Bacteria (TSA) Plates</u>		
	<u>7897A-1 Control</u>	<u>7897A-2 Wake Up</u>	<u>7897A-3 Wake Up</u> <u>Beta</u>
7897A-1	10%	10%	10%
7897A-2	2%	5%	--
7897A-3	2%	5%	2%
7897A-4	70%	68%	80%
7897A-5	3%	10%	8%
7897A-6	3%	--	--
7897A-7	--	1%	--
7897A-8	--	1%	--
Total Strain Types per Sample →	6	7	4
Total of Morphologically Unique Strains Amongst Samples on TSA: <u>2*</u>			

Thank you from the staff on project:


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Soysoap S-100 Bacterial & Microbial Testing

Subject: Soysoap S-100 why does it kill the bad bacteria like staph, e-coli and salmonella?

Several weeks ago I arranged with a microbiology lab manager to run cultures of their major microbial products sprayed with 1:512 dilution solutions of Soysoap S-100. This is a petri dish test, not field work. Lab Manager tested the impact of Soysoap S-100 on their two primary, large acreage microbial products. One is a spring-applied biological which enhances microbial populations in the Rhizosphere. The other a fall product is a cellulose and lignin digester typically applied in the fall to accelerate the breakdown of corn stalks. The idea is to capture the carbon in above ground stalks instead of seeing it oxidize through the spring and summer, while competing with a growing crop for nitrogen. Both of these products contain some Mycorrhizae. The claim is with this biological system farmers can raise corn on less than a half-pound of applied nitrogen. That means only about 75 pounds of N to raise 200-bu. corn.

This morning, I called the lab Manager who had just reported on his lab tests at an internal tech/sales meeting. In the petri dish, Soysoap S-100 at 1:512 dilutions does not significantly inhibit the most important species of good microbes in either their spring or fall product. Some species of microbes which he had not previously examined in these products appear to be somewhat more noticeable among the colonies after Soysoap S-100 treatment. This is something he wants to check out in more detail.

This probably means that at least some minor microbes species are restrained, making "room" for others which aren't as impacted by Soysoap S-100. When I mentioned earlier lab tests showing selective killing of bad vs. good bacteria and how the Soysoap S-100 takes out certain pathogens (Staph, Strep, E Coli, Salmonella, E Coli, Candida, Trichophyton, Listeria, Pseudomonas, and Raw Sewage of Broad Spectrum microbials). He posed a theory that may explain this effect. Many pathogens are "thin skinned" with a fragile cell wall. Genetically these disease organisms go for rapid reproduction rather than self-defense. These thin-walled bacteria show up as "Gram negative" or pink when stained. Thicker-walled bacteria are generally "Gram positive" and show up as purple when stained. While the good bacteria area allowed to reproduce.

Lab trials show the Soysoap S-100 as a strong bactericide may have the benign effect of dissolving the cell walls of thin "skinned" pathogens, but the beneficials can handle the effect if they are fully developed. The live and multiplying bacteria in their products are not dormant endospores, but growing organisms.

The original lab work helps explain a result we saw on an oats trial in 2008. This was done with oats raised in 1 ft. x 2 ft. steel pans, in ordinary field soil. Soysoap S-100 applied in the same mix produced the largest growth and highest brix (14). We should probably repeat this trial now that I know a little more. He is a keen researcher and interested in knowing how to multiply the benefits of biological farming.

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