The History of our PicoAg 25B Agriculture products was born in 2007, It was a mistake that turn into the future of farming and PicoTechnology was born for Ag, and a lot more.



I had never done farmer or went to college, but I am a first learned and I attribute my ability to figure out things is because I have never been a group thinker. I have found that in some cases that commonsense and critical thought can solve problems. So when Freddie in 2006 held up these 2 soybeans plants. We grew them with zero (0) water for the season and Soysoap treated got 32 bushels and untreated got 8 even I knew I was onto something. Soysoap was born as we but the soap on soybeans.

The question that must come to your mind is why do we have the video below. Its simple you need to understand the properties of water and why it can be good or bad for a farmer especially during drought. Its important that you understand that plants get their water from the ground and not from leaves. So if you have dew in the morning you have to get it off the leaves so the sun doesn't evaporate it off the leaves into the air and escape benefit to the plants. That is were Soysoap comes in as we reduce the Draves (Surface Tension) of the water from about 75 to 30, and that makes the water wetter, therefore it can roll off the leaves, and into the ground where it becomes available for

plants. Think about and I am sure you know about hydroponic farming. Do they spray the plants with water to feed them H2O? No, as that water comes from roots. Again, what Soysoap does (and you can After spraying six plots with the micros and Soysoap 2. This is a translocation application test and the weather is very cool. Around the high 30s at night and low 50s by day. Here is how the sprayed leaves look when surface tension is managed as its virtually zeroed with Soysoap. The plants and you have received the benefit of the foliar feed micros.



We believe the following examples on Soybeans, Oats and Corn of dry and wet leaves help the understanding of the Soysoap benefit. The pictures and comparisons of treated and untreated plants are further proof of Soysoap!

see many examples below of (GOOD) treated dry leaves and (BAD) wet puddled leaves that are untreated. What you want is the dew to roll off the leaves and go into the ground to provide water to the plants to grow instead of die!

Drought Stressed Corn: Before I get into Dew Farming let me report what I have seen Corn rolling to preserve moisture in the corn. Once the corn rolls you can easily lose 50 bushels an acre. Well Soysoaped Corn doesnt seem to roll for about 3 weeks after the untreated Corn. Below low is a perfect example how you lose 50 bushels of corn and acre when plants go into water conservation mode.



Left side untreated and dew on plants could die, right side treated and no dew!



Dry leaves again have absorbed Nutrients and Moisture, Wet Leaves awaiting evaporation!



Dry leaves have absorbed Nutrients and Moisture, Wet Leaves awaiting evaporation!





Lack of dew on the strip absorbed moisture in the early morning into the oat plants.





Bottom Treated Corn didn't roll while the Top Untreated Corn is losing bushels per acre!

Some Conclusions as well!

What leaped to mind is another way we can measure evaporation and re-absorption of moisture in soils where Soysoap has been applied to crops. Of course our tissue analysis for nutrient translocations prove with the aid of Soysoap from 3 to 10 times more foliar nutrients benefit the plants.

In arid climates, clear plastic tunnels about three feet high are used to capture evaporation from the soil and crop respiration. Condensation on the underside of the plastic trickles down the sides of the plastic "greenhouse" and feeds the roots again. We may set up such an experiment here, with little hoop structures.

What we already know is that Soysoap reduces capillary action between inert elements like paper fibers and soil particles by about 70%, while making ionic transfer within crop xylem and phloem easier with electro-conductivity reduction of the plant sap viscosity. Physics is the process to leverage it and use nutrients more effectively. Simple observation indicates that spraying dew-laden leaves with Soysoap accelerates absorption of the moisture through the cuticle and into leaf cells.

Last night I visited with farmer Keith again, and he told me he cuts the Soysoap rate per acre to a shade over 2 ounces per acre when he flies on foliar nutrients for corn at the rate of 4 gallons per acre. That would be a ratio of 2 ounces in 4 gallons of solution, or 1:512, which ironically is the ratio often used in the vegetables farmers and in the Philippines. Keep in mind that the water he uses has already been treated by a Pursanova reverse osmosis unit, plus a Pursanova structuring unit. The 1:512 lacing of Soysoap in this refined water is adequate for a smooth "laydown" of spray material on the leaf, and rapid absorption.

Keith also cuts the recommended rates of micronutrients and NPK foliars by about half, because absorption is so high that it's about all a leaf can handle in one application. However, this 50% savings in foliar materials allows twice as many separate applications, about 10 days apart or as needed, through the season. You keep the crop happy and well-fed and growing with five, six or even seven foliar treatments. Total of 15 or more ounces of Soysoap per acre!

Keith also scouts the crop every day. Underscore that, every day. He thus develops a sense of when the crop needs another "encouragement" of foliar feeding with Soysoap. Keith also communicates closely with Dr. Huber on his "prescriptions" and believes that in corn, the threat of Goss's wilt has become so endemic that reducing bacterial and fungal pressure is cost-effective. He tells me he uses Soysoap to aid and mobilize Procidic and other approved bacterial products.

Some Info I received from the farmer on the corn crops above!

PS. I have been thinking about your question about dew meeting the needs of a corn plant. On days when there was a heavy dew, I remember going into my test plots in mid-morning and seeing a wet ring of soil about 6 inches in diameter at the base of each corn plant.

During the night, as the dew was forming, it would collect and run down the leaves and the stalk and wet the soil at the base of the cornstalk.

I always marveled at that sight, and on mornings of heavy dew, the soil would remain moist at the base until almost noon.

That is why I said that a heavy dew was probably as good as a .2 inch shower every morning.

In thinking about your observation of the treated oats, maybe spraying Wake-Up on the cornstalk would increase the corn plants efficiency of using whatever moisture is available with dews.

Answer and Trail: We are going to spray Soysoap on some corn early in the mornings and watch what happens to the dew. This morning I saw those wet spots under leaf tips. With erect leaves, much of the dew collects in the "cups" formed by the base of the leaf.

As for the Headline treatment in that BASF series that difference indeed is stunning. But I have a question for BASF: 20 years ago before glyphosate, who needed to spray corn for fungus? If corn is so vulnerable now to fungus that a fungicide treatment makes such a huge difference, shouldn't we be looking for the reason why the organisms are so damaging?

The Corn photos above are in a field which is biologically grown: No anhydrous, non-GMO, microbial inoculants with the seed, soft rock phosphate, Soysoap with foliar micronutrients row support fertility. No KCL. With the exception of Soysoap, the management of this soil has been pretty much as Dave Larson would like to see it for the past 10 years. And that field as you can see is superior to the other field. We have no roll corn and leaves are upright and greener.

The second field is just across the road; same soil types. Its management is the "state of the art:" Triple stack GMO, two layers of Roundup, 200+ units of N as anhydrous, fall broadcast dry fertilizer, Headline fungicide. Photos taken the same day the first week of July near Maurice in Northwest Iowa. Photos were taken by one of our clients. It is looking very poorly!

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Soysoap Aids Farmers with Drought Relief from Dew on Corn, Soybeans, Grain Crops and aids Foliar Application!

We will site several examples of treated plants without dew in the morning and with untreated crops and dew. This dew will not go into the plants and the sun will evaporate it denying the plants of much needed water.

First, this photo shot as I test-sprayed a micros on winter wheat. The micros alone: Note the beads which form. Most of the micros spray runs off the leaves and you have just wasted money and the benefit of your foliar feed micros application. <u>Surface Tension Rules.</u>

