

actosol[®] in action

Organic Biostimulant Plus Fertilizer

Summer 2013

Agricultural Revolution in China



Chinese farms are rapidly becoming large commercial agriculture production farms comprising of several hundreds of acres from a few years ago being limited to 1/6th of an acre individual farms. According to the UNFAO 2011 data the arable land in China is 112 million hectares compare to 160 million hectares in USA, out of almost same land area of both countries. Today the crop yields in China are lagging the US yields. During recent visit by **ARCTECH's** founder, Dr. Daman Walia, to the Guangxi and Shandong provinces in China, he

observed efforts underway by large farmers in improving both yield and quality. They are implementing drip and foliar approaches with increased emphasis on use of water soluble fertilizers as well as for irrigation for combating the arid conditions. There is increased use of organic humic products inputs for improving the fertility of depleted soils. The Chinese Bureau of Agriculture recently established a nationwide standard of humic acid fertilizer based on our **Horticulture actosol** product.

The first field tests using **Horticulture actosol** on tomatoes in the Guangxi Province in South China have resulted in a 50% increase in average yield of 45,000 kg per acre in comparison with the control average of 30,000 kg per acre. The control standard used 600 kg of 15-15-15 NPK granular at planting in soil and then 600 kg of 17-8-20 NPK granular per acre post emergence of flowering. In the test area they used 600kg of 15-15-15 NPK at planting and then 2.5 gallons of **Horticulture actosol**.



Dr. Daman Walia Visiting Plantation Outside of Nanning, in the Guangxi Province of China

What are Local Farmers Saying about **actosol**?



*“**actosol** increases the organic carbon, which holds moisture for the plant during a dry spell. It mixes well with other fertilizers and flows through equipment like a silicon mix. It chelates the fertilizer which creates an uptake in the plant very quickly. It also increases the organic tilth in the soil. We have seen an increase of up to 25 bushels per acre. We are talking about money in your pocket, with a 10:1 ratio of rate of return on our investment. It’s a win-win situation!”* - **Robert Lawson of Gordonsville, Virginia**



*“I’ve been using **actosol** for 3 years, and I like it more and more. It seems like every year I can see something different in the plant. It’s growing better, it’s holding moisture. The crop jumps out at me when we get a good rain. These last 3 years have been hard on us with these droughts. I can see a lot of difference between our crops and looking at other farmers crops. Some of theirs burn up, and mine did not burn up. It just held in there until we got sufficient rain.”* - **Walter Golden of La Plata, Maryland**



*“I really like **actosol**, it builds humic acid in our soil. Our local lands have been farmed for generations, and we are finding that our humic acid is low. By applying it we can increase our humic acid, which enhances the plants root growth; which enhances moisture retention. During the hot & dry weather of July, I noticed our hay had higher moisture, which produced higher yields. Additionally, we tested the hay and found it had higher protein & nutrient content.”* - **David Witt of Blueridge, Virginia**



*“On corn it’s showing us great results. Our neighbors are getting about 20 bushels per acre, and we are getting 60 or better. And some as high as a 100. With the heat we had 10 days of 105° weather right during pollination. Ours pollinated alot better than our neighbors, and I attribute that to **actosol**. My neighbors ask me what in the world are we doing, that they are not doing. So they are beginning to wonder what’s going on. It’s looking great”* - **Freddie Doub of East Bend, North Carolina**

How Does **actosol** Perform in Local Soils?

actosol Increased Yield of Tobacco by 17% in Penhook, Virginia



1000 Pounds of 6-12-18 per acre



1000 Pounds of 6-12-18 per acre
+ 1 Gallon of **actosol** per acre



1000 Pounds of 6-12-18 per acre
+ 1.5 Gallon of **actosol** per acre

actosol Increased Yield of Field Corn by 12% & Resulted in 10 to 1 Investment Gain At Twin Oaks Dairy Farm Fields in Martinsville, Virginia



Field application was conducted in Martinsville, Virginia at Twin Oaks Dairy on substandard land for cultivation of corn silage. Fertilizer was applied at the rate of 600lbs per acre of 9-23-30 with 38 gallons of liquid nitrogen solution (30-0-0) at time of planting supplied by Southern States Martinsville Coop for the control plot. The test plot was fertilized exactly the same but with one gallon per acre of **Bioactivated actosol** applied along with the liquid nitrogen solution. **actosol** increased yield by 12% of field corn and resulted in 10 to 1 investment gain.



actosol Resulted in Robust Growth of Sorghum in Gordonsville, Virginia

actosol[®] Organic Biostimulant Plus Fertilizer

Increases Stress Tolerance | Enhances Nutrient Uptake | Improves Yield & Quality | Enhances Moisture Retention | Increases Beneficial Microbial Activity



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