

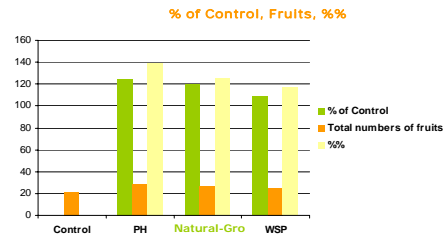
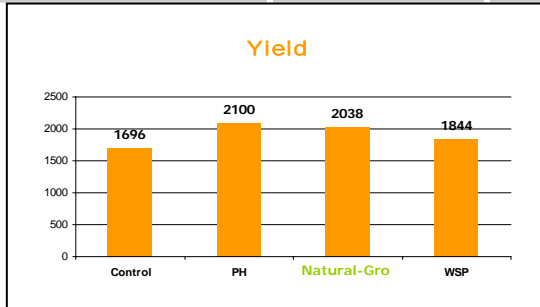
## ***Effect of Nano-Gro™, Natural-Gro NPK and Medicine for Plants (MP) on Growth and Yield of Tomatoes***

Pursuant to initiation of the project on September 12, 2003, I am Tom Davenport, Associate Professor University of Florida, IFAS herein reporting the results of investigations of three Agro Nanotechnology Corp. products (Nano-Gro™, Natural-Gro NPK, and Medicine for Plants (MP)) on growth, development, and yields of tomato planted in field beds and containers.

### *Field tomato*

*Date: 3/2/2004 - 3/11/2004*

Treatment	Yield in grams	% of Control	Total Number of Fruits	%%
Control	1696	N/A	21.17	N/A
Nano-Gro™	2100	124%	29.42	139%
Natural-Gro NPK	2038	120%	26.42	125%
MP	1844	109%	24.71	117%

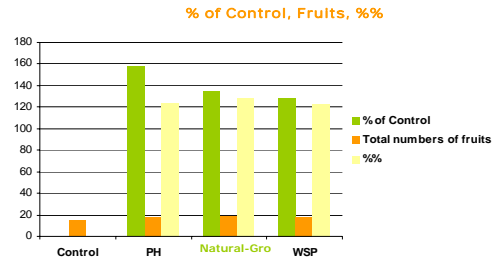
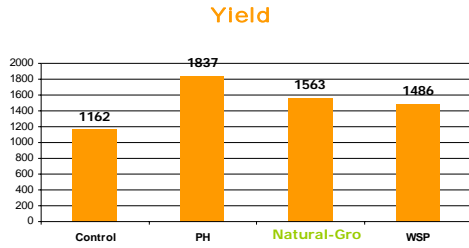


Pre-Planting treatment of tomato seeds with Nano-Gro™, Natural-Gro NPK and Medicine for Plants increased yield by 24, 20 and 9% respectively.

# Container tomato

Date: 3/2/2004-3/12/2004

Treatment	Yield in grams	% of Control	Total Number of Fruits	%%
Control	1162	N/A	14.50	N/A
Nano-Gro™	1837	158%	18.00	124%
Natural-Gro NPK	1563	135%	18.75	129%
MP	1486	129%	17.86	123%



In containers pre-planting treatment with Nano-Gro™, Natural-Gro NPK and MP gave even bigger increase, 58, 35 and 29% respectively.



Field tomatoes on day of harvest (first row):  
Water-treated plants on left, Nano-Gro™ treated plants on right

***Effect of Nano-Gro™, Natural-Gro NPK and Medicine for Plants (MP) on Growth and Yield of Baby Corn in Laboratory Conditions***

1. Objective- to test effect of Nano-Gro™, Natural-Gro NPK and Medicine for plants on baby corn.
  2. Tests performed to track changes in: wet biomass, roots biomass, stem and foliage biomass, and germination of seeds.
  3. Results will be analyzed on 50 seeds and will be statistically calculated.
- I) We used four E-Z Gardens growing systems with luminescent light to grow experimental plants.
- A) Distance between plant to light source from 4 to 12".
  - B) Temperature was regulated at 80°F.
  - C) Timers: 8 hour days/4 hour nights.
- II) First treatment of soil before planting:
- A) Control: 300 ml tab water
  - B) HP: 300 ml of working solution (1 pellet per 1liter of tab water).
  - C) Nano-Gro™ Liquid: 300 ml of working solution (0.2 ml of Nano-Gro™-Liquid per 1 liter)
  - D) Medicine for Plants: 300 ml of working solution (1 pellet per 1liter of tab water).

**RESULTS SUMMARY OF THE 12 TESTS**

Remedies	Biomass gram	% of Control	Roots (gr.)	Above ground (gr.)	Germinated seeds out of 50
Control	33.8		14.2	19.6	34
Nano-Gro™	47.3	140%	15.5	31.8	34
Natural-Gro NPK	43.3	128%	17.1	26.2	37
MP	39.1	116%	17.2	21.9	37

## ***Effect of Natural-Gro™ and Medicine for Plants on growth and yield of winter wheat***

The experiment was conducted at the Clemson University Calhoun Field Laboratory farm. A fall wheat experiment was planted in mid-November. Unfortunately repeated and heavy rainfall during the fall and winter resulted in poor wheat stands such that biomass and yield comparisons among treatments in the fall trial could not be determined.

A spring wheat experiment was established and seeded on April 10, 2004 using a small plot drill seeder. Three treatments were evaluated: Treatment 1: Nano-Gro™ (white pellets); Treatment 2: Medicine for Plants; Treatment 3: water control. Pellets were dissolved in water as per treatment protocol directions (1 pellet per liter; 284 ml solution per 1 pound of seed). Seeds were soaked in the treatment solution and allowed to dry before planting.

Treatment plots were arranged in a randomized complete block design. The experimental design was replicated for each of two wheat varieties: Variety 1=SC996284; Variety 2=SC996289. Thus, each treatment was evaluated in 12 replicated plots (6 of each wheat variety). Individual plot size was 24 feet x 7 feet; or a plot size of 1008 square feet for each treatment and wheat variety.

Soybeans were grown as a summer cover crop in the experimental field during the previous year. Because of the nitrogen supplied by the soybean cover crop no fertilizer was applied to the wheat plots.

Wheat was harvested for plant biomass and grain yield on July 18, 2004. All plants in the four middle rows of each plot were hand pulled and placed in paper bags for transport to the laboratory. Plant roots were washed and allowed to dry before weighing. Whole plants from the four middle rows of each plot were weighed, and then passed through a small threshing machine to remove the wheat grain from the seed heads for weighing.

## RESULTS

Data were analyzed using ANOVA and treatment means compared using Duncan's Multiple Range Test (PC SAS software).

*Variety 1: SC996284 wheat plant biomass and grain weights (N=6 replicates)*

Treatment	Plant biomass weight (mean wt. in grams )		Grain weight (mean wt. in grams )	
Control: water	846.4		147.2	
Nano-Gro™	873.2	103.0%	197.2	133.9%
Medicine for Plants	848.0	100.2%	152.0	103.2%

*Variety 2: SC996289 wheat plant biomass and grain weights (N=6 replicates)*

Treatment	Plant biomass weight (mean wt. in grams)		Grain weight (mean wt. in grams )	
Control: water	718.8		164.3	
Nano-Gro™	792.0	110.2%	188.0	114.4%
Medicine for Plants	714.0	99.3%	162.8	99.1%

*We also measured sugar and protein content in winter wheat crop:*

Treatment	Sugar avg. mg/g seeds		Protein avg. mg/g seeds	
Control: water	281.80		54.80	
Nano-Gro™	402.99	143%	59.24	108%
Medicine for Plants	379.27	135%	49.84	91%

