

Russian Federation  
Scientific-Technology Center of Continuous Education for Agriculture  
Professionals

## “AgroEcoScience”

March 30, 2005

### Results of Nano-Gro™ trials

In March 2005, we ran experiments using the **Nano-Gro™** treatment on Dutch tulips. The tulip bulbs were planted in plastic containers in the middle of February. Bulbs were not treated before planting.

On February 28, 2005 the tulip plants were treated with **Nano-Gro™** in concentrations of 2 pellets per 1 liter of tap water. 25 plants were treated and 23 were designated as control. On the fifth day of treatment the bulbs were taken out and investigated.

The following are observations made on the fifth day:

Main results	Treated plants	Untreated plants
Plant height	15-18 cm	10-12 cm
Cup size	7-8 cm	3-5 cm
Size of flower-stem	5-6 cm	2-3 cm

On March 21, 2005 the vegetation cycle of the tulips came to an end and the bulbs were taken out of the soil and examined with phytopathological analysis.

Test results:

Plant disease	Treated plants	Untreated plants
<b>Botrytis cineria (tulip fire)</b>	None	7-10% infected
<b>Fusarium blight</b>	Almost none	35% infected
<b>Other pathogens (alternaria)</b>	None	5-7% infected

Conclusions:

1. Natural Gro increased the total growth of the tulip compared to the control
2. Clearly, **Nano-Gro™** improves the plant's immune system and even prevents development of plant diseases like Fusarium.

Test performed by:  
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***Preliminary results of Nano-Gro™ trials on winter wheat and sugar beets in Voronezh region***

**I) Winter wheat**

**Nano-Gro™** was used in combination with fungicide Falcon on winter wheat by the end of May 2005.

**Test setup:**

Preparation	Dosage	Treatment time
<b>Nano-Gro™ + Falcon</b>	6 pellets per hectare 20% less recommended Falcon	June 1, 2005
<b>Control Falcon</b>	100% recommended	June 1, 2005

**Test results:**

Parameters	Nano-Gro + Falcon	Control
<b>Leaf health</b>	Healthy	Healthy
<b>Root growth</b>	Well developed, many side roots, healthy	Less developed, almost no side roots, depressed
<b>Growth intensity</b>	High	Average

**II) Sugar beets**

**Nano-Gro™** was used in combination with herbicide **Betanal22** on sugar beets by the middle of June 2005.

**Test Setup:**

Preparation	Dosage	Treatment time
<b>Nano-Gro™ + Betanal22</b>	6 pellets per hectare 100% recommended	June 15, 2005
<b>Control Betanal22</b>	100% recommended	June 15, 2005

**Test results:**

Parameters	Nano-Gro™ + Betanal22	Control
<b>Growth intensity</b>	High	Average
<b>Cercosporosys infection</b>	None	Some spots

**Preliminary conclusion:**

1. **Nano-Gro™** increases plant tolerance to stressors in the environment, increasing immune system response and root system, thereby enhancing productivity of plants.
2. **Nano-Gro™** allowed for lower use of pesticides without jeopardizing defense, in the case of the Falcon product, reducing dosages by 80% percent.

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***Preliminary results of Nano-Gro™ trials on spring wheat in  
Volgograd region***

Nano-Gro™ was used in combination with fungicide Rex C on spring wheat by the end of May 2005.

**Test setup:**

Preparation	Dosage	Treatment time
Nano-Gro™ + Rex C	6 pellets per hectare 20% less recommended Rex C	June 1, 2005
Control Rex-C	100% recommended	June 1, 2005

**Test results:**

Parameters	Nano-Gro™ + Rex-C	Control
Leaf health	Healthy	Healthy
Root growth	Well developed, many side roots, healthy	Less developed, almost no side roots, depressed
Growth intensity	High	Average

**Preliminary conclusion:**

1. **Nano-Gro™** increases plant tolerance to stressors in the environment, increasing immune system response and root system, thereby enhancing productivity of plants.
2. **Nano-Gro™** allowed for lower use of pesticides without jeopardizing defense, in the case of the Rex C product, reducing dosages by 20% percent.

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## “AgroEcoScience”

June 30, 2005

### *Preliminary results of Natural- Gro™ trials on potatoes in Moscow region*

In March 2005, we ran experiments using the **Nano-Gro™** treatment on potato plants. The potato plant had significant herbicide burns: they exhibited small development, yellow side leaves were dying and top leaves were depressed.

#### Test setup:

Parameters	Nano-Gro™ + Betanal22	Control
Nano-Gro™	Manual sprayer: 2 pellets per 10 liters of water.	Beginning of June

#### Test results:

- ❖ On the 10th day after treatment general improvement could be observed: top leaves become greener, side branches appeared.
- ❖ On the 20th day after treatment the potato plants were practically restored and were able to catch up with the of control plants.

#### Preliminary conclusion

**Nano-Gro™** enhances a plants tolerance to stressors in the environment, increasing immune system and productivity of plants, actively helping damaged plants to restore their former condition after stress and other harmful influences have deteriorated their health.

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