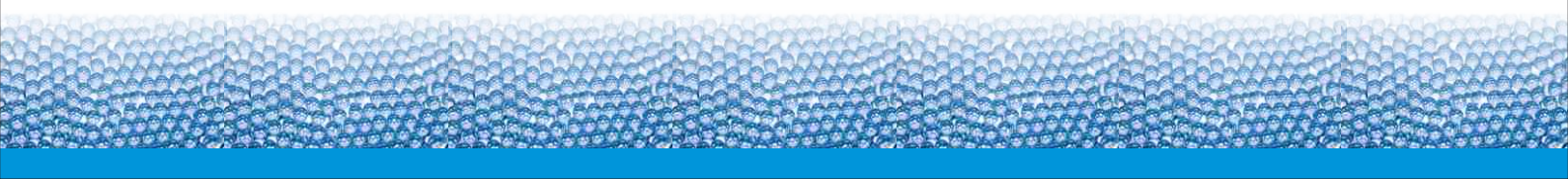




# Roots Biotech

**Adding value to Basic Scientific Concepts**

**Products based on  
Nano Particle Size Technology**



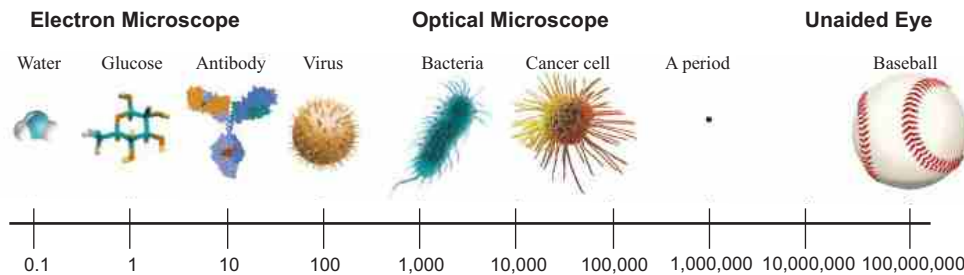
## Innovative Solutions using Nano Sized Particles.

**Colloidal particles of ionized minerals, having nanometer size, embedded in matrices of amino acids and then encapsulated using a biopolymer for poultry nutrition.**

### What is Nano Particle Size

Nano particle size is science, engineering, and technology conducted at the nanoscale, which is about 150 to 400 nanometers. One nanometer is  $10^{-9}$  of a meter i.e 1 meter / 1000000000 or 1 mm / 1000000

### Size Comparison



### *Poultry formulations for better absorption and utilisation of Minerals.*

#### 1. ROOCAL NC :

Minerals	gm / L
Calcium	100.00
Application: 500 ml / MT of feed. (500 ml Roocal NC + 500 ml Roophos NC will replace approximately 10 kg of DCP per MT of feed)	

#### 2. ROOPHOS NC :

Minerals	gm / L
Phosphorus	70.00
Application: 500 ml / MT of feed. (500 ml Roocal NC + 500 ml Roophos NC will replace approximately 10 kg of DCP per MT of feed)	

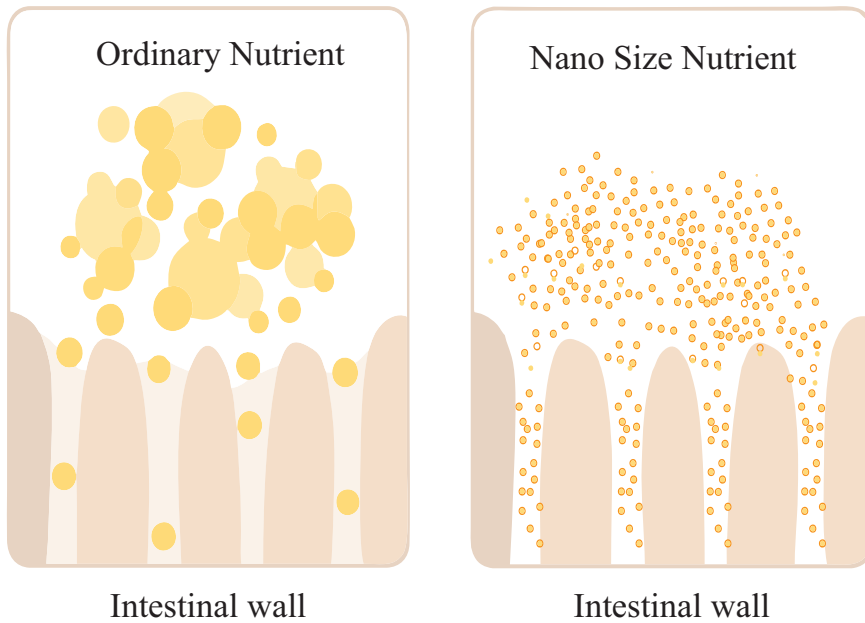
#### 3. ROOMIN NC :

Minerals	gm / L
Manganese	17.46 ± 0.05 g/l
Zinc	17.50 ± 0.05 g/l
Iron	12.95 ± 0.05 g/l
Copper	07.53 ± 0.05 g/l
Iodine	00.20 ± 0.05 g/l
Cobalt	00.10 ± 0.05 g/l
Selenium	00.06 ± 0.01 g/l
Chromium	00.05 ± 0.01 g/l
Molybdenum	00.05 ± 0.01 g/l
Application: 200 ml / MT of feed. (Will replace approximately 1 kg of trace mineral per MT of feed)	

***Totally Bio Assimilable Improves Performance & Productivity***

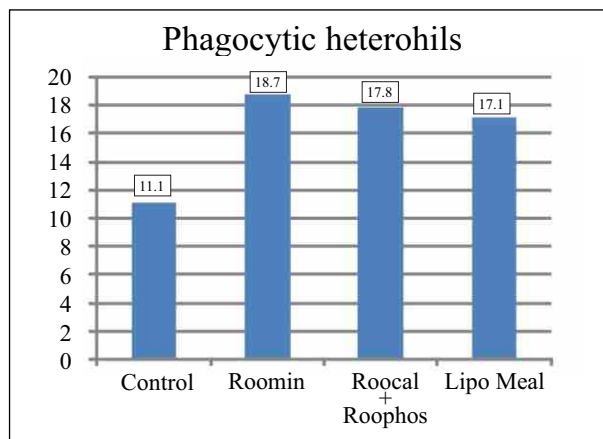
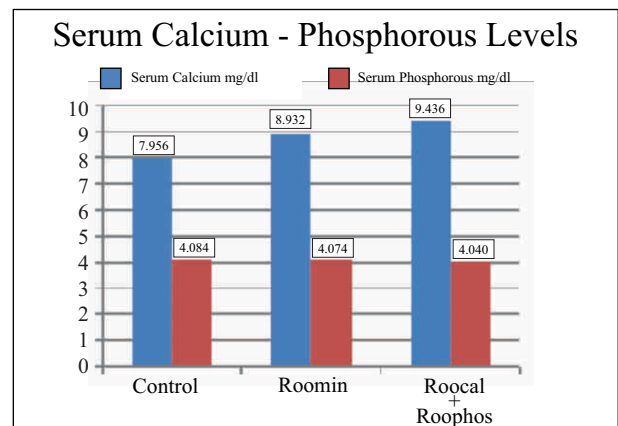
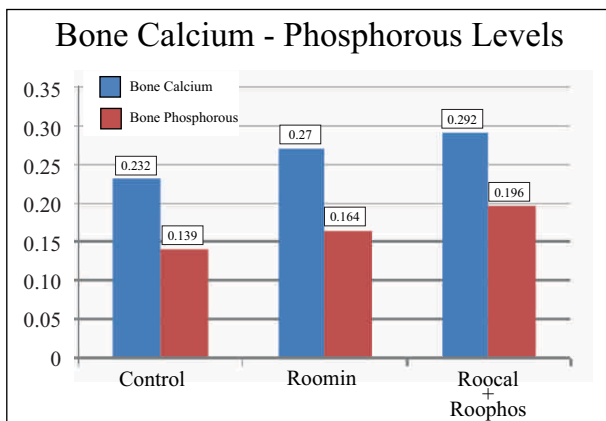
# Advantages of our Nano Particle Size products

**Surface Area – Smaller is Bigger - As the particle size reduces the surface area increases - Absorption increases.**



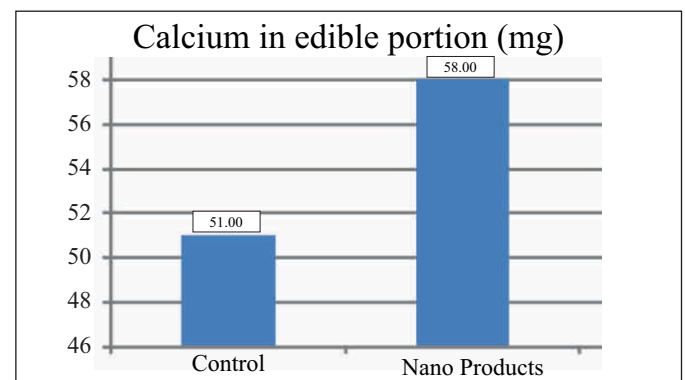
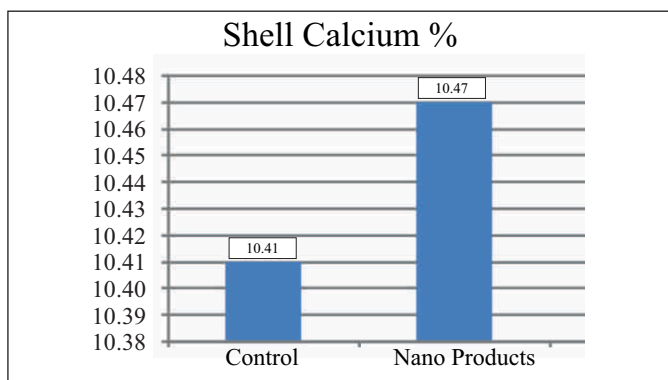
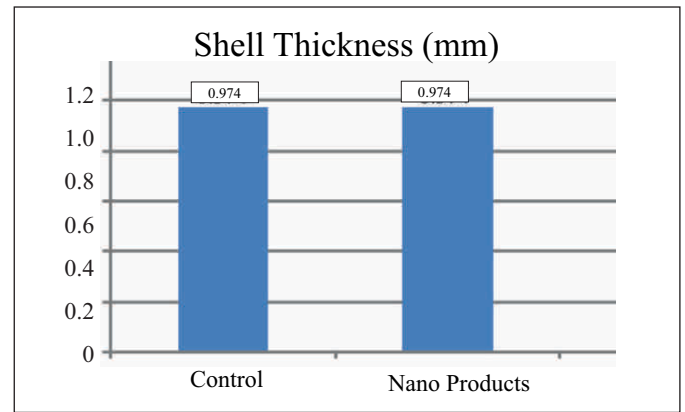
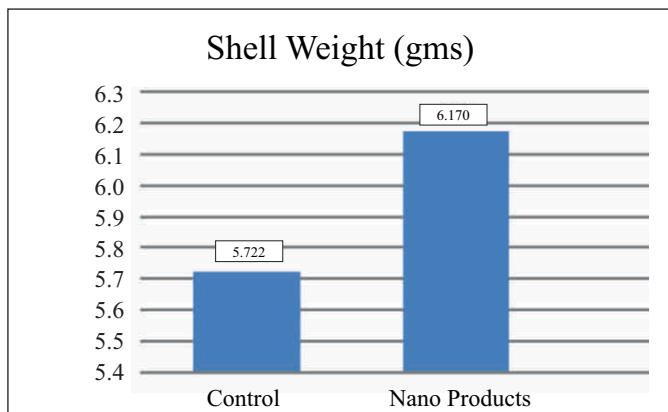
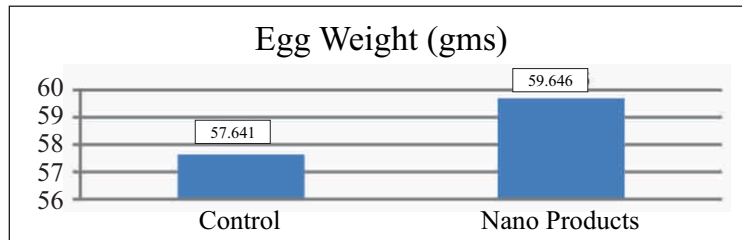
## In Vitro Studies:

**100% replacement of DCP & Trace Minerals with Nano Products in Commercial Broilers.**



## In Vitro Studies:

100% replacement of DCP & Trace Minerals in Commercial Layers. Flock age - 101 weeks



Marketed By :

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