



- Nitrogen 42%, Bioactive Zinc 1%

A synergetic combination of Urea (Nitrogen) Nutrient Solubilizing Microorganisms (NSM), Plant Growth Regulating Microorganisms (PGRM) & Organic Coating. A novel product of Niha Corp – USA Patent Bioactivation Technology. It contains Eco-friendly comparative to ZnSO<sub>4</sub>. Its Bio active Zinc is best suited for all soils (Alkaline & Acidic). Bioactive Zn – No Zn leaching or fixation. Resultantly: -

- Healthy & vigorous root system due to synergetic effect of Zinc, PGRM & NSM
- Lush green and larger leaves due to quick and lasting Zinc supplement.
- Larger ear with more grains
- Healthy crop and more yield
- Crop remains green till ripening due to PGRM
- Organic coating gives less Nitrogen leaching and volatilization
- Free flowing, no lumps & powder.

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**Full Length Article**

**Influence of Zinc Impregnated Urea on Growth, Yield and Grain Zinc in Rice (*Oryza sativa*)**

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**Abstract**

Zinc (Zn) is critically required by plants, animals and human beings. About one third of total world's poor population is at the high risk of Zn deficiency because they rely on cereals for their daily caloric intake. By keeping in mind this scenario it is hypothesized that the use of ZnO (a cheap source of Zn) impregnated urea for rice may enhance Zn contents in grains. Three types of urea were prepared including bio-activated Zn coated, Zn coated and Zn blended urea. The bio-activated Zn coated urea was prepared by inoculating the powdered organic material with Zinc solubilizing bacterium and then this material was mixed with ZnO. This bio-active Zn was coated on urea at three rates to formulate 0.5, 1 and 1.5% bio-activated Zn coated urea. Moreover, Zn blended urea was prepared by mixing powder ZnO with urea. The comparative efficacy of different types of Zn impregnated urea were compared with ZnSO<sub>4</sub> to enhance growth, yield and grains Zn concentration of rice grown in pots. The results showed that 1.5% bio-activated Zn (ZnO) coated urea performed better in promoting growth, yield and grain Zn content than other treatments. About 15 to 20% increase was observed in yield and grain Zn concentration. This suggests that the application of 1.5% bio-activated Zn coated urea is highly effective in enhancing growth, yield and quality of rice. © 2016 Friends Science Publishers

**Keywords:** Zn impregnated urea; Zn contents in grains; Phytate; Zn; Rice

# Impact of on Potato & Maize Crop in Pakistan



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Sulfate 33%



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