

THE OFFICIAL MONTHLY MAGAZINE OF THE GREEN ZEOLITE COMPANY.

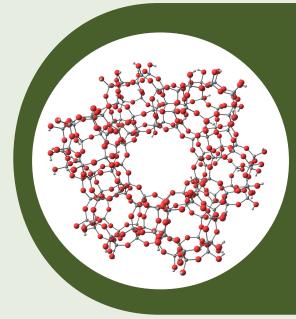


WELCOME TO THE NEW ISSUE OF OUR MONTHLY MAGAZINE!

In this edition, we will explore the advantages of blending zeolite with fertilizers. We invite you to delve into this issue and discover its varied and engaging content. We trust that you will find enjoyment and value in each issue of our magazine.



NEWSLETTER



Zeolite refers to a group of naturally occurring minerals composed of hydrated aluminosilicates. It is distinguished by its crystalline structure containing channels and cavities.

The geometric arrangement of zeolite is a crucial property responsible for its absorption capabilities. Consequently, zeolite serves not only as an absorbent for environmental pollutants but also as a reservoir of water and nutrients for plants. With its unique properties, zeolite has gained popularity in recent years and finds practical applications across various fields.

Studies conducted thus far demonstrate that zeolite is environmentally safe and poses no harm to living organisms. Its versatile use in agriculture primarily stems from its porosity, extensive surface area, and ion exchange capacity. The direct application of zeolite to soil not only enhances soil absorption capacity but also reduces soil oxidation and improves nutrient utilization efficiency.

Zeolite is known for its cation exchange property, allowing it to absorb monovalent cations like nitrogen and phosphate. This enables it to retain these nutrients within the soil and release them gradually as needed by plants. This prolonged release helps extend the lifespan of nitrogen and phosphate in the soil, preventing their conversion into toxic salts due to leaching.



NEWSLETER



Advantages of blending zeolite with fertilizers:

- It minimizes fertilizer waste, preserving over 50% of nitrogen and phosphate in the soil.
- Using zeolite with other fertilizers such as (nitrogen phosphate NPK) saves the amount of added fertilizers by up to 75% in general.
- The percentage of plant benefit from fertilizers in the first year is about 40% of the amount used, and most of the amount leaches into the soil or reacts in the soil and turns into salts and toxic chemical formulas. With zeolite, it is possible to benefit from 90% of the added fertilizers that the plant can absorb.
- Zeolite retains minerals, nutrients, and water in the upper layer of soil around the plant's root network, and prevents their leakage in the soil into groundwater.
- Zeolite increases the effectiveness of fertilizer by up to 70%, depending on the type of crops and the type of fertilizer. It works together with organic fertilizers and increases their effectiveness.

International experiments have demonstrated that blending zeolite with fertilizers in specific proportions yields the following outcomes:

- Enhancing wheat yield by 40-50%, rice by 27-70%, apples by 10-28%, potatoes by 30%, tomatoes by 40%, barley by 50%, and carrots by 15-30%.

These yield increases contribute to higher vitamin content, larger grain size, and enhanced plant immunity against diseases. Additionally, zeolite helps retain soil moisture for extended periods and serves as a source of essential mineral particles.

