

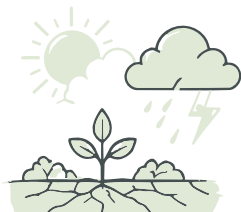
MAKING EVERY NUTRIENT COUNT



Nutrient Use Efficiency helps growers maximize crop performance, quality, and yield in an increasingly demanding agricultural environment.



Market volatility and input price pressure



Climate variability and Abiotic stress



Water scarcity and irrigation limitations



Stricter nutrient regulation and environment rules



Need for greater input efficiency and productivity

Where NUE is really influenced

1



Availability

Nutrients should be present in the root zone and on the leaf surface in a form the plant can access.

2



Uptake

Nutrients should be absorbed by the roots or leaves at the right time for the crop's needs.

3



Use

The plant should efficiently use and convert nutrients into growth and yield.



Improving NUE means managing both, nutrient application and plant performance.

Biostimulants can help improve this efficiency

How to boost Nutrient Use Efficiency



High-performing applications

Efficient nutrition starts with the right delivery method, nutrition, splitting and product quality.



Fertigation:

Nutrients are applied in the root zone, increasing efficiency.



Foliar Application:

Fast and targeted crop support.

Precise and qualitative nutrition makes each application more effective.



Biostimulants

Biostimulants support plant and soil processes involved in nutrient use.



- Enhance plant natural processes.
- Improve nutrient uptake and transport.
- Improve soil conditions and microbial activity in the root zone.

Biostimulants help crops make better use of available nutrients.

www.vaniperen.com

Follow us!



OUR SOLUTIONS FOR BETTER NUE

Supporting nutrient availability, uptake, and use through the High-Performing Applications of our Essentials and Biostimulants.

Our Essentials and Biostimulants

To optimize **Nutrient Use Efficiency (NUE)**, a crop needs support at every stage of growth. Our Essentials and Biostimulant ranges work to secure nutrient **Availability** in the soil, accelerate nutrient **Uptake**, and maximize **Use** within the plant under challenging conditions. Explore our specialized solutions designed to maximize efficiency at every stage:

1



Availability

Keeping Nutrient accessible

IPE® Technology



Releases fixed phosphorus available in the root zone, and protects the fresh-added Phosphorus.

Plants for Plants® 4-Terra



Pre-biotic effect on the microbiome, improving soil life. Boosting Phosphorus solubilization in the soil.

2



Uptake

Helping Nutrients enter the plant

IPE® Technology



Enhances Phosphorus uptake.

Plants for Plants® 4-Good



Delaying and reducing natural oxidative damage to cells, improving nutrient uptake.

Pure Seaweed & FoliaStim®



Improve uptake through complexation of nutrients.

WAKE-up®



Improves uptake of Potassium.

3



Use

Boosting plant physiology

Plants for Plants® 4-Terra



Activation of key genes involved in Phosphorus transport.

Plants for Plants® 4-Good



Optimization of photosynthetic activity.

Pure Seaweed & FoliaStim®



Enhances plants' natural processes and mitigates abiotic stress.

Plants for Plants® 4-Vita



Delaying and reducing natural oxidative damage to cells, Improving Water (WUE) and Nutrient Use Efficiency (NUE).

WAKE-up®



Regulates water management within the plant and improves utilization of Potassium.

P- NUE

General NUE

K- NUE

Explore our NUE approach!

