

AgriBac 2026



NitroPulse

FREE-LIVING NITROGEN FIXING INOCULANT

BY

AGRIBAC

LIVE AZOSPIRILLUM INOCULANT + DP500 PROTECTANT



SEED TREATMENT

Better Roots. Better Nutrition. Better Yields.



ENHANCED
Root Growth &
Development



BIOLOGICAL
Nitrogen Fixation



IMPROVED
Nutrient Uptake
& Efficiency



INCREASED
Yield Potential
& Profitability

NitroPulse™

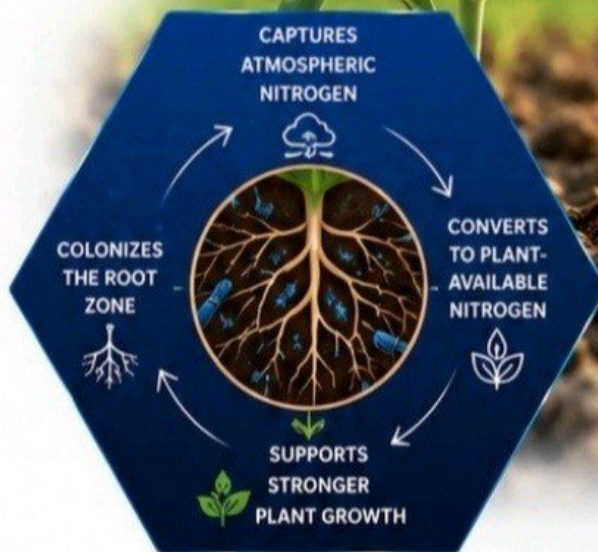
BIOLOGICAL NITROGEN-FIXING INOCULANT



PRODUCT OVERVIEW

NitroPulse is a concentrated liquid biofertilizer containing selected free-living nitrogen-fixing bacteria. When applied to seed or soil, these beneficial microbes colonize the root zone, capture atmospheric nitrogen and convert it into forms that plants can use.

The result is stronger plant growth, improved nutrient efficiency and higher yield potential.



KEY BENEFITS



ENHANCES
biological
nitrogen fixation



STIMULATES
vigorous root
development



IMPROVES
nutrient-use
efficiency



SUPPORTS
strong plant growth
under stress



PROMOTES
healthier soil
microbial activity



COMPATIBLE
with sustainable
and regenerative
farming



SUITABLE CROPS



MAIZE



WHEAT



SORGHUM



SUNFLOWER



POTATOES



VEGETABLES



PASTURES



Suitable for most non-legume field crops.



POWERED BY NATURE. BACKED BY SCIENCE.

Our carefully selected strains are produced under strict quality control to ensure maximum viability, consistency and effectiveness in the field.



THE SCIENCE BEHIND NITROPULSE™

NitroPulse contains specially selected free-living nitrogen-fixing bacteria that work in partnership with your crop to convert atmospheric nitrogen into plant-available forms.



THE NITROPULSE PROCESS

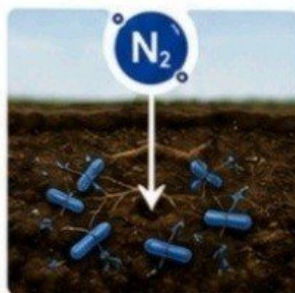
1 COLONISATION

After application, beneficial bacteria colonise the root zone (rhizosphere).



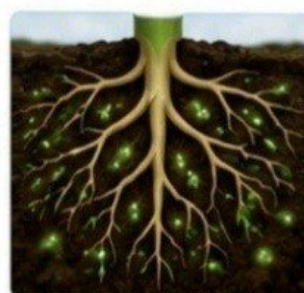
2 NITROGEN FIXATION

Bacteria capture nitrogen (N_2) from the air and convert it into ammonia.



3 NUTRIENT CONVERSION

Ammonia is transformed into plant-available forms that the crop can absorb.



4 BETTER PLANT PERFORMANCE

Improved nutrition and root growth lead to stronger plants and higher yield potential.



BEYOND NITROGEN: OTHER BENEFITS



STRONGER ROOTS

Stimulates root development and root hair growth, increasing the plant's ability to access water and nutrients.



IMPROVED NUTRIENT UPTAKE

Enhances the availability and uptake of essential nutrients such as phosphorus, potassium and micronutrients.



INCREASED STRESS TOLERANCE

Helps plants better withstand drought, heat and other environmental stresses.



HEALTHIER SOIL MICROBIAL ACTIVITY

Supports a diverse and active soil microbiome for long-term soil health and fertility.



SUSTAINABLE SOLUTIONS

Complements good agronomic practices and reduces reliance on synthetic nitrogen fertilisers.



POWERED BY NATURE. PROVEN BY SCIENCE.

Our strains are carefully screened for high nitrogen fixation potential, survival and performance in diverse soil and climatic conditions.

ACTIVE BENEFICIAL BACTERIA

- ✓ High viability and stability
- ✓ Formulated for maximum performance in the field



More Biology. More Nitrogen. More Growth.



NITROPULSE – WORKING WITH NATURE
TO FEED THE FUTURE.

BENEFITS THROUGHOUT THE GROWING SEASON

NitroPulse works in harmony with your crop from early emergence to maturity, delivering consistent benefits that support higher yields and more efficient use of resources.



1. STRONG START

- Enhances early root activity
- Improves seedling vigour and stand
- Helps crops establish faster



Better establishment
leads to healthier,
more uniform crops.



2. ENHANCED ROOT DEVELOPMENT

- Stimulates extensive root growth
- Increases root surface area
- Improves access to water and nutrients



Stronger roots build
a solid foundation for
higher yields.



3. REDUCED NITROGEN LOSSES

- Biological fixation reduces reliance on synthetic nitrogen
- Helps reduce leaching and volatilisation
- More nitrogen stays in the root zone



More efficient nitrogen
use means better
returns on every
kilogram applied.



4. IMPROVED STRESS TOLERANCE

- Helps plants better withstand drought, heat and salinity
- Supports healthier plants under stress
- Improves recovery after stress events



Healthier plants are
more resilient in
challenging conditions.



5. HIGHER NUTRIENT-USE EFFICIENCY

- Improves uptake and utilisation of other nutrients
- Supports balanced plant nutrition
- Translates to higher yield potential



Better nutrition.
Better yields.
Better profitability.



NitroPulse is more than a nitrogen fixer –
it's a growth partner that supports your crop
every step of the way.



STRONGER ROOTS



BETTER NUTRITION



HIGHER YIELDS

NitroPulse™

APPLICATION & USAGE GUIDE

Easy to use and integrate into your existing farming practices. Apply **NitroPulse**, **TrichoSol** and **DP500** together to give your crops the biological advantage they need from the start.



HIGH CONCENTRATION. MAXIMUM IMPACT.

Cfu/seed ≈ 4×10^7 per seed

Cfu/ha ≈ 5×10^{11} per ha



APPLICATION RATES

SEED TREATMENT



2 L

PER TON OF SEED

Ensures better root colonisation and stronger early establishment.

SOIL / IN-FURROW APPLICATION



2 L

PER HECTARE

Apply in-furrow, with irrigation or as a soil drench.



MIXING INSTRUCTIONS



1. SHAKE WELL

Shake NitroPulse and TrichoSol thoroughly before use to ensure an even distribution of beneficial microorganisms.

2. PREPARE THE MIXTURE

Add 2 L NitroPulse + 1 L TrichoSol to a clean mixing container. Add 1 L clean, chlorine-free water and mix thoroughly.

3. APPLY TO SEED

Apply the 4 L mixture per ton of seed while continuously mixing the seed to ensure even coverage.

4. ADD DP500

Immediately after liquid application, add 500 g DP500 per ton of seed. Continue mixing until all seed is evenly coated.

5. DRY BEFORE PLANTING

Allow treated seed to dry in the shade before bagging or planting.



Store in a cool place (5–25°C). Do not freeze. Protect from direct sunlight.

BENEFITS OF USING NITROPULSE + TRICHOSOL + DP500 TOGETHER



NitroPulse Benefits

- Biological nitrogen fixation
- Improves root development
- Enhances nutrient-use efficiency
- Supports plant growth under stress
- Promotes healthy soil biology



TrichoSol Benefits

- Protects against soil-borne pathogens
- Enhances root health and growth
- Improves nutrient uptake
- Supports beneficial soil microbes
- Increases plant resilience



DP500 Benefits

- Natural sticker and protective coating
- Protects beneficial bacteria on the seed
- Provides nutrients and micronutrients
- Enhances moisture retention
- Improves germination and early vigour
- Helps protect against seedling stress



Stronger protection. Better colonisation. Healthier start. Higher yields.



COMPATIBILITY

- Compatible with most fertilisers and pesticides
- Avoid mixing with highly alkaline products or products containing chlorine.
- If unsure, conduct a jar test before mixing.



BEST PRACTICES

- Use clean equipment and water.
- Maintain agitation during application.
- For best performance, apply under favourable soil moisture conditions.

PACK CONTENTS

2 × 1 L NITROPULSE

Treats 1 ton of seed or 1 hectare



1 × 1 L TRICHOSOL

Biological fungicide & root protector



1 × 500 g PACKET DP500

NATURAL SEED TREATMENT & DESICCANT PROTECTOR



IDEAL FOR INTEGRATION WITH



BASAL FERTILISERS



IN-FURROW APPLICATION



IRRIGATION SYSTEMS



DRONE APPLICATIONS



SPRAY APPLICATIONS

FOR BEST RESULTS

- ✓ Use quality seed
- ✓ Follow recommended rates
- ✓ Timely application
- ✓ Good soil moisture
- ✓ Balanced crop nutrition



CONTACT US



NitroPulse™

BIOLOGICAL NITROGEN-FIXING INOCULANT

For product information, orders,
technical support and partnerships,
please contact our team.



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LIVE BENEFICIAL
MICROORGANISMS



SCIENTIFICALLY
DEVELOPED



QUALITY ASSURED
& RELIABLE



SUSTAINABLE
& SAFE



POWERED BY NATURE.
FUELLED BY SCIENCE.



Unlock the power of
atmospheric nitrogen for
stronger, healthier crops.

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