



Optimize your plantation growth

by Triferto

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About

In forests around the world, plantations face the same challenge:

How to meet ever-growing demand for forest productivity without sacrificing the health of the land or the bottom line?

Forest3 was born from a simple belief: that every tree species, site, and operation deserved an optimized approach, not a one-size-fits-all bag of granules. Drawing on decades of fertilizer expertise and hands-on R&D, we partner with forestry teams to design, test and redefine nutrition programs tailored to their forestry specific needs.


Our lean-and-green* methodology places nutrients precisely where they're needed, slashes waste and emissions and accelerates growth cycles; all while safeguarding soil, water, and climate.

The result?

Forests that flourish and operations that flourish right alongside them, all whilst improving the planet and their return on every hectare.

Forest3 – Rooted in Science

**Lean and Green Forestry - a strategy of taking a tailored approach - feeding each species exactly what it needs, reducing chemicals and labor, and helping plantations grow more timber with less impact on soil, water, and climate.*



“Discover the phases.
Optimizing the growth”

Approach

From generic inputs to precision nutrition

Tree nutrition is not static. Nutrient demand shifts throughout the growth cycle, from nursery to establishment and full rotation.

Yet most fertilizer programs apply uniform inputs across all stages, leading to inefficiencies in nutrient uptake, unnecessary costs, and variability in growth.

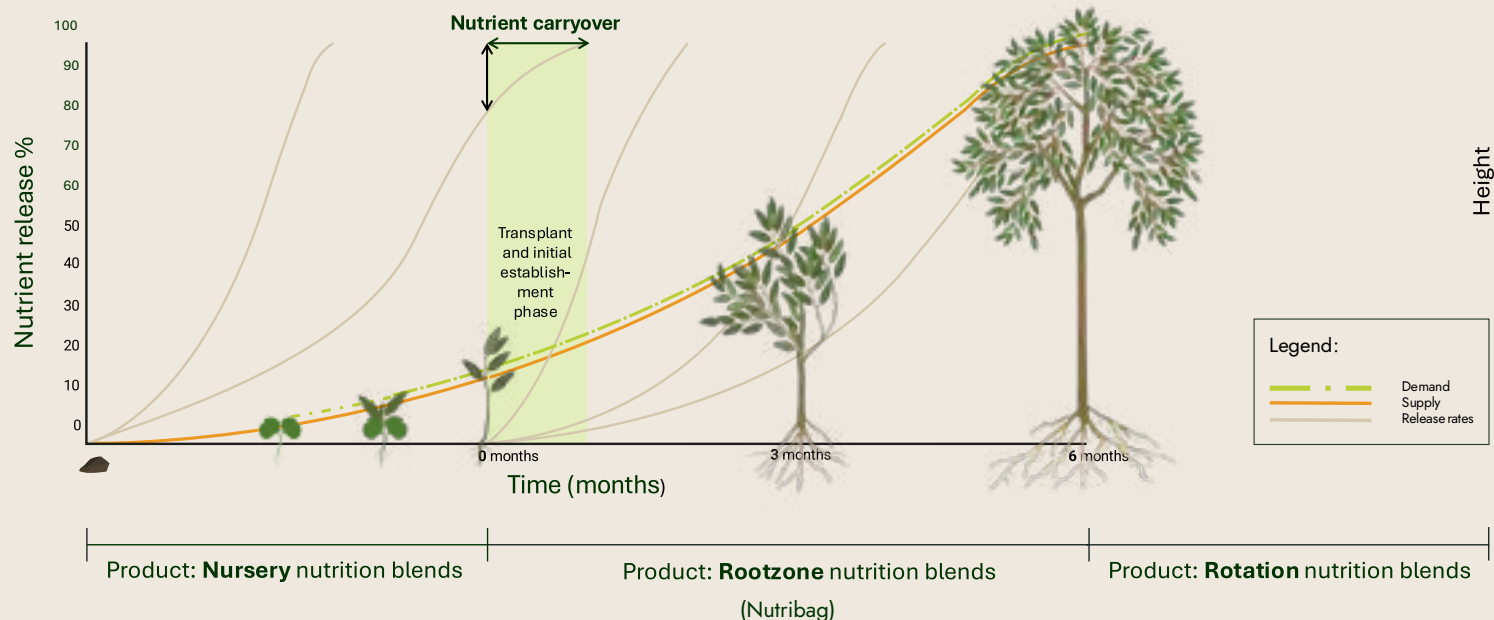
The Forest3 Optimization Program

The Forest3 Optimization Program is designed to meet the evolving nutritional needs of your plantation as it matures.

Built on thorough research and development, the program is structured around **three key phases: nursery, establishment and rotation**, each supported by specifically formulated products and services.

This graphic illustrates our forestry nutritional approach. We have mapped the tree's growth cycle, from nursery to establishment and rotation, and developed specialized fertilizers for each phase.

The graphic shows how nutrient release changes over time. Our formulations ensure that the right nutrients are available exactly when the tree needs them, helping maximize growth while minimizing waste.



Nursery nutrition

Phase 1

During the crucial nursery phase, young trees are particularly vulnerable. This phase focuses on building a strong, resilient foundation by establishing a robust root system that support future growth.

Successfully navigating this phase is critical to long-term survival and stand performance.

That is why we developed Nursery Nutrition.

This precisely formulated forestry nutrient solution is designed to **minimize nutrient loss** and **maximizing uptake**, directly supporting the root development needed during this vulnerable period.

The Forest3 Nursery product supports both the **nursery phase** and the **transition to field planting**, ensuring that each seedling receives the nutrition it needs during the **first four weeks after transplanting**.

Benefit: Stronger seedlings, lower mortality, and reduced replanting. This approach also helps prevent nutrient deficiency at transplant.

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- **CRF formulation designed for forestry nurseries.**
Developed to meet the specific nutritional requirements of forest seedlings under nursery conditions.
 - **Optimized CRF combination and release curve.**
Ensures consistent nutrition throughout the nursery phase, minimizing or eliminating the need for overhead fertigation.



What is the advantage of controlled-release fertilizers (CRF)

Controlled-release fertilizers (CRF) offer a **more targeted approach to forestry nutrition**.

By delivering nutrients gradually over an extended period, they help reduce nutrient loss through **leaching and volatilization**, while maximizing **nutrient uptake efficiency** and minimizing environmental impact.

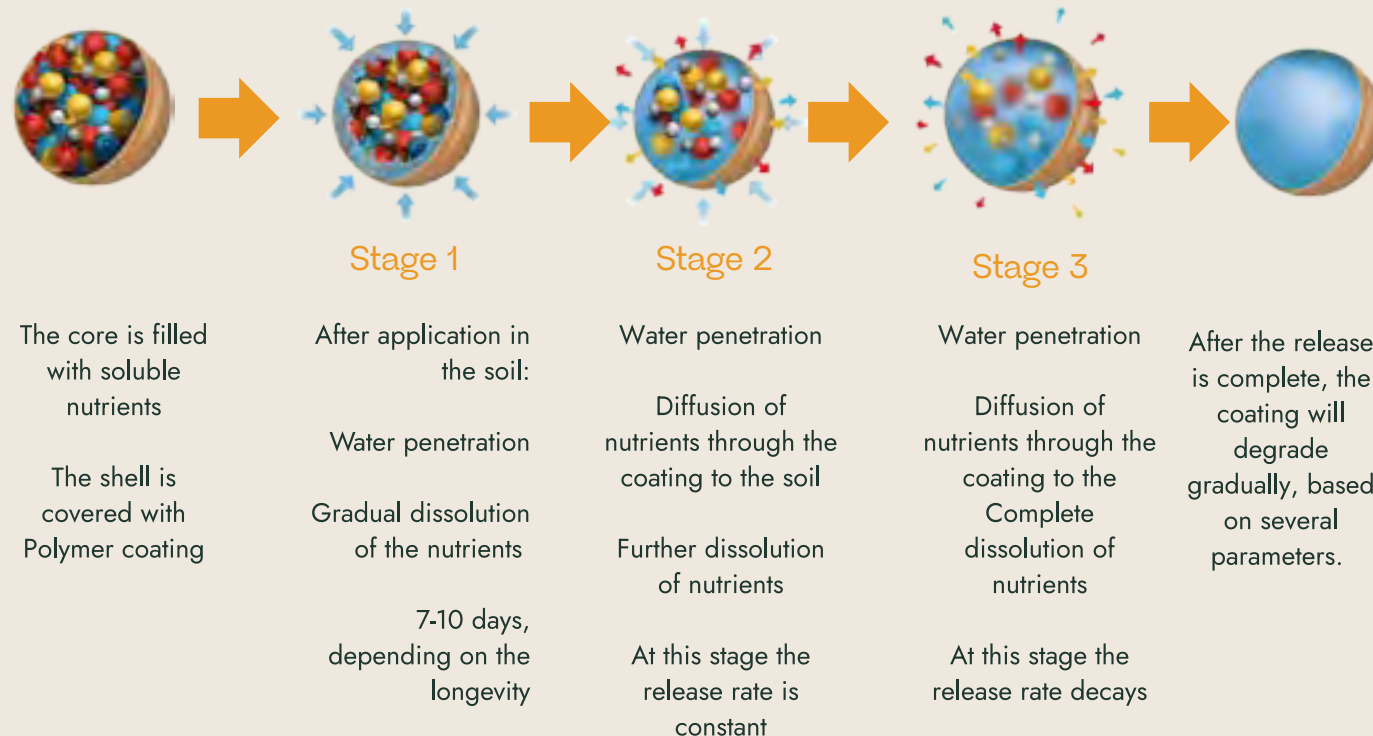
By aligning nutrient release with **tree growth dynamics**, CRF supports **optimized growth rates and sustained forest health**.

It also helps reduce **application frequency** and associated **operational costs**.

Understanding controlled-release fertilizer technology

Polymer-coated release technology controls how nutrients are delivered. A thin polymer coating gradually releases nutrients into the soil over time, reducing waste and improving nutrient uptake.

As a result, **CRF allows growers to apply less fertilizer** than conventional alternatives, while reducing the risk of **leaching and volatilization**.



Comparative Analysis of fertilizer types for Forestry

Not all fertilizers are formulated for forestry.

Differences in formulation, nutrient release, and uptake efficiency have a direct impact on seedling performance, operational efficiency, and long-term yield per hectare.

The comparison below highlights the key differences between forestry-specific controlled-release fertilizers (CRF) and conventional fertilizer programs.

Comparison point	Forestry-specific CRF	Conventional fertilizers
Formulation	Formulated specifically for forestry	Commercial products not specifically developed for forestry
Nutrient profile	Contains all essential nutrients: macro-, secondary, and trace elements	Primarily limited to NPK with some secondary elements, often lacking trace elements
Nutrient release	Consistent nutrient release and availability over time	Rapid release of nutrients
Risk of nutrient loss	Reduces, or even eliminates, the risk of leaching and volatilization	High risk of leaching and volatilization
Nutrient-use efficiency	High nutrient-use efficiency	Lower nutrient-use efficiency

What do Forest3 products focus on?

Forest3 products are designed to deliver:

- **Balanced nutrient values** aligned with crop demand
- **High phosphate availability** where rapid uptake is required
- Consistent, regulated release of all other macro-nutrients
- CRF release rates calibrated to compensate for differences in soil temperature

Forest3 CRF fertilizer consists of:

N Macro-nutrient

- Promotes vegetative growth, increase leaf area and enhance photosynthesis
- Major component in:
 - Chlorophyll
 - Proteins
 - Amino Acids

P Macro-nutrient

- Fundamental for early root development
- Plays a major role in energy transfer
- Crucial during the establishment phase

Te Trace elements

- B, Cu, Fe, Mn and Fe
- Plays an important role in cell division
- Crucial in photosynthesis and metabolic processes
- Other roles: enzyme activation, hormone synthesis, and disease resistance



K Macro-nutrient

- Regulates water uptake and distribution through the plant
- Nutrient transport
- Enzyme regulation
- Can improve drought tolerance

S Secondary element

- Building block for proteins, enzymes, and vitamins
- Enhances resistance to diseases and pests
- Required in chlorophyll production

Mg Secondary element

- Key nutrient in chlorophyll, essential for photosynthesis
- Energy Metabolism & Transport
- Enables carbohydrate transportation

Ca Secondary element

- Provide and maintain structural integrity in the plant
- Acts as a signalling molecule for stress response
- Essential for root tip and leaf development



Rootzone nutrition Phase 2

As your trees transition into the establishment phase, the focus shifts to **successful establishment, maximizing growth, and building resilience** against environmental stressors.

This phase requires a **balanced and consistent nutrient supply** to support rapid root and shoot development and overall seedling performance.

That is why we developed **Forestry Rootzone Nutrition**, pre-calibrated in a NutriBag.

This solution is specifically developed for forestry plantations and, with our **rootzone-safe technology**, can be applied directly in the planting hole, within the root zone.

Nutrient release rates are designed to align with the seedling's nutrient demand curve, starting 10 to 14 days after planting and continuing for up to 6 months. This targeted approach supports healthy, vigorous growth and improves resistance to disease and pests.

Benefit: Easy application, lower operational costs, rapid nutrient response, reduced environmental impact, and more uniform growth.

- **Establishment nutrition developed for forestry species**
Formulated by forestry specialists to support strong early root development and successful seedling establishment after planting.
- **Tailored CRF release technology.**
Delivers nutrients at the right dose and at the right time to optimize seedling establishment and early growth.
- **Pre-calibrated NutriBag application**
Enables simple single-dose application directly in the planting hole, within the root zone.
- **Root-zone-safe technology**
Reduces nutrient losses from leaching and volatilization, minimizing the need over overfertilization.



What is a Nutribag?

NuTribag is Triferto's new delivery method, where fertilizer are pre calibrated and packed in a biobased paper Nutribag. When using rootzone-safe-technology from Forest3, it can be applied directly into the root zone of newly established crops.

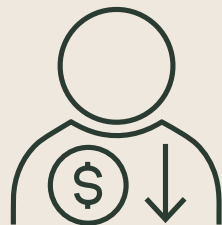
The ultimate fertilizer solution for forestry

- Advanced, forestry specific fertilizer
- Controlled nutrient release matching nutritional requirements during early development stages
- Ease of application with pre-calibrated application dosage in an easy to apply Nutribag
- Root-safe technology, applied at the rootzone
- The paper is biobased, 100% biodegradable

Key benefits



Cost reduction



Labour reduction



Positive environmental footprint



Rotation nutrition

Phase 3

As your plantation matures, the focus shifts to protecting **long-term health, productivity and resilience**.

That is why we develop nutrition programs tailored to the needs of mature plantations combining precisely formulated fertilizers with expert technical guidance to address nutrient deficiencies where and when they matter most.

Forest3 nutrition specialists and field advisors help identify under performing areas and determine where targeted nutrition can improve plantation performance.

Benefit: Supports long-term plantation health, stable growth, and sustained productivity

-
- **Nutrition designed for ongoing forest health**
Provides a sustained nutrient supply to support stable tree growth throughout the rotation.
 - **Balanced nutrient supply for long-term productivity**
Helps maintain soil fertility and supports consistent stand development throughout rotation cycle.



Are your mature trees getting what they need?

At Forest3, we provide a premium fertilizer, precisely formulated to match your forest's nutritional needs. Our experienced forestry specialists analyze tree conditions to deliver the precise nutrition your trees require for optimal growth and resilience.

Don't settle for guesswork

Make sure your trees are getting what they need. Contact us today to discover the difference a tailored forestry nutrition fertilizer can make!

Why work with us?

- **Expert Forestry Team:** Benefit from the knowledge of experienced forestry specialists, right in the field.
- **Precision Recommendations:** We deliver accurate, tailored solutions based on your forest's unique needs.
- **Complete Solutions:** From seedling to mature trees, we offer a customized approach for every requirement - ensuring long-term health and growth.



Product Overview

Specie	Tropics				Sub-Tropics				
	Eucalyptus	Acacia	White Laran	Teak	Eucalyptus	Acacia	Pine	Gmelina	Teak
Nursery Nutrition									
▪ Nursery Forestry 4M									
▪ Nursery Forestry 8M									
Rootzone Nutrition									
▪ Rootzone Forestry 100% 4M									
▪ Rootzone Forestry 8M									
Rotation Nutrition									



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by Triferto

Product Sheet



1 Nursery nutrition

- **CRF formulation designed for forestry nurseries.**
Developed to meet the specific nutritional requirements of forest seedlings under nursery conditions.
- **Optimized CRF combination and release curve.**
Ensures seedlings receive consistent nutrition throughout the entire nursery phase, minimizing or eliminating the need for overhead fertigation.



2 Rootzone nutrition

- **Establishment nutrition designed for forestry species by forestry specialists.**
Developed to support strong early root development and successful seedling establishment after planting.
- **Tailored CRF release technology.**
Delivers nutrients at the right dose and at the right time to optimize seedling establishment and early growth.
- **Pre-calibrated NuTribag application**
Enables simple single-dose application directly in the planting hole, at the rootzone, during planting.
- **Rootzone-safe technology**
Reduces nutrient losses from leaching and volatilization, eliminating the need over overfertilization.



3 Rotation nutrition

- **Nutrition designed for ongoing forest health.**
Supports sustained nutrient availability for stable tree growth throughout the rotation.
- **Balanced nutrient supply for long-term productivity.**
Maintains soil fertility and supports consistent forest development over the full rotation cycle.