

The Problem
The white rot fungus, Ganoderma boninense, which causes the Basal Stem Rot (BSR) disease, is considered as a major threat to the lucrative palm oil industry in south-east Asia. Unfortunately, the pathogen typically destroys a significant amount of a palm's base before signs of infection appear.

-     - The Solution - - - - - -

We recommend an enhanced preventive strategy that focuses on to minimizing the entrance of the pathogen to healthy palms.

Approach: incorporate EMBIO actinoPLUS (Streptomyces nigrogriseolus), a proven \& effective Biological Control Agent (BCA), into current cultural methods for sanitation, to significantly reduce the disease incidence.


Left: Ganoderma control plate, middle: vermiculite+biochar control plate, right: EMBIO actinoPLUS plate. GanoSA1 in EMBIO ${ }^{\circ}$ actinoPLUS Inhibited Ganoderma with 100\% Percent Inhibition of Radial Growth (PIRG)

## Our Product Delivers Proven Results:

- Laboratory Testing: 100\% Inhibition of Ganoderma Radial Growth
- Nursery Testing: 65.2\% reduction in BSR treated Seedlings


## Elevate

Your Palms to Ganoderma-Proof with
' actinoPLUS

## । The Benefits

Streptomyces nigrogriseolus is a game-changer in the fight

## against BSR. Here's why:

- Ganoderma Defense:

Streptomyces will act as a shield against Ganoderma by releasing metabolites which have antifungal properties.

- Enhanced Palm Health: Streptomyces strengthens the palm's immune system, promoting vigorous growth.
- Higher Yields: Healthy palms mean higher-quality fruit and increased harvests.
- Sustainable Agriculture: Protect your investment while contributing to a greener, healthier environment.
- Field Testing: 75\% of untreated seedling showing signs of BSR and died compare to only $6.7 \%$ seedling treated with EMBIO ${ }^{\circ}$
- Safety Testing: Proven safe through toxicological studies at the University Sains Malaysia (USM)

