Fight foliar infection with better biology

from biofilm crop protection

LoliPepta

biofilm crop protection

- Reduces airborne spore load
- A sustainable rotation for integrated disease management
- Improves efficacy of other applied compounds
- Tank mix compatible

Lp loliPepta

biofilm crop protection

Contains – endospores and culture broth of the bacteria Bacillus amyloliquefaciens strain pm 414. Product is produced via a process to achieve consistent target concentrations of endospores (1 x 10^8 cfu/ml) and ferment.

The endospore is a tough, hardy dormant non-reproductive structure that reactivates and becomes vegetative when exposed to increased moisture, temperature and light. The bacteria colonise the seed, root and leaf areas having multiple modes of action.

As a Foliar Treatment:

- ✔ Endospores germinate and attach and develop a bacterial colony on plant surfaces.
- ✔ The pre-emptive colonisation by way of competitive exclusion of the leaf surface by the bacteria forms a physical barrier known as a BIOFILM DISEASE SHIELD. This structure forms a barrier that inhibits the infection of the leaf surface by pathogenic organisms that cause plant diseases.
- ✔ The culture broth produced by the bacterial during fermentation have multiple modes of action and anti-fungal activity that also contribute to activity of the Plant Disease Shield. It Creates a pathway for nutrient absorption, improve intra cellular movement of applied compounds .
- ✔ Induced plant immune response - Induced resistance is a state of enhanced defensive capacity developed by a plant when appropriately stimulated called Salicylic Acid Immune Response
- ✔ Used for competitive exclusion on the leaf area, continuing to then form a Biofilm disease shield (Physical Barrier) of Lipopeptide antibiotics.

LOLI-PEPTA Benefits:

- ✔ Excellent safety – only a 4-hour re-entry, and can be sprayed up to and on the day of harvest!
- ✔ Leaves virtually NO residues on plant foliage or flowers
- ✔ Performs better than many copper-based products, without phytotoxicity or residues
- ✔ A good rotation option for effective resistance management
- ✔ Safe for beneficial insects and bees
- ✔ Compatible for tank-mixing / rotating with other registered products
- ✔ Excellent for sustainability and IPM programs

What situations trigger the requirement for Loli-pepta and when to apply it

Crop Nutrition and Plant Health

- ➔ Cation imbalances, or nutrient immobility
- ➔ High aerial spore load from continuous cropping pressure
- ➔ Apply in conjunction with Insecticides, Fungicides, Nitrate, Phosphate, Silica and Molybdenum fertilizers to increase their efficacy via active transport.

Application Rates

- ➔ The risk of Bacterial pathogens is present as a result of humid conditions that are conducive to the germination of spores
  - ➞ Ensure that **Loli-pepta** has been applied either before or early at the onset of these conditions to enable:
    - » Colonization to occur and the bio-film to be created
    - » **Loli-pepta** is not mobile on the plant, so repeat applications as more vegetative material grows to ensure continued colonization. Limit application late in the season.

Foliar Timing	Rate	Water Volume
Apply weekly from early vegetative to Fruit fill.	1 - 2 litres/100 litres + wetter and sticker	spray to point of runoff

NOTE -- STORE BIOFILM PRODUCTS IN A COOL SHADED AREA AVOIDING DIRECT SUNLIGHT.