

BiOWiSH™ is Summit Fertilizers newest enhanced efficiency fertilizer bacterial product (*Bacillus* spp.) designed to increase grower yields and profitability. The bacteria makes use of the rhizophagy cycle to form a symbiotic relationship with plant roots; increasing root biomass and turbo-charging nutrient uptake.

Application of BiOWiSH™ requires no practice change to implement into a farming system as it is supplied pre-coated by Summit Fertilizers onto fertilizer or mixes easily with UAN on farm.

Applied as endospores, the bacteria remain dormant until the right soil temperature, moisture and amino acids produced by roots are present. Due to the symbiotic relationship formed with crop roots, our hot, dry summers do not allow for residual biology carryover; thus application is required each season. Ideal application should be early in the season with product being as close to the seed as possible. The key is to maximise the time the bacteria can get to work.

BiOWiSH™ is not crop specific as it takes advantage of the rhizophagy cycle, which every plant utilises.

It has been proven internationally to be effective in not only cereals, canola, corn and legumes, but also horticultural and tree crops.

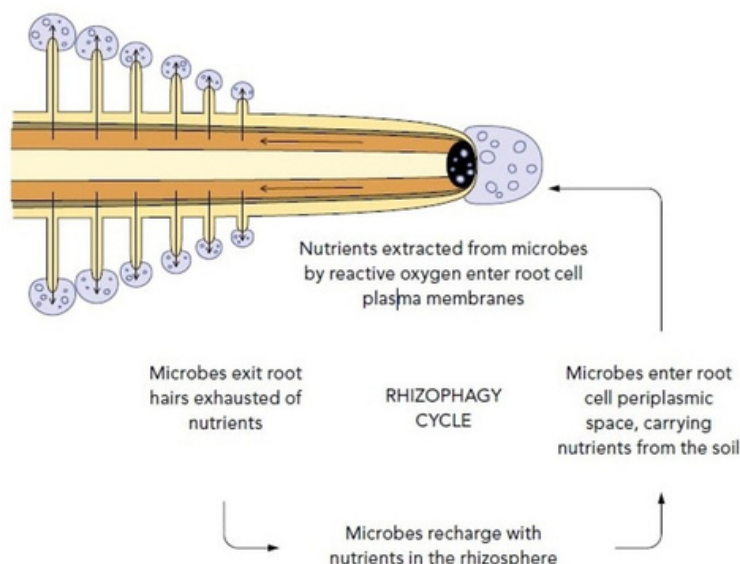
There are no compatibility issues with common agricultural chemicals and being a bacterium (vs. fungi), can be coated alongside fungicides such as flutriafol without any reduction in efficacy.

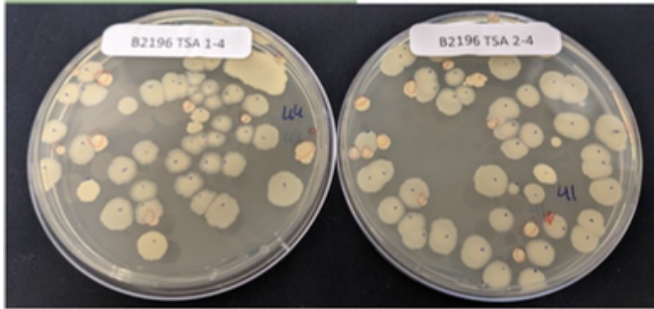
Resiliency of the bacteria is proven, with *Bacillus* spp. able to endure being coated on fertilizer and mixed with UAN.

Lab testing has also shown it can remain viable in a tank suspension with paraquat for 14 days.

How it works:

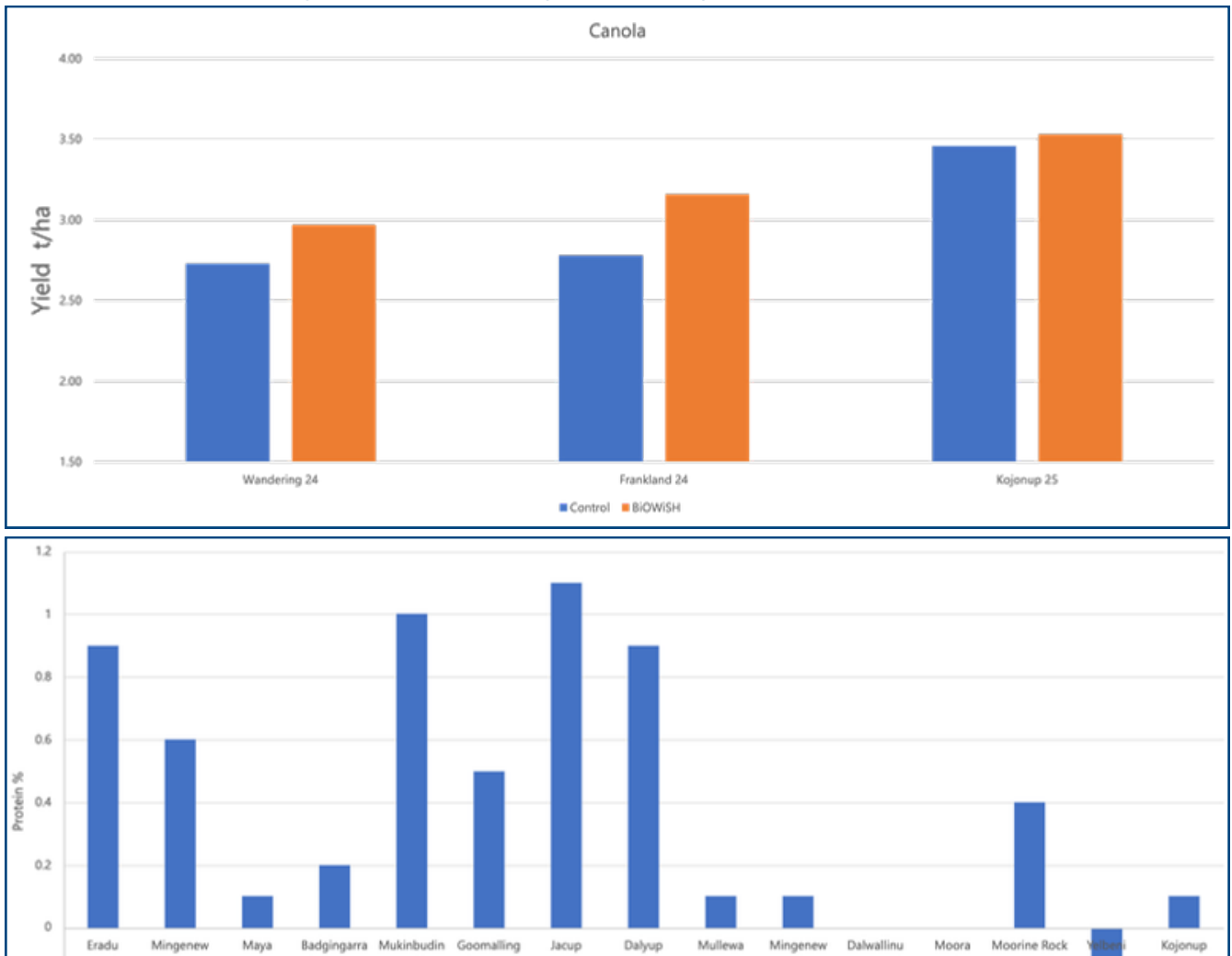
1. *Bacillus* microbes are coated onto granular fertilizer or mixed with liquids.
2. Once soil applied, microbes populate the soil immediately surrounding the plant roots, an area called the rhizosphere.
3. Microbes consume soil nutrients (N,P,K,S etc.) and use the rhizophagy cycle to enter the plant roots.
4. Nutrients are extracted from the microbes within plant roots.
5. Depleted microbes exit plant roots and begin consuming nutrients again in this symbiotic relationship.
6. Along with direct yield increases from additional nutrient uptake, the microbes also stimulate plant exudates (an indirect benefit), which in turn enhances other beneficial biology in the root zone.





BiOWiSH coated fertilizer showing rapid early bacterial growth after 48 hours of incubation. This represents the ability of BiOWiSH to populate the rhizosphere. Testing was conducted independently by MALDIID - June 2026

Canola yield and wheat protein responses in Summit trials



BiOWiSH on the left showing increased biomass in wheat

