



## Mapleton Agri Biotec Pty Ltd

### Products Summary

Mapleton Agri Biotec has developed a range of products for agriculture that enable more efficient and profitable crop production. The products work to allow conventional farmers to farm with reduced fertiliser inputs, while maintaining or increasing yields and profits. Many farmers are looking for tools to farm more sustainably without having to totally modify their farming systems. We provide those tools. Other farmers are making major changes to their production systems to be biodynamic or organic. The majority of our products are certified as organic via different registration schemes around the world.

Our product development proceeds by using initial selection for the elite natural species of microbes and fungi that are tested to determine which will address the particular agricultural goal we are targeting. Testing the formulations requires rigorous science to determine which combinations are effective in real world agricultural systems and MAB have used a lot of formal field trials in different countries to achieve this goal. This knowledge also allows us to provide high quality advice on how to use these products in a wide variety of cropping systems.

All our microbe inoculums are made from 100% Australian produced microbes and every batch is tested in a Government laboratory to maintain a quality guarantee for our clients. Our products are aimed mainly at commercial farmers who need a guaranteed quality of product that will allow them to shift easily to the emerging global requirements for food to be produced more sustainably. Our products also address some of the challenges of assisting farmers to develop more resilient cropping systems in changing climatic conditions.

The following is a summary of each of our products to provide some context to the more detailed product descriptions and presentations that are presented along with this summary.

#### **TwinN**

TwinN was MAB's original product and the core TwinN technology underpins most of our more recent products as well. TwinN consists of a selection of nitrogen fixing microbes in a freeze-dried vial. This format allows a reliable shelf life and, importantly, it allows us to use some species of high performing nitrogen fixing species that are unable to survive as powder or liquid formulations.





## NitroGuard

NitroGuard is our evolved version of TwinN. It contains the identical vial of freeze-dried nitrogen fixing microbes as is present in TwinN, but it also contains selected Bacillus microbes. So NitroGuard provides the same nitrogen fixing benefits as TwinN but the Bacillus in NitroGuard also helps drive even better root development. NitroGuard is used by many tree crop growers who have problems with root pathogens and other sources of root damage. NitroGuard microbes also act as phosphorous solubilisers, allowing crops to access phosphorous that is bound in the soil and unavailable to crops.

## NitroGuard DEFENDER

Following feedback from tree crop growers eg. avocado and citrus growers, we have released a version of NitroGuard called NitroGuard DEFENDER that has a multiplied dose of Bacillus to combine with the original TwinN nitrogen fixing microbes. This product is often used where growers struggle to get strong vigorous root systems in different crops. It is also used in crops where growers want to prevent the spread of root growth problems.



## PastureN

PastureN contains the same microbes as NitroGuard, plus plant-derived amino acids. It is a microbial biofertiliser for use in pastures. Dairy and beef producers use PastureN to grow more grass with moderate rates of nitrogen fertiliser, or to make better use of nitrogen fertiliser at reduced rates (increased Nitrogen Use Efficiency). Pastures for horses have an obvious fit for this product. PastureN is Mapleton Agri Biotech's new product for 2019-20 and it has been developed to help farmers produce pastures of high quality in a more profitable and sustainable way.



## CataPult SuperFine

CataPult contains mycorrhizae (VAM) plus Bacillus. It uses our Release and Catch Technology with the Bacillus solubilising bound P while the mycorrhizae form a large network of fungal hyphae that capture P, N, Zn and other nutrients very efficiently and deliver them back to the crop plants. It is primarily used to improve P nutrition in crops.

CataPult is also used widely to assist in tolerance of water stress. In many parts of the world dry spells are becoming common, or irrigation water becomes restricted later in the season. CataPult assists with these problems. It is specifically formulated to allow use in drip irrigation systems and other fertigation systems.



RELEASE & CATCH TECHNOLOGY