Synergro M²

Biostimulant









Synergro M^{2 ®} - Microbial Technology for Sustainable Ag

Synergro M² is derived from a consortium of microbes uniquely co-fermented to produce a rich array of metabolites to improve the signaling capabilities of plants and liberate soil nutrients.

Synergro M² activates the root rhizosphere, delivering powerful metabolites to the area where the plant roots meet the soil.

- Increases rooting and vegetative plant growth
- Reduces the impact of abiotic stress
- Improves crop performance drives yield and enhances quality
- Registered by CFIA
- Safe and stable when premixed with fertilizers

Our proprietary fermentation process converts microbes into beneficial metabolites.





MICROBES





FERMENTER



Metabolites
include enzymes,
organic acids,
amino acids, and
other beneficial
compounds

Key Metabolites in Synergro M²

| Component | Function | Component | Function | | |
|---------------|---|--------------------|--|--|--|
| Organic acids | Make phosphorus more soluble and improve mobility of nutrients such as manganese, copper, zinc, iron, calcium and magnesium Improve glomalin production, associated with a healthy rhizosphere | Phenolic acids | Attract beneficial bacteria associated with a healthy root rhizosphere Mediate plant stress responses Support lignin accumulation and salinity tolerance | | |
| Amino acids | Improve complexing of key nutrients making them more available for uptake and utilization by the plant Improve antioxidant defenses of plants and alleviate salt stress Improve flowering, seed set and development | Phosphatase enzyme | Releases phosphorus from organic matter making it plant available Helps regulate osmotic processes in the plant Improves root development | | |
| Polyamines | Reduce the impact of drought stress Priming effects that provide stress-resistance | Flavonoids | Facilitate colonization by N-fixing bacteria Influence pollen tube development Regulate plant stress responses | | |

Proven Agronomic Performance

Agronomic trials demonstrate that Synergro M² can be applied 3 different ways (seed, soil or foliar) to show an advantageous and consistent agronomic response.

SEED

Winter wheat seed treated with Synergro M² showed an average yield increase of 3.7 bu/ac for trials conducted in the Pacific Northwest.

SEED-APPLIED: WINTER WHEAT

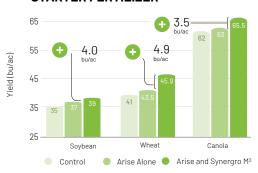


Synergro M² was seed-applied at 1 ml/Kg to wheat Trials were conducted at 3 PNW locations by a third party research company

SOIL

Replicated trials from 2019 and 2020 showed a strong response with Synergro M² in canola, wheat and soybean crops when combined with a starter fertilizer at the recommended rate of 250 ml/ac.

STARTER FERTILIZER



Small plot replicated trial conducted in Portage, MB in 2019 and 2020 Arise (starter liquid Phosphorus) was applied at 3 gal/ac in furrow. Synergro M² was applied at 250 ml/ac.

FOLIAR

Grower-replicated strip trials in Manitoba in 2019 on oats and wheat showed a consistent improvement in yield with Synergro M² applied at herbicide timing.

HERBICIDE: OATS & WHEAT



Synergro M^2 applied at 125 ml/ac in a tank mix with NRG P (applied at 1 L/ac) Synergro M^2 and NRG P applied with the existing herbicide application

Grower Demo - Soil Application

- A 2018 grower demonstration trial in Southern Saskatchewan on lentils clearly showed from the yield map a significant increase in production for the Synergro M² treated side of the field (left).
- Synergro M² was applied in-furrow at 250 ml/ac on 40 acres of land.
 The total field was 96 acres.



Product Recommendations

- For a seed treatment, use Synergro M² in combination with a nutrient dressing and a crop protection product.
- For soil applications, use Synergro M² in combination with a starter fertilizer.
- For foliar applications, use Synergro M² in combination with a nutrient(s).
- Synergro M² is compatible with most fertilizers and commonly used pesticides. Conduct a jar test to determine product compatibility. Contact your ATP representative with any compatibility questions.
- To view the Synergro M² SDS and Product Labels please visit www.atpag.com

| Product | Analysis | Rate | Timing | Form |
|-------------------------|----------------------------------|-----------|--------|--------|
| Synergro M ² | Biological Metabolite Consortium | 1 ml/kg | Seed | Liquid |
| Synergro M ² | Biological Metabolite Consortium | 250 ml/ac | Soil | Liquid |
| Synergro M ² | Biological Metabolite Consortium | 125 ml/ac | Foliar | Liquid |



At ATP, we believe a proactive, science-based approach to restore the balance between plant and soil health is the single most effective way to deliver the genetic potential of the crop. We challenge the status quo by utilizing agtech to monitor and drive productivity.

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