

MAXIMIZE YOUR POST-HARVEST NUTRITION PROGRAM WITH IN-M1

Post-harvest is a critical time for replenishing essential nutrient levels in perennial crops like trees and vines. During this period, root activity and nutrient uptake is extremely high in deciduous trees and vines as the plant prepares for winter dormancy. Beneficial microbes in IN-M1 actively promote root growth, increase nutrient uptake and contribute to soil health – a perfect complement to basic post-harvest nutrition programs.

NUTRIENT UPTAKE

Improved nutrient solubility allows for more efficient nutrient utilization, leading to increased marketable yields, greater uniformity and improved productivity - in some cases reducing the amount of inputs required.

- IN-M1 has been proven to solubilize phosphorus. In a lab study, various concentrations of IN-M1 were shown to convert insoluble tri-calcium phosphate to a soluble form, illustrated by a transparent halo that forms around the microbial cultures. Research suggested that 8 out of 10 microbes in IN-M1 solubilize phosphorus. Some of the microbes converted the tri-calcium phosphate to a soluble form within the first 24 hours of contact.
- Independent field trials have proven that IN-M1 increases uptake of nitrogen. In a 2017 lettuce trial with Pacific Ag in California,

when the grower kept optimal levels of nitrogen, the addition of IN-M1 caused a yield increase of 4.5%. When reducing nitrogen by 30% from the grower standard and adding IN-M1, yields were 31.3% higher with IN-M1 than without.

 Independent field trials have proven that IN-M1 increases uptake of calcium, shown by the reduced occurrence of blossom end rot, which is associated with calcium deficiency. In a 2016 trial on bell peppers, IN-M1 reduced the occurrence of blossom end rot by 12.6%, indicating that more calcium was available to the peppers.

Fig. 1: Phosphorus solubilization study

Fig. 2: Nitrogen and yield study with Pacific Ag, 2017.

Fig. 3: Calcium study with Univ. Of Georgia

1. Undiluted concentration (bottom)

- 2. Diluted to 1:25 (vol:vol) (top right)
- 3. Diluted to 1:100 (vol:vol) (top left)



IN-M1 living Solubilized Insoluble microbes phosphorus phosphorus



BLOSSOM END ROT IN BELL PEPPERS 2016



*IN-M1 is currently labeled as GARDEN SOLUTION® in the U.S. and SYNERGRO® in Canada.



WHY IS POST-HARVEST NUTRITION IMPORTANT?

When harvesting fruit, vital nutrients are removed from the tree or vine—leaving the remaining plants and soil lacking for nitrogen, boron, zinc, phosphorus and other macro- and micronutrients. The plant moves remaining nutrients to the woody tissue, forming a food source to build the foundation for next season's crop development.

Post-harvest nutrition:

- Builds a nutrient "savings account" to start the next season with a solid foundation
- Maximizes early season growth potential
- Gives the plant extra energy for bud break and shoot growth
- Protects against winter injury
- Improves uniformity and fruit set

PROVEN BENEFITS OF IN-M1 IN TREE & VINE RESEARCH TRIALS

PEACHES:









APPLICATION RECOMMENDATIONS

To optimize nutrient uptake, add IN-M1 at 0.5 to 1 gallon/acre to your post-harvest and spring bud break fertilizer applications.

TO LEARN MORE ABOUT IN-M1, CONTACT YOUR CONCENTRIC AG REPRESENTATIVE OR VISIT

WWW.CONCENTRICAG.COM

