

Micronutrient deficiencies is one of the major constraints to crop productivity and contributors to “Hidden Hunger”

INTRODUCING A QUANTUM LEAP IN MICRONUTRIENT TECHNOLOGY

Bio-Available Mineral Formula X (**BAM-FX™**) allows positively charged, ionic molecules to cross plant cellular membranes with a minimal expenditure of energy. The minerals can then be more efficiently used in a long list of reactions leading to a biological cascade, creating a net positive in carbon harvest. Extensive field trials on a large variety of crops across a broad range of climates and conditions have consistently demonstrated that using BAM-FX in a grower’s mineral nutrition program can enhance yields, lower costs per acre, mitigate stress and increase efficacy.

Research & Development

- **BAM-FX R&D** has included mission flights to the International Space Station, university studies, toxicity and stability studies, laboratory studies, field tests and fifteen years in discovery with over 5 million dollars in R&D.

How is it different?

- **BAM-FX ionic minerals are not bonded with salts**; the plant’s energy is directed toward transporting the **BAM-FX** minerals to locations in the plant that are deficient, this **opens metabolic pathways to achieve superior rooting, thicker stemming, biomass growth, increased sugar/brix content and a higher nutritional value.**
- **BAM-FX has demonstrated increased absorption and the up-take of other minerals, while breaking down the salts in the soil; this, together with the higher levels of nutrient utilization, can impact and reduce run-off.**
- **BAM-FX systemically utilizes additional micro and macro nutrients latent in the soil thus, reducing NPK.**
- **BAM-FX helps plants to cope with environmental and chemical stresses which produce Reactive Oxygen Species (ROS) that are caused by; drought, flooding, salt, heat, frost, pathogens, excess nutrients and metals. ROS generated by these environmental stresses are most often responsible for killing crop plants.**
- **BAM-FX creates positively charged ionic molecules in the manufacturing process.** The positive electrical charge and the molecular structure **allow BAM-FX to cross or diffuse through the negatively charged plant cellular membranes of leaves and roots encouraging superior systemic activity and better product distribution.**
- **BAM-FX contains a balanced ratio of the ionic minerals**, cationic Zinc²⁺ and cationic Copper²⁺ solution, along with sulfate and ammonium, **resulting in highly bioavailable micro and macro nutrients.**
- **BAM-FX has a low pH, which stimulates root growth** and also helps solubilize minerals in the soil, which allows crop plants to uptake nutrients that are often unavailable in the soil matrix.
- **BAM-FX increases performance with an overall reduction in NPK.** BAM-FX tank mixes with liquid fertilizers and other commercial standard farming practice products. It can be applied after dry fertilizer applications.
- **BAM-FX protocols indicate fewer applications (3/crop cycle) with a price range of \$20 to \$40/acre/application** (depending upon crop type, number of applications & volume); + additional savings from the reduction of NPK.
- **BAM-FX can improve your bottom line, increase crop production, mitigate crop stress and reduce runoff.**

Note: BAM Agricultural Solutions, Inc. (BASI is a division of **Zero Gravity Solutions, Inc. (ZGSI)**, a public company. Bio-Available Mineral Formula X (**BAM-FX™**) is a patented product from ZGSI, which was originally designed for deep space missions by Astronauts to sustain plant growth while reducing weight and mitigating a multitude of potential plant stresses. Through a “Space Act Agreement” with NASA, ZGSI is preparing for additional research on the International Space Station to develop additional innovative products.

For further information on BAM-FX, visit www.bamagsolutions.com