

# Naturally Balanced Nutrition in Every Granule

Experience higher yields and balanced fertility in melons by providing the right nutrients at the right rate, right time, and right place for maximum return. Intrepid Trio is natural langbeinite, a unique mineral with three essential nutrients comprised of 21.5-22% potassium ( $K_20$ ), 10.5-10.8% magnesium (Mg) and 21-22% sulfur (S) as sulfates, depending on grade.

Intrepid Trio, also known as Sulfate of Potash Magnesia, allows growers to apply an extremely low chloride potassium (less than 1.0-3.0% Cl depending on grade) and neutral pH fertilizer with the benefit of sulfur and magnesium in the same ratio in each granule. Intrepid Trio is also OMRI Listed and approved for organic farming.

# When should Intrepid Trio® be applied?

Apply Intrepid Trio as part of a pre-plant fertilizer blend in preparation for melon seeding in the Fall or Spring. Split applications may be considered when broadcasting Intrepid Trio on deep sandy soils apt to leach.









INTREPID 1001 17th Street, Suite 1050 | Denver, CO 80202 www.intrepidpotash.com







### How does potassium (K,O) affect melons?

Melons remove significant amounts of potassium from the soil and is the most utilized nutrient during the growing season. Potassium serves as a regulator nutrient that aids in photosynthesis, improves water use efficiency of the plant through regulation of stomatal openings, and helps the plant resist disease and pests. The levels of potassium in melons also determine the level of sugars at harvest and thicken the rind to minimize damage during transportation.

Deficiency symptoms first appear on the older leaves as K is mobile within the plant. There will be a yellowing or scorching along the leaf margin. If conditions become severe the chlorotic areas will become necrotic and leaves will dry up and die. Many melon crops are also sensitive to high fertilizer salts that can negatively impact yield and quality. Intrepid Trio is the ideal product for melons as it supplies immediately available potassium in a fertilizer containing less than 1.0-3.0% chloride depending on grade.

<b>Growth Stage</b>	Potassium Effects	Magnesium Effects
Pre-Plant	Promotes strong early growth	Promotes strong early growth
Vegetative Growth	Aids in photosynthesis and improves water use efficiency	Plays key role in photosynthesis
Flowering	Helps plants resist disease and pests	Improves flowering and aids in promoting healthy leaf tissue
Fruit Set	Thickens the rind to minimize damage during transportation	Improves overall quality crop production
Fruit Fill	Aids in determining the level of sugars at time of harvest	Promotes healthy fruit fill

# K<sub>2</sub>0 22% Mg 11% • S 22%

Intrepid Trio provides three essential minerals readily available as your crop needs them.

## What effect does magnesium (Mg) have on melons?

Magnesium plays a key role in photosynthesis as the center of the chlorophyll molecule and acts in enzyme reactions forming proteins, and aiding the plant in the manufacture of energy. In melons, magnesium also aids in promoting healthy leaf tissue and fruit fill, while improving flowering and overall crop production.

Deficiencies of magnesium in melons can cause reduction in growth and are most common on sandy, acidic soils. The symptoms will appear first on the older leaves as yellow or white areas between the veins. Additionally, high rates of K fertilizer without an Mg source can induce a deficiency and applying a balanced fertilizer like Intrepid Trio that has K, Mg, and S in each granule will provide balanced nutrition and high-quality melons.

### How does the sulfur (S) in Intrepid Trio® benefit melons?

Sulfur is an essential part of vitamins, hormones, and proteins within a plant. Sulfur and nitrogen uptake work hand in hand, and as a result, nitrogen use efficiency is a key benefit of sulfur application to a vegetable crop. Intrepid Trio provides sulfur in the sulfate form that is immediately available to the plant and pH neutral causing no acidifying effect to the soil.

#### When will Intrepid Trio® be available to melons?

Intrepid Trio readily dissolves in the soil slowly, reducing the risk of leaching and providing longlasting nutrients that are immediately available to the plant.







