



# Naturally Balanced Nutrition in Every Granule

Experience higher yields and balanced fertility in bermudagrass pastures and hay 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 ( $\rm K_20$ ), 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.

## Nutrient removal by hybrid bermudagrass

Yield	l N	P <sub>2</sub> 0 <sub>5</sub>	K <sub>2</sub> 0	Mg	S
Ton/Ac	lb/ac	lb/ac	lb/ac	lb/ac	lb/ac
6	258	60	240	20	20
8	368	96	400	44	24
10	460	120	500	55	32

(Source: Eichorn, LSU 1996)



an even distribution of nutrients.











### When should Intrepid Trio® be applied?

Apply Intrepid Trio six weeks before the first cutting, and again after each harvest to replenish nutrient removal.

#### What are the benefits of potassium (K<sub>2</sub>0) fertilization for bermudagrass?

- Improved stand density and production longevity of stand
- Greater rhizome formation and root vigor
- Increased plant use efficiency of nitrogen fertilizer applications

Intensive bermudagrass hay production can deplete soil potassium reserves very quickly, particularly on sandy soils. Each ton of hay produced removes 50 lb /  $K_2$ 0 / ac from the soil. Uptake in a rapidly growing crop can equal 4 lb  $K_2$ 0 / ac / day. Replenishing the soil potassium with a fertilizer such as Intrepid Trio is critical in high-yielding bermudagrass hay production.

#### Is magnesium (Mg) needed in a high-yielding bermudagrass hay environment?

Balanced fertility is critical for forages that are consumed by ruminant animals. Low blood levels of magnesium can cause a metabolic disorder in cattle, known as grass tetany, that can lead to the death of livestock. Livestock that graze pastures and feed on hay high in potassium and low in magnesium can develop grass tetany. Forages high in potassium and low in magnesium need magnesium levels of at least 0.25%. Bermudagrass hay and pastures low in magnesium will respond best to a readily available balanced fertilizer such as Intrepid Trio.

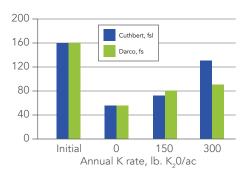
(Source: New Mexico State university, 2003)

#### Is sulfur (S) application needed for bermudagrass pastures and hay?

Sulfur acts as an important component of amino acids and aids with nitrogen recovery. It also aids in the palatability, digestibility and intake of the forage for animals. Sulfur deficiencies in a bermudagrass field are represented by a chlorotic, or yellowing response of the forage, which can commonly be mistaken for a nitrogen deficiency. The sulfur in sulfate form found in Intrepid Trio will lead to greater recovery of applied nitrogen fertilizers and better quality forage.

## When will Intrepid Trio® be available to the bermudagrass stand?

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



(Source: Nelson et al, 1983. Soil Sci. Soc. Am. J. 47:963-965)

Effect of potassium  $(K_20)$  fertilizer input on soil-test potassium level after three years of bermudagrass production on two sandy soils in east Texas. Potassium was applied yearly as potassium chloride.



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







