

SOIL CONDITIONER

TIMAC AGRO TECHNOLOGY

Our patented formulas are derived from nearly 60 years of research and development in plant extract technology. Through precise methods, our extracts are evaluated for their specific effects at each stage of crop development. By enriching selected extracts with macro- and micronutrients, we create bionutritional formulas that meet the ever-changing needs of the crop. Better yield and quality benefit our customers and are the result of improved emergence, vegetative growth, and reproductive performance.

As a company, our mission is to improve agriculture by focusing on four major areas of service to growers:

- Relentless innovation
- Flexible manufacturing
- Optimized applications
- Partners in the field

FEATURES

Humistart is a soil conditioner proven to increase microbial activity, provide labile calcium, and improve breakdown of manure and (or) stubble into plant available nutrients. As a homogeneous granule, it supplies several key nutrients, such as nitrogen, calcium, sulfur, magnesium, and trace amounts of boron, iron, and zinc. Humistart works well on manured fields, orchards, vineyards, vegetables, fruits, and in both no-till and conventional tillage. It can be used alone or blended with other granular fertilizers.

KEY BENEFITS

- Calcimer provides labile calcium that helps improve soil structure and feeds the crop
- Delivers other critical micronutrients in a homogeneous granule
- Humistim complex (our patented soil amendment) increases microbial breakdown of stubble or manure into plant-available nutrients

APPLICATION

Broad acre application in no-fill or manured fields will often call for 100 to 200 lbs/ac. Tree fruit and vegetable production will normally require 200 to 400 lbs/ac to more intensively increase soluble calcium. Humistart can be blended with fertilizers or applied alone.

Please refer to soil tests and the advice of your Timac Agro sales representative for specific recommendations.

PACKAGING SIZE

- 50 lb bag
- 1,333 lb super sack

HUMISTART

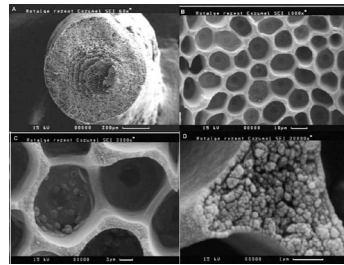
→ HUMISTIM



SOIL CONDITIONER

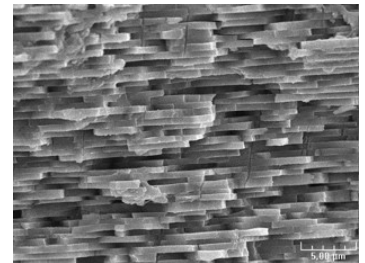
Humistart is manufactured using our exclusive marine-based mineral called **CALCIMER**. This highly-soluble material provides quicker release of calcium compared to limestone. This is due to its unique microscopic structure.

Improved Calcium Availability



CALCIMER

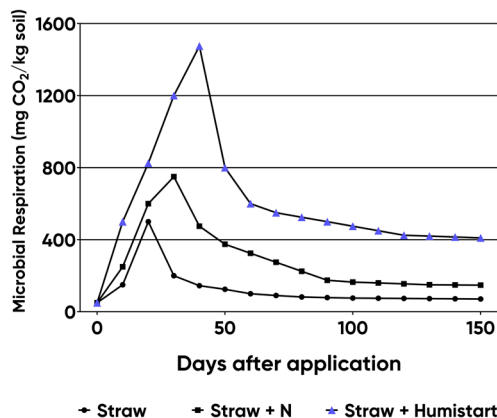
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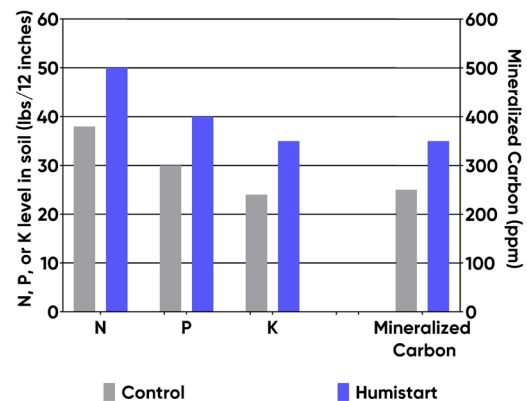
Traditional Lime

Humistart is the only soil conditioner that enhances microbial breakdown of organic matter into plant-available nutrients.

Effect of Humistart on soil microbial respiration



Effect of Humistart on soil nutrient availability



Independent research shows that the Humistim Complex increases microbial respiration by almost 3 times compared to straw alone. Data shown are averages of 3 replicates of straw-covered soil that was amended with 250 lb/acre of Humistart. Source: National Institute of Agronomy, Paris Grignon, Paris, FR, 2004.

In split-field experiments, Humistart treated areas showed increased availability of N, P, K and mineralized carbon. Data shown are averages of 4 replicate samples per area taken in June. Humistart was spread at a rate of 400 lb/acre 4 months earlier on a silty sand loam, pH = 7.0. Source: RITMO Labs, Cedex, FR, 2013.



ANALYSIS

Homogenous granules contain:

Total Nitrogen (N)	4%
Ammoniacal Nitrogen	4%
Calcium (Ca)	20%
Magnesium (Mg)	0.5%
Sulfur (S)	5%
Boron (B)	0.15%
Iron (Fe)	0.1%
Zinc (Zn)	0.25%

Derived from: Marine Calcium Carbonate, Ammonium Sulfate, Zinc Oxide, Calcium Borate, Iron Carbonate.