



**We're digging deeper
to take yields higher.**

**A unique combination of Monty's proprietary
activated humics and mineral rich basalt,
designed to fortify your soil and plants.**



From the depths of the earth comes the ideal way to take your yields to new heights.

Monty's MagmaHume™ is forged from mineral-rich volcanic basalt, then blended with Monty's proprietary activated humics to deliver those minerals to the plant faster: in a ready-to-apply, naturally soluble form that works faster to improve soil health, fertility, and most importantly... your yields.

At Monty's, we know yield is everything. But we also know that what you grow is really only as good as the soil you grow it in. That's why we've dedicated our entire company to the science of better soil through activated humics. Better soil leads to healthier plants and higher yields.

Now we're proud to introduce Monty's new MagmaHume: the answer for today's progressive farmer. MagmaHume takes mineral-rich volcanic basalt — a building block of some of the most fertile soil on earth — and combines it with our activated humics to help you build better production from the ground up. And it's OMRI-listed for organic applications!



MagmaHume: Healthier Soil. Healthier Plants. Higher Yield.

The power of pure volcanic minerals, enhanced by the proven science of Monty's. For growing your best, and improving your soil's performance while you do it, there's no better solution than MagmaHume. Try it on your crops, and see how digging deeper can help you grow like never before.



Basalt



Humics



MagmaHume

BASALT brings more benefits plants and soil hunger for:

- Key nutrients including Calcium, Magnesium, Cobalt, Iron, Manganese; Silica; and 46 trace elements... all for plant and soil fortification.
- These nutrients assist in photosynthesis, enzyme production, catalyzing key plant processes, and support plant strength.

Monty's proven HUMIC TECHNOLOGY catalyzes basalt's inherent benefits:

- Improves overall soil health by reducing compaction, enhancing micronutrient uptake, and increasing microbial activity.
- Enhances breakdown of plant residue and improves soil-moisture retention.

Natural, organic, and balanced for better growth, MAGMAHUME brings more energy to your plants:

- Dual-action soil and plant fortifier.
- Ideal for silica- and nutrient-demanding crops like rice, sugar cane, wheat, small grains, corn, hemp, soybeans, and tomatoes.
- OMRI Listed and approved for organic application.
- Pelleted product is uniformly sized, low-dust and easy to spread.
- Basalt processed to maximize surface area interaction with activated humics.
- Blendable and compatible with other dry inputs.

MagmaHume is rich with a variety of important nutrients including:

Calcium (Ca)

- Stimulates leaf and root development
- Strengthens plant structure
- Activates several plant enzyme systems
- Improves root growth conditions

Magnesium (Mg)

- Involved in photosynthesis
- Affects seed development
- Aids in phosphate metabolism, plant respiration, and the activation of many enzyme systems

Cobalt (Co)

- Is a trace element in plants
- Is a component of a number of enzymes
- Increases drought resistance of seeds
- Is important for nitrogen fixation in legumes
- Helps ensure maximum efficiency of plant activity

Iron (Fe)

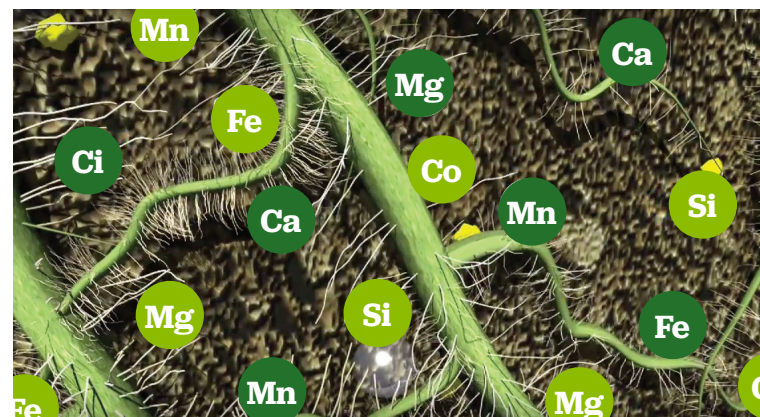
- A catalyst to chlorophyll formation
- Helps certain respiratory enzyme systems
- Acts as an oxygen carrier

Manganese (Mn)

- Plays a direct role in photosynthesis by aiding the plant's chlorophyll synthesis
- Accelerates germination and maturity while increasing the availability of P and Ca
- Deficiency symptoms appear on younger leaves
- Deficiencies may result from an imbalance with other nutrients such as Ca, Mg, and Fe

Silica (Si)

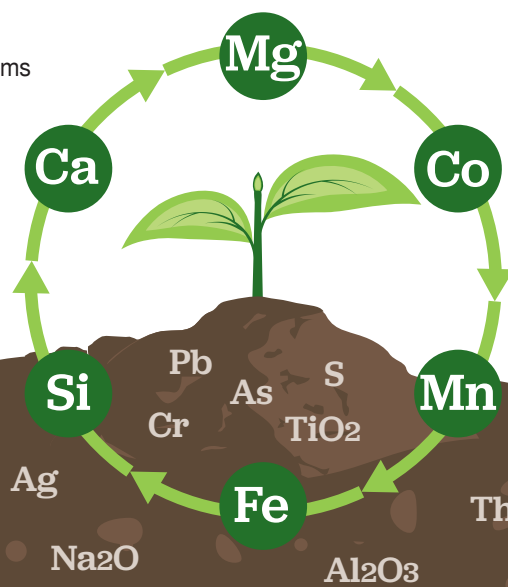
- Silica strengthens cell walls, which enables plants to endure environmental stressors like drought and extreme temperatures; and metal toxicity and tolerance to salt
- Silica can equip plants to better resist pathogens



Monty's activated humic technology provides more oxygen and a variety of essential nutrients for healthy root system growth by stimulating the soil biology. Monty's activated humic is engineered to unlock tied up nutrients making them available to the plant as it continues to develop. We understand the right concentration of humic substances to maximize biological, geological, and chemical impact – which contributes to healthier soils leading to higher yields. This is one of our advantages.

“Although the weather threw us many curveballs, we were pleasantly surprised with MagmaHume and a 17.5 bushel advantage. MagmaHume spread fine and we look forward to using more in the future.”

Brad Hobrock of Illinois-based AgriBio Systems.



Monty's Humic Difference

Farmers around the country are beginning to discover the value of humics. Humics are basically organic substances that work as soil catalysts. Not all humics are created equal, nor do they perform the same.

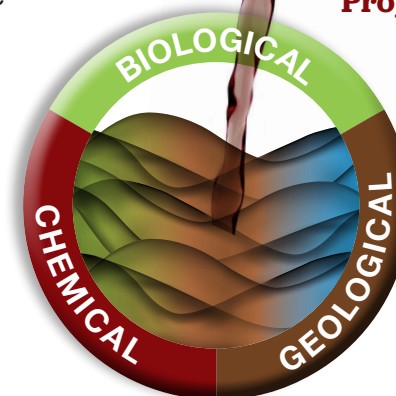
The active humic technology in Monty's products is engineered for faster results... biologically, geologically and chemically. This is what makes us most effective in helping to maximize yields.



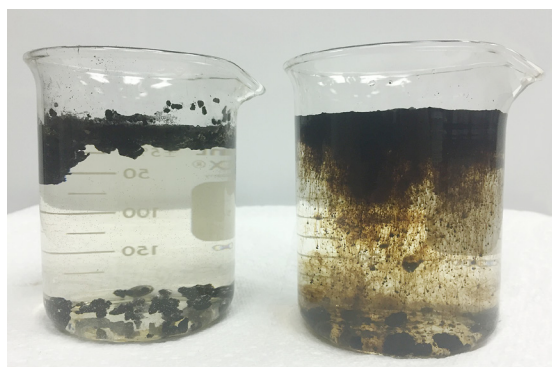
The Monty's Edge

Monty's understands the right ratio of humic substances that maximize plant growth. Our engineered humic product stimulates all three soil health properties – biological, chemical, and physical – causing dramatic differences in soil, roots, and crops. Monty's understands the importance of that relationship and how it impacts the success of the plant's growth.

**THIS is the
Monty's edge!**



**Three Soil
Health
Properties**



Competition

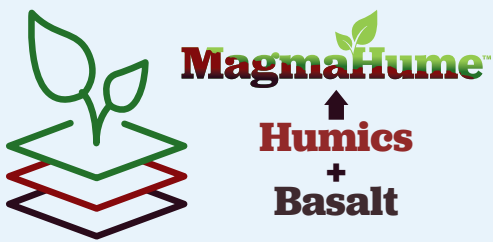
Monty's Humics

**Monty's activated
proprietary humic
technology converts
nature's insoluble
humic substances into a
highly activated, clean,
engineered catalyst for the
soil and plant – THAT is
the Monty's advantage.**



I recommend Monty's because it does a lot of things the plant needs. It stimulates early root development and early growth.

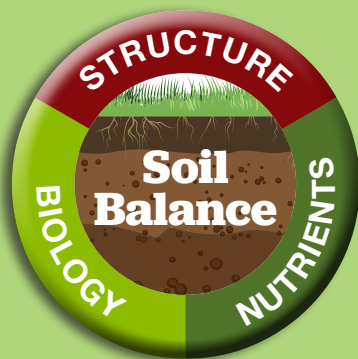
Dr. Ron Heiniger, NC State University



Rebuilding Your soil

Bring your soil back to its ideal balanced state.

Our soils today are not as productive as they once were. Weather, insects, erosion, over-production, and high salt products have led to an imbalanced soil, robbing you of yield potential... and higher revenue! MagmaHume is designed to help revive your soil, maximizing its health, and improving the health and yield of your crop!



The Basics of MagmaHume

What is MagmaHume? MagmaHume is a unique combination of Monty's proprietary activated humics and mineral rich basalt, designed to fortify soil and plants. It is a unique dry pellet containing activated humic substances, key organically chelated nutrients (Ca, Mn, Mg, Fe, Co), and Silica (Si) for plant fortification.

What are the benefits of MagmaHume? a) The nutrients found in MagmaHume fortify the plant by: Enhancing photosynthesis, aiding enzyme production, catalyzing key plant processes, and supporting plant strength. b) It improves overall soil health by: Reducing compaction, enhancing micronutrient uptake, catalyzing microbial activity, enhancing breakdown of plant residue, and improving soil-moisture retention. c) It is flexible and compatible by: Blending with dry agriculture inputs. d) It is OMRI Listed and approved for organic applications.

What makes MagmaHume innovative and unique?

a) It contains Monty's unique, activated humic substances. These proprietary humic acids have demonstrated consistent success over decades of use on many crops and soil types. Successful results include measurable soil health properties, nutrient efficiency improvement, healthier plants, increased crop quality, and ultimately higher yields. b) Optimized efficiency. The basalt used in MagmaHume is sized to maximize surface area interaction between the activated humic substances and the basalt. Allowing more surface area for the humic substances to work provides a higher rate of mineral conversion into plant-available forms. c) Soil and plant fortification. MagmaHume is uniquely formulated to fortify the soil and plants improving key soil health properties and feeding the plant with strengthening nutrients.

What are organically chelated nutrients? The activated humic substances in MagmaHume increase the amount of soluble and plant available Ca, Mg, Mn, Fe, Co and Si. As these nutrients interact with the activated humic substances, they are organically chelated, preventing them from being tied up in the soil.

What are the benefits of Silica? Silica is accumulated at high levels in tissues of almost every plant species. Silica plays an important role on metabolic, physiologic, and structural components of plants. Silica increases resistance to both biotic and abiotic stressors. Studies have shown an increase in plant resistance to insects and diseases and plant lodging. Silica accumulation reduces plant water loss through transpiration and increases tolerance to drought. Silica interacts with magnesium and increases chlorophyll levels and leaf metabolism, two important components of photosynthesis.

Can I blend MagmaHume with other dry fertilizers?

Yes, MagmaHume is compatible with dry fertilizers of similar granule size (SGN).

What are best application methods? For row crops, hemp and specialty crops grown outdoors: Blend with other dry fertilizers for a single pass application. For indoor growing: Blend with soil mixtures.

Can I use MagmaHume in organic growing? Yes, MagmaHume is OMRI Listed and approved for organic application.

What are the best soil types to use MagmaHume?

MagmaHume is formulated for all soil types.

Does basalt contain harmful salt or increase salt content in your soil?

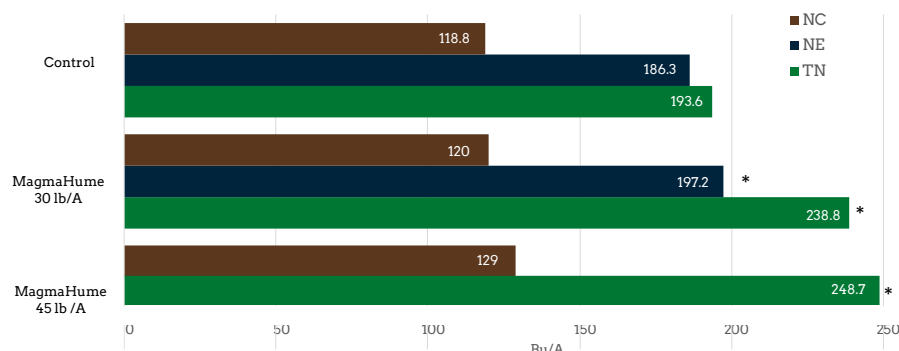
No, basalt is not salt. It is rich in plant beneficial nutrients and 46 trace elements.

What is the ROI when applying MagmaHume? While farmers face many factors that can impact overall crop performance, initial studies show a positive return on investment. Across four states and two years, (2019 and 2020) average ROI from corn trials was \$49.56/Acre. Positive ROI on soybean in 2020 resulted in an increase of \$45.36/Acre compared to the control.

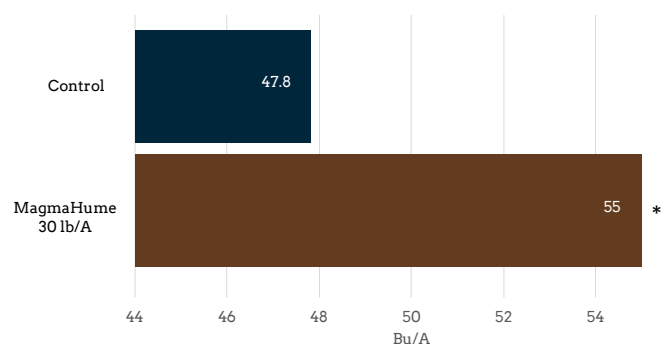
Where can I buy MagmaHume? Please contact your Monty's representative or call 1-800-978-6342.

Healthier Soil. Healthier plants. Higher Revenues.

MagmaHume produced an average ROI of \$53.91/acre in corn and \$45.36 in soybeans in replicated 3rd party trials across the United States.



Corn Trials. The results above are a combination of three replicated field trials completed at different locations throughout the United States in 2020. Studies examined varying rates of MagmaHume Application from 30-45 lb/A. MagmaHume significantly increased yield in corn compared to the control plots in all locations across different soil types. *For additional trial data, visit montysplantfood.com.*



Soybean Trial. The results above are derived from a replicated field trial in Memphis, TN in 2020. This study examined MagmaHume application at 30 lb/A. MagmaHume significantly increased yield in soybeans compared to the control plots. *For additional trial data, visit montysplantfood.com.*

*Indicates statistically significant at a P-value 0.05 compared to the control.

Note: Corn calculated at \$3.61 Bu (nass.usda.gov) and \$0.96 lb/MagmaHume. Soybeans calculated at \$10.30 Bu (nass.usda.gov) and \$0.96 lb/MagmaHume

ACTIVE INGREDIENTS

Silica (SiO ₂)	22%
Iron (Fe)	5%
Magnesium (Mg)	3%
Calcium (Ca)	2%
Manganese (Mn)	0.08%
Cobalt (Co)	0.004%
Derived from Basalt	

Humic Acids	0.75%
Derived from Lignite.	

APPLICATION INSTRUCTIONS

General application rates are 30-45 pounds per acre. Optimal rates will vary with timing, placement and methods of application. Consult your local dealer for optimal rates for your particular region, soil types, and usage. MagmaHume may be mixed with most granular applications or other dry products including animal manures. When applying as a mix with other granulated products, ensure even distribution by mixing thoroughly before application.

“Placing pulverized rock such as basalt into farmland has a real potential to both increase crop yield and capture carbon to be stored in the earth for prolonged periods of time. Agriculture could be key to creating negative carbon emissions.”

Professor Benjamin Houlton, Director of the John Muir Institute of the Environment at University of California Davis.



**Healthier Soil.
Healthier Plants.
Higher Yields.**



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