Research, Validation and Commercialization of Technologies

Part B: Plausible Scientific Evidence of Supreme(AG)™ with Nutri-Mastic™ as a Mulch, Soil Amendment, Natural Fertilizer, and More

Rev.6-21Dec25-ifus

IFUS Table of Contents:

IFUS Point 2: Predation Prevention as a Natural Pesticide

As SupremeAG™ with Nutri-Mastic™ has shown efficacy to any number of acid- and iron-loving plants, a formal scientific trial kicked-off on the application of SupremeAG™ with Nutri-Mastic™ on strawberries in the U.K.

To date, trials across the U.S.A. and Canada have demonstrated the successful application of SupremeAG™ with Nutri-Mastic™ to a myriad of trees, shrubs, plants, and cut flowers. Included in the list are: (1) Citrus (Oranges, Lemons, Grapefruit, etc.), (2) Roses, (3) Apples, (4) Pears, (5) Peaches, (6) Blackberries, (7) Tomatoes, (5) Watermelon, (6) Cantaloupe, (7) Plums, (8) Cherries, (9) Pecans, (10) Azaleas, (11) Crepe Myrtles, (12) Mimosa, (13) Oaks, (14) Figs, (15) Magnolias, (17) Altheas, (18) vegetables (Bell Peppers, Green Beans, etc.), and (19) any number of floral producing plants.

These trials have consistently demonstrated:
(1) Healthier, pest-free plants.
(2) Enhanced bloom, fruit, vegetable, and nut production
(3) Enhanced fragrance of blooms
(4) Enhanced favor and taste of fruits, vegetables, and nuts

Furthermore, a trial conducted by SUAREC on "Greens" demonstrated that:
(1) mustard, (2) broccoli, (3) kale, (4) spinach, (5) and other species in this line of "Greens" proved unsuccessful. Lady Bugs devoured the SupremeAG™ with Nutri-Mastic™ enhanced plants, and the SupremeAG™ with Nutri-Mastic™ produced little or no difference in growth rates or yield as compared to the control.

This contrast led to expanded research of previously conducted science as to:

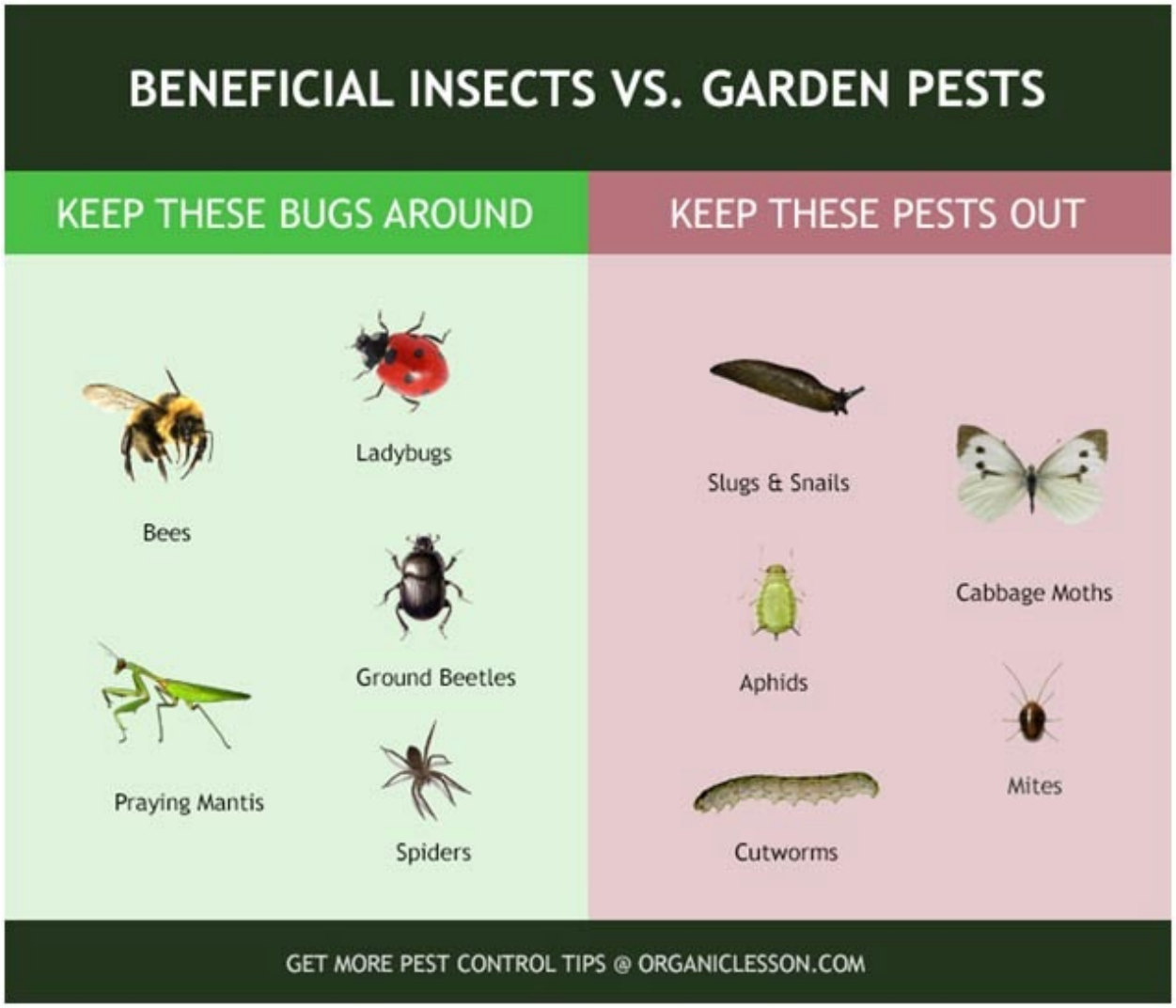
(1) the olfactory nature of bugs and insects,

(2) the impact of various phytochemicals on both specific plants as well as bugs and insects,

(3) the impact of specific phytochemicals contained within the plants and the effect on growth rate, yield, taste, and natural defense mechanisms.

For example, there is a contrast between "Beneficial Insects / Bugs" and "Garden Pests" as illustrated in Picture 1:

Picture 1:



Hence, the IFUS Scientific Team has formulated a working theory that the natural phytochemicals in SupremeAG™ with Nutri-Mastic™ can for certain plant, trees, and shrubs:

(1) Repel unwanted insects, bugs, and pests.
(2) Attract beneficial insects, bugs, and pests.
(3) Improve growth rates and yields.
(4) Reduce, eliminate, and/or replace the need for synthetic fertilizers, pesticides, and/or herbicides.
(5) Reduce water requirements.
(6) Reduce the costs of growth and increase the revenue from yield and quality.

It is suggested at this time that this may be due to the flavonoid / indole-like phytochemical balance, and possibly the contrast of these competing phytochemicals.

In other words, things that smell good vs. things that don't are enhanced by SupremeAG™ with Nutri-Mastic™. Yet, the mix of the two competing groups of phytochemicals might be required so as to enhance favorable taste or smell. This is found in perfume formulation, food preparation, smell-remediation, smell-enhancement, and more. This science is well-established and used under the guise of "Steven's Power Law."

"Stevens' Power Law is an empirical relationship in psychophysics between an increased intensity or strength in a physical stimulus and the perceived magnitude increase in the sensation created by the stimulus. It is often considered to supersede the **Weber–Fechner law**, which is based on a logarithmic relationship between stimulus and sensation, because the power law describes a wider range of sensory comparisons, down to zero intensity."

The impact of this balance may drive:

(1) the olfactory response of select bugs, insects, and pests
(2) the flavor / taste of the fruit, nut, bloom, or produce
(3) The smell of the blooms from plants, trees, and shrubs
(4) the actual health and well-being of the plant, tree, and shrub
(5) the beneficial effect of the plant, tree, and shrub and/or the fruit, nut, or "Greens" to animals and humans, who would consume these.

This content is covered in the IFUS White Paper found at
https://www.impactfusionbrands.com/knowledge-base/part-1a-screw-worm-fly/

Hence, in the case of the Lady Bugs, the IFUS Scientific Team believes that in the case of the "Greens" tested at SUAREC, the Lady Bugs were driven by the enhanced phytochemicals in the "Greens" produced as a result of SupremeAG™ with Nutri-Mastic, so as to enhance the indole-like phytochemicals that drive Lady Bugs to become herbivores; hence, devouring the plants.

In contrast, on the IFUS Test Farm in Louisiana, Lady Bugs are actually introduced annually as a preventative measure for aphids. In this case, the enhanced phytochemicals from citrus trees and others nourished with SupremeAG™ with Nutri-Mastic™ is evident in the smell of Spring Blooms, the yield of fruit, the taste/quality of the fruit, the overall health of the plants, and the elimination and/or significant reduction of Sooty Mold on the Citrus Trees and others.

Sooty Mold is said to be spread by Aphids. Lady Bugs, in this situation seemingly become carnivores, eating the Aphids. Yet, the Lady Bugs leave the vegetation untouched.

Picture 1: Stock photo of Sooty Mold on a Citrus Tree

Picture 2: Stock Photo / A ladybug feeding on aphids: Science Photo

Picture 3: Stock Photo of a Healthy Satsuma Citrus Tree:

IFUS Point 3: Mulching and/or Soil Amendment (In Progress)

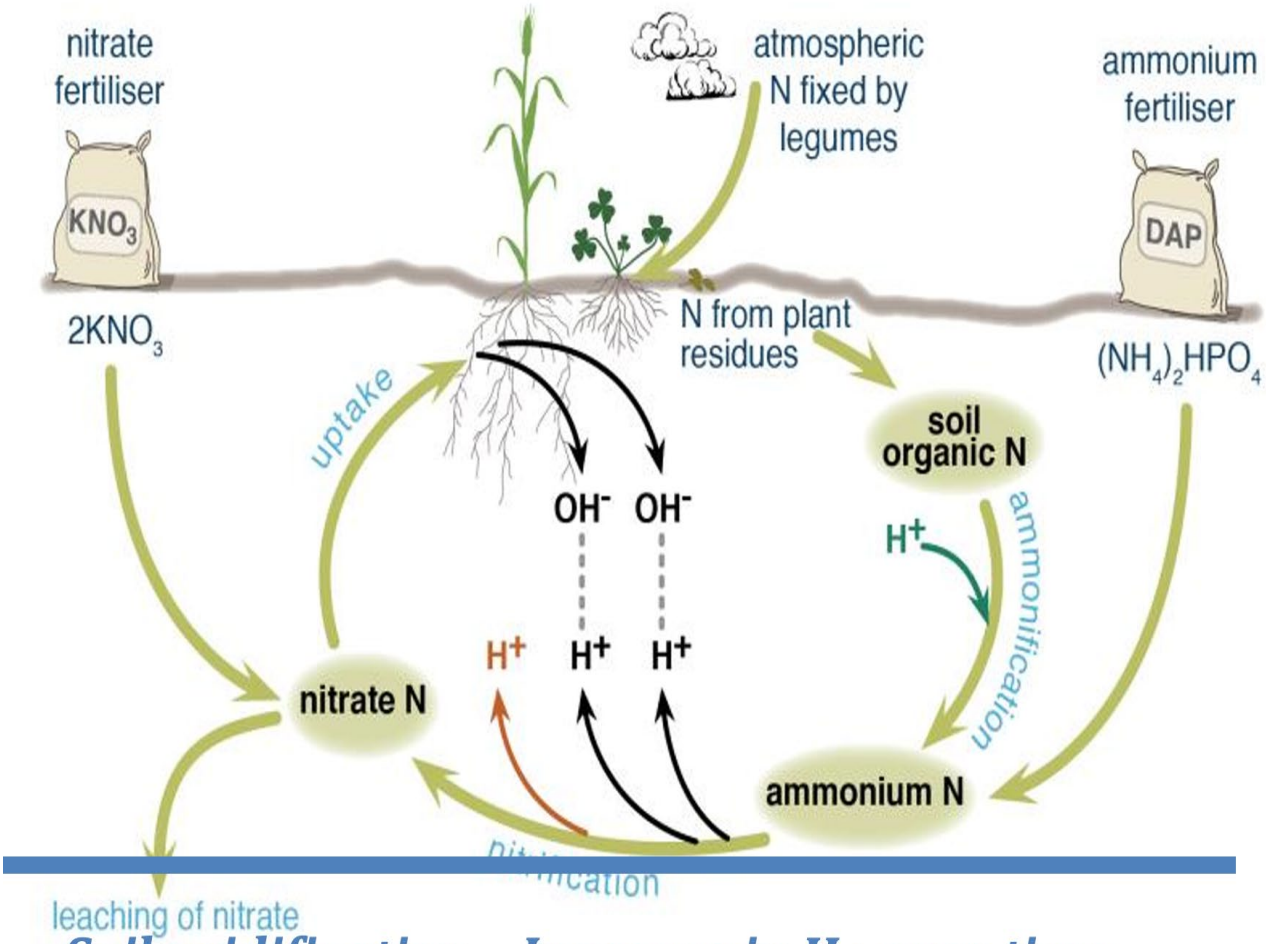
Once more we return to a quote from Dr. Robert E. Pettit, Emeritus Associate Professor Texas A&M University, who published a treatise: "ORGANIC MATTER, HUMUS, HUMATE, HUMIC ACID, FULVIC ACID AND HUMIN: THEIR IMPORTANCE IN SOIL FERTILITY AND PLANT HEALTH."

As a reminder, Dr. Pettit stated, "Continued use of these acidic fertilizers in the **absence of adequate humic substances (in the soil) has caused many serious sociological and ecological problems**. **Man needs to reconsider his approach to fertilization techniques by giving higher priority to soil humus**."

For example, the IFUS Scientific Team posed the question: Do acidic fertilizers damage the natural ionic mineral content of soil?

The answer: "Acidic fertilizers can indeed damage the natural ionic mineral content of soil. The use of ammonium-based fertilizers, which are known to lower soil pH, can lead to a decrease in the availability of essential minerals like calcium and magnesium. This reduction in mineral content can negatively impact soil health, microbial activity, and overall nutrient cycling. It is crucial for farmers and gardeners to consider the pH levels of their soil and the type of fertilizers used to maintain the natural mineral content and prevent damage to soil health." See Diagrams A&B (Source: https://ucanr.edu/sites/default/files/2019-07/306283.pdf)

Diagram A

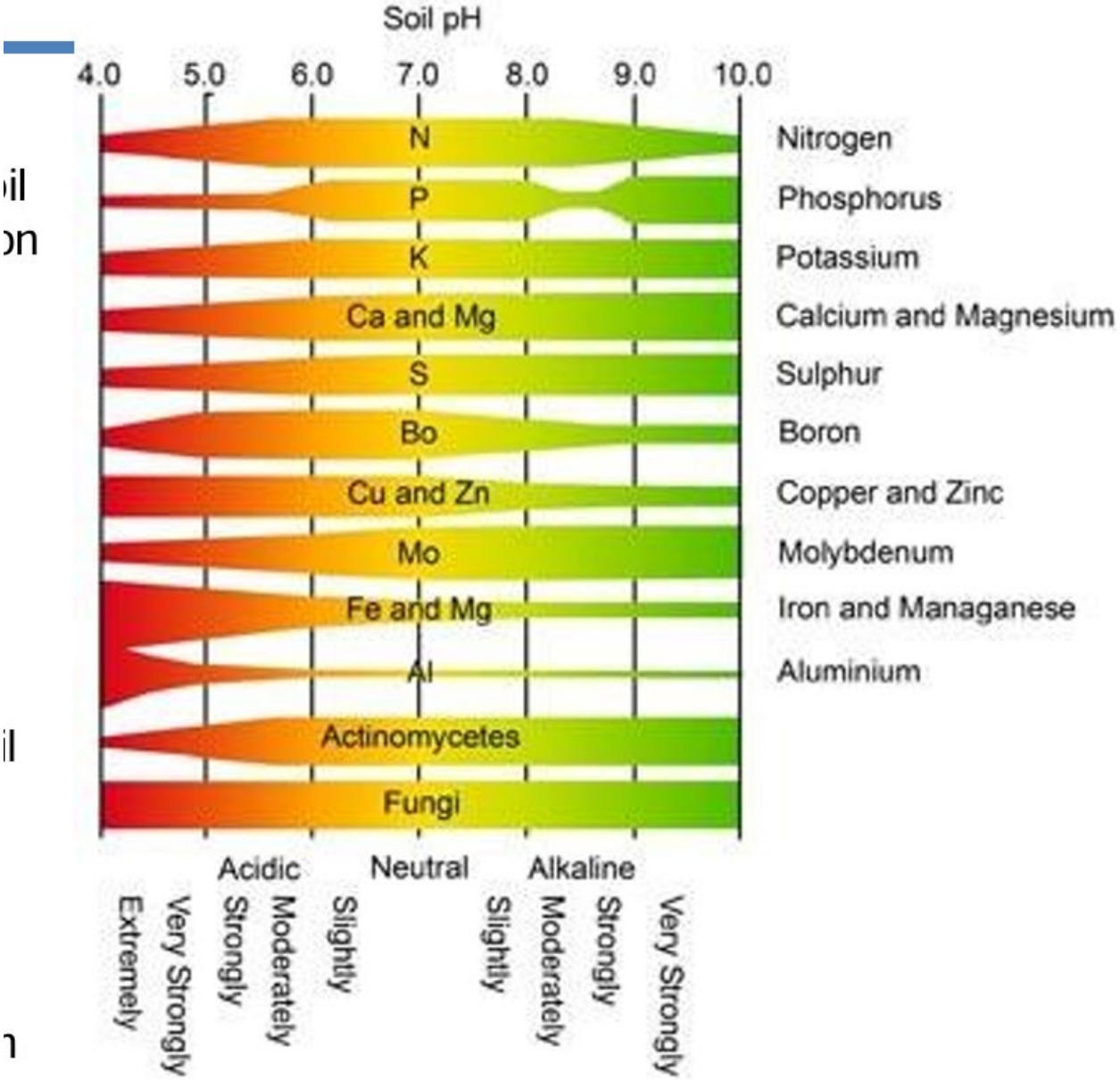


Soil acidification – Increase in H+ over time, (Photo DAFF Western Australia)

Soil acidification is a natural process in high rainfall environments where hydrogen cations (H+) build up; reducing soil pH. Thus, many tropical (high rainfall area) soils are acidic.

Soil acidification can speed up if practices remove cations (like calcium and magnesium) from the soil – e.g., increased leaching due to irrigation, removal of nutrients in produce or addition of fertilizers.

Diagram B:



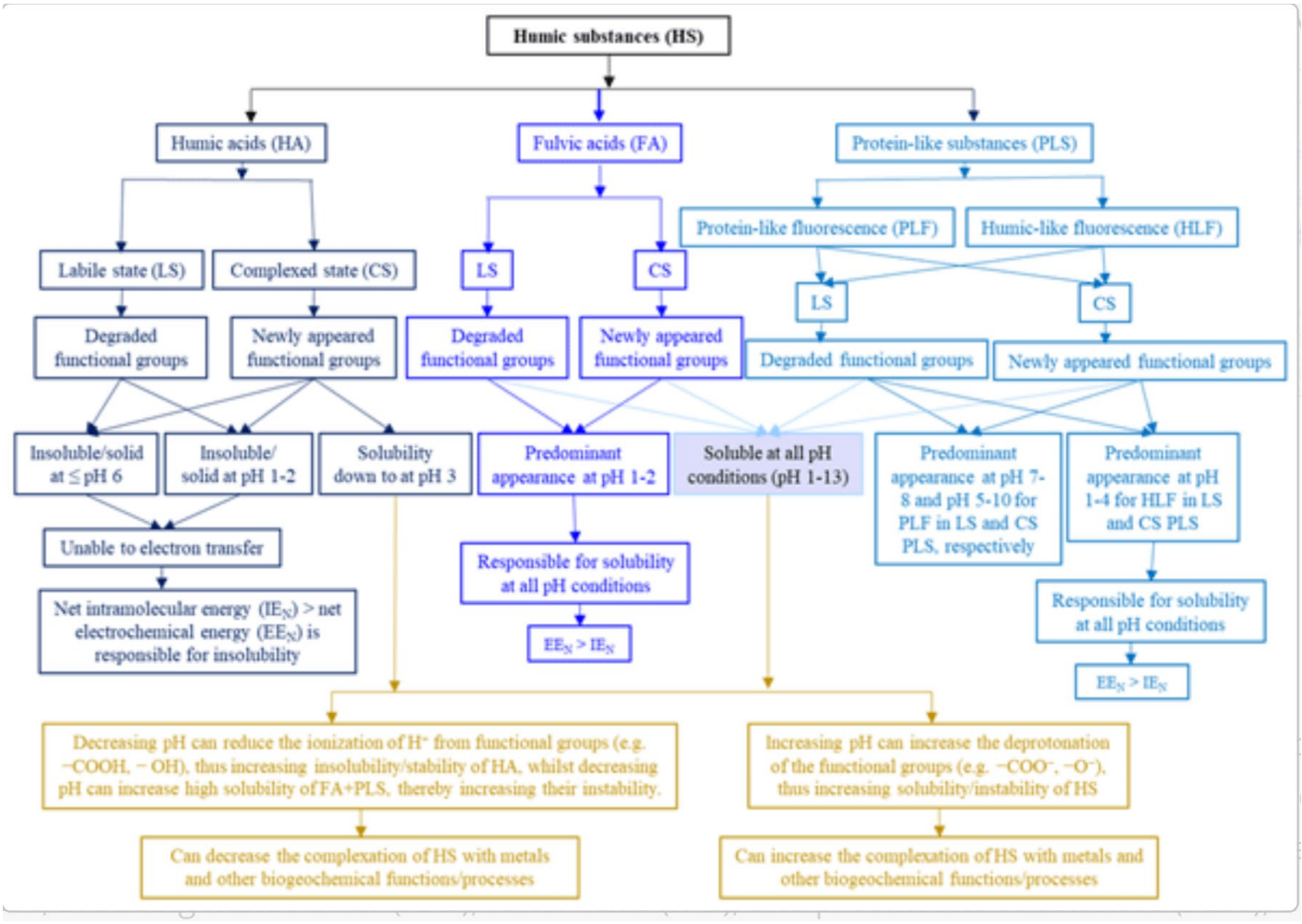
Soil pH affects nutrient availability, elemental toxicity, and microbial activity. (Pic Fairway Green Inc)

The aforementioned information begged yet another question: Do Humic Substanes affect soil pH?

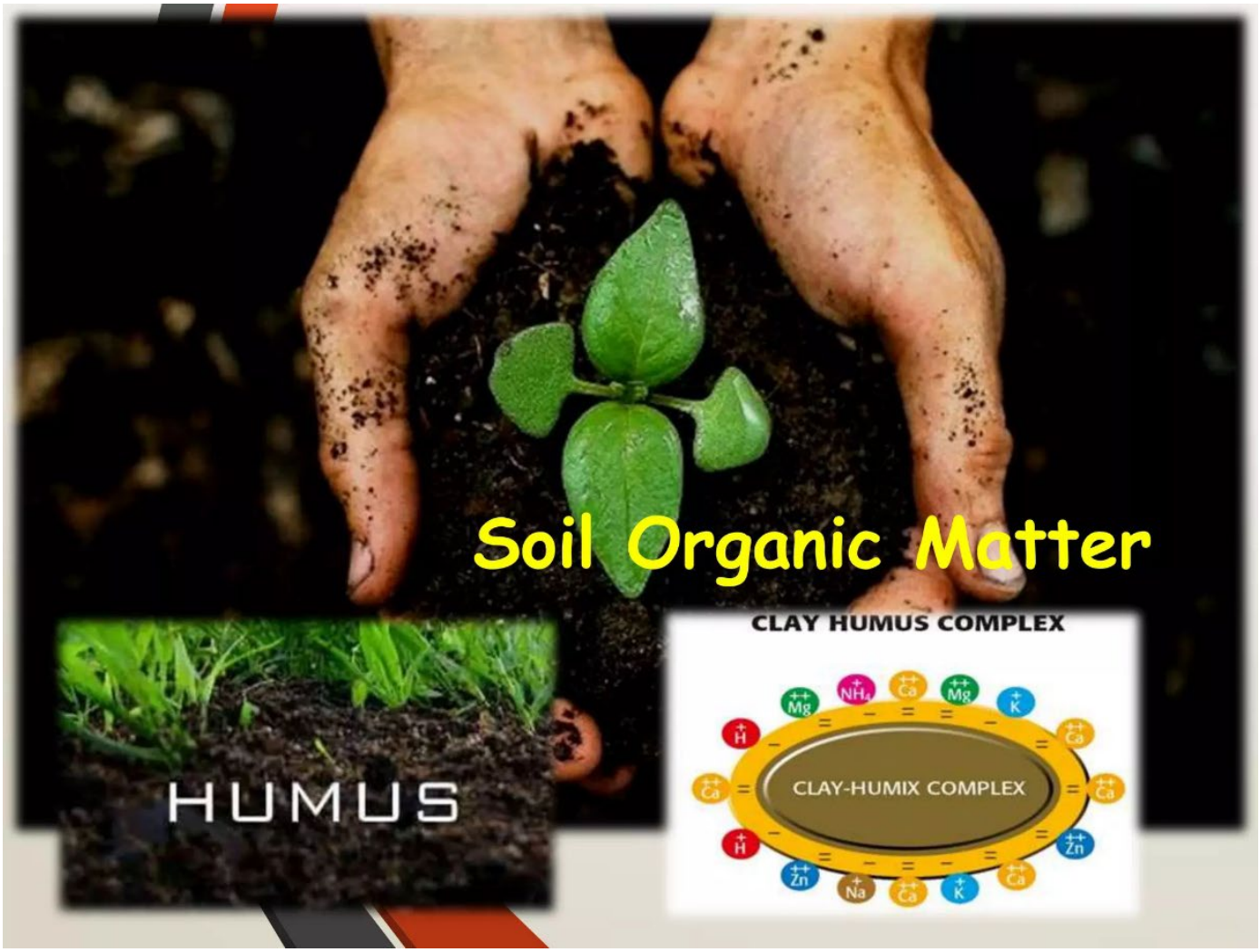
The Answer: Yes, "Can significantly affect soil pH"

"Humic substances can significantly affect soil pH, particularly through their ability to release hydrogen ions (H+) into the soil solution. This release can lower the pH of the soil, making it more acidic. However, humic substances also have buffering properties, which can help stabilize the soil pH and prevent it from becoming too acidic or too alkaline. The extent of these effects depends on factors such as the initial soil pH, the type and quality of humic substances, the application rate, and the soil type. In highly acidic or alkaline soils, humic substances may have a more pronounced effect on pH adjustment"

Source: "Solubility characteristics of soil humic substances as a function of pH: mechanisms and biogeochemical perspectives, Xuemei Yang, et.al., Biogeosciences, Articles, Volume 22, issue 7, BG, 22, 1745–1765, https://doi.org/10.5194/bg-22-1745-2025 (2025https://bg.copernicus.org/articles/22/1745/2025/)



Hence, per Dr. Pettit we find in Diagram 1, an illustration of "Humus" along with a designation of the natural ionic mineral content in the bottom right-hand corner. Mineral content in Humic Substances will be considered as a separate, yet highly valuable aspect of Humic Substances.



Source: https://image.slidesharecdn.com/soilorganicmatter-181129065629/75/Soilorganic-matter-and-Humic-substances-1-2048.jpg

The balance of natural phytochemicals and minerals both in structure and form are prevalent when Mother Nature utilizes the natural biome in the soil as well as on and in the plant to create Humic Substances. Man's desire to manage this intricately complex series of processes, many of which are metabolic in nature, through synthetic means seems ghastly inadequate at best. Finding mechanisms (i.e., products and technologies) that support Nature in the production of Humic Substances, may allow natural metabolic and other processes to once more become intact.

Hence, On Friday, 7Nov2025 an IFUS World-Wide Press Release discussed the efforts of the “Florida Statewide Organization (FSO) of Omega Psi Phi Fraternity, Inc." The FSO "has launched an Agricultural Committee to Test Impact Fusion’s Technology Against Citrus Greening, Citrus Canker, Increase Fruit Tree Yield, Increase Chicken Egg Production, and Producing Quality Beef Without New World Screwworms Infections with a targeted effort to Decrease Food Insecurity." (https://www.impactfusionbrands.com/news/)

Furthermore, as indicated above similar efforts are underway at SUAREC in Baton Rouge, LA, which has as part of its outreach efforts a functioning "USDA Nutrition Hub". The "Hub" at SUAREC holds its mission as "ASCEND for Better Health."

In consideration of efforts like that of FSO and SUAREC, a trial kicked off on the IFUS Test Farm in Louisiana during late Spring of 2025. Ten (10) newly planted blackberry vines were mulched with SupremeAG™ with ten (10) newly planted vines left un-mulched.

The favorable nutritional qualities of berry-producing plants are well-established:
(1) Piazza S, Fumagalli M, Khalilpour S, Martinelli G, Magnavacca A, Dell'Agli M, Sangiovanni E. A Review of the Potential Benefits of Plants Producing Berries in Skin Disorders. Antioxidants (Basel). 2020 Jun 20;9(6):542. doi: 10.3390/antiox9060542. PMID: 32575730; PMCID: PMC7346205.
(2) John T. Weber. 2022. Traditional uses and beneficial effects of various species of berry-producing plants in eastern Canada. Botany. 100(2): 175-182. https://doi.org/10.1139/cjb-2021-0086.

The photo (Picture 1) below illustrates a vine mulched with SupremeAG™ with Nutri-Mastic™. This vine (along with other 9-SupremeAG™-mulched vines) has been pruned twice this year. It and the other 9-vines will undergo a final pruning once their growth is suspended by frost. This will ensure new growth, ample blooms, and superior fruit production in Spring 2026.

Picture 1:

By contrast, vines of the same varietal (and from the same grower) were planted the same day (Picture 2). However, these were NOT mulched with SupremeAG™. These vines have NOT been pruned to date and have demonstrated 5% of the growth of the blackberry vines mulched with SupremeAG™. Also, these vines are only 15-ft

apart from the mulched vines. The mulching in the picture is residual wood chips.

The stark contrast in the two groups of sample vines led our IFUS Scientific Team to ask the question: Do blackberries like humus-rich soil?

"Yes, blackberries thrive in humus-rich soil. Humus, or organic matter, is essential for soil fertility and provides the necessary nutrients for blackberry plants. When

incorporating humus into the soil, it helps improve soil structure, retain moisture, and provide slow-release nutrients that support vigorous cane development and consistent fruiting. Blackberries prefer a slightly acidic to neutral soil pH, and humus-rich soil can help maintain this ideal pH level, promoting healthy growth and fruit production."

In an article published on Fruit Tree Hub August 11, 2024 (https://fruittreehub.com/what-type-of-soil-do-blackberries-like/), Lucy Smith writes:

"Have you ever wondered why your blackberry bushes aren't thriving as they should? Picture this: you've planted those delicious blackberries with care, but they seem to be struggling in their growth. What could be the missing piece of the puzzle?

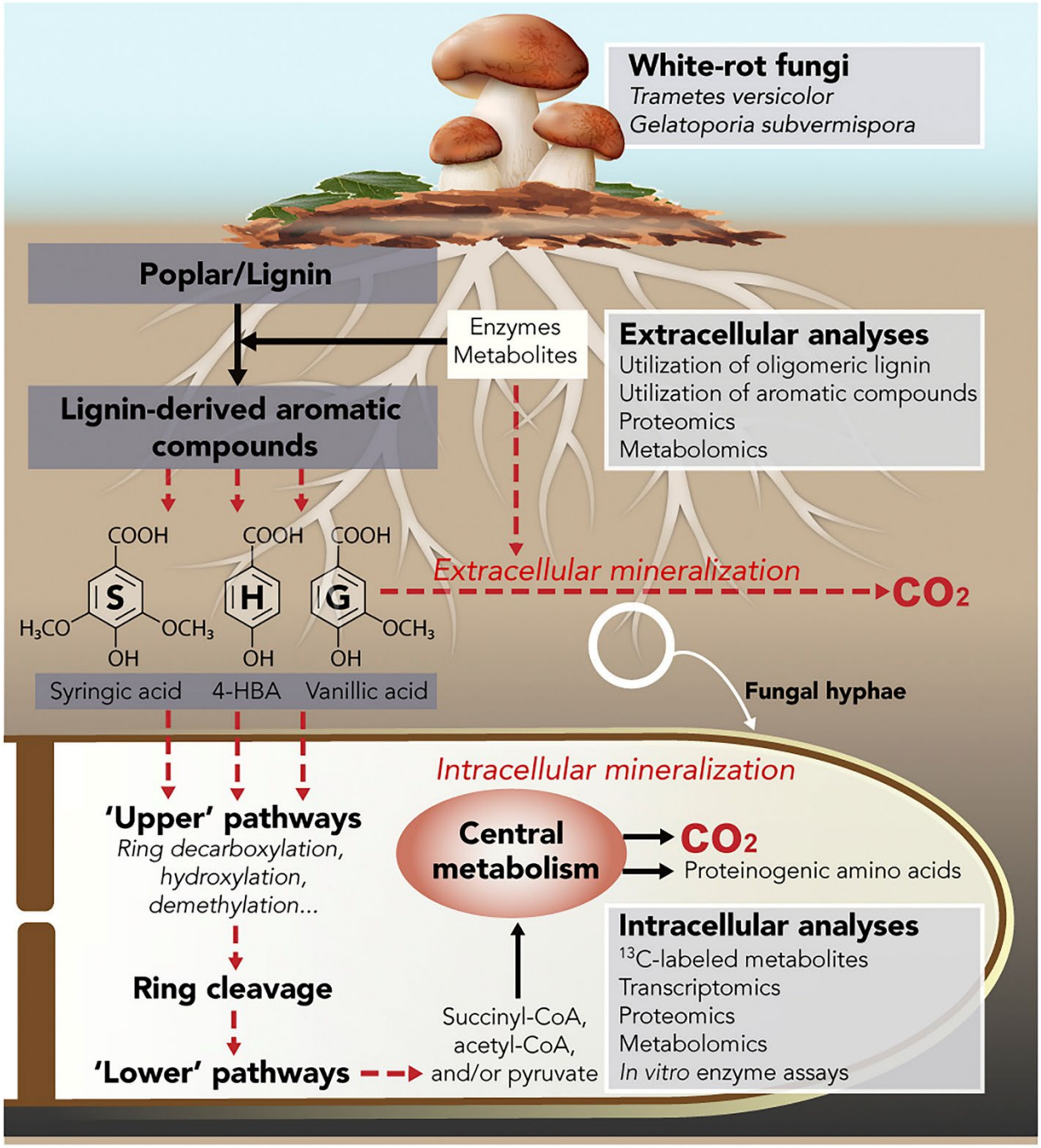
In this article, we'll explore the crucial factor that can make or break your blackberry harvest – soil. By understanding what type of soil blackberries prefer, you'll unlock the secret to bountiful berries in your own backyard. Ready to give your blackberries the best possible chance to flourish? Let's dive into the world of soil types and discover how you can set the perfect foundation for a successful blackberry garden.

Key Takeaways:

- Blackberries thrive in well-drained soil to prevent waterlogging and root rot.
- A loamy soil texture with sand, silt, and clay balance promotes healthy root development.
- Optimal pH levels for blackberries range between 5.5 and 7.0 for proper nutrient uptake.
- Soil rich in organic matter enhances nutrient availability and supports microbial activity beneficial for growth.
- Good air circulation within the soil is essential for root respiration and nutrient absorption by blackberry plants.
- Regularly monitor and maintain soil health through testing, adding organic matter, adjusting pH levels, and practicing crop rotation for sustained blackberry growth."

With Best Gardening Practices like those offered by Ms. Smith, the IFUS Scientific Team considered the SupremeAG™ formulation. The formulation contains Chios Mastic Gum, Carob, 72-Natural Ionic Minerals, Water, and Sugarcane Bagasse. Additionally, a reminder: White Rot Fungi seem to be nourished by the ingredients in the SupremeAG™ with Nutri-Mastic™ formulation, resulting in the accelerated degradation and depolymerization of the lignin as demonstrated in Diagram 2 below:

Diagram 2:



Source: “Intracellular pathways for lignin catabolism in white-rot fungi” written by Carlos del Cerro, et.al in "The Proceedings of the National Academy of Sciences: Systems Biology/Biological Sciences," Feb. 23, 2021

Additionally, the IFUS Scientific Team finds further evidence of the degradation and depolymerization of lignin when opening bags of SupremeAG™ with Nutri-Mastic™ (Picture 3). Product prepared about 3-months ago, revealed active White Rot Fungi per the picture below taken at the IFUS Test Farm in SE Louisiana (about 15.5 miles SSW of NOLA).

Picture 3:

Additionally, in the same bag of 3-month-old SupremeAG™, it was noted that when compared to SuperSaks containing 6-month old material, that the 3-month old material presented a different profile in structure and texture; that is, was less degraded (See Picture 4):

Picture 4:

Further contrast became evident when a 9-month-old SupremeAG™ Super-Sak was opened (See Picture 5):

Picture 5:

As seen in Picture 6 below, SupremeAG™ with Nutri-Mastic™ in both color, texture, and performance has been compared to pictures of soil rich in Humic Substance.

Picture 6: "Close-up view of moist, dark humus soil with tiny green seedlings sprouting, showcasing the early stages of plant growth."

Source: https://forestry.com/guides/what-is-humus-in-soil/

In consideration of this information, the IFUS Scientific Team asked what key nutrients might be found in Humic Substances that would support healthy blackberry growth.

Picture 7 (below) illustrates blackberry plants being planted under the guidance of Best Gardening Practices for this specific varietal. Note the similarity in the (1) Humic Substance filled soil, (2) the optimum pH range, (3) the color and texture of soil, (4) and lastly the beautiful healthy fruit that can be produced from a single blackberry plant. This fruit can be grown typically in limited space box gardens or even be added to a flower bed for the beauty of spring blossoms and colorful fruit until harvested. The plant regenerates every year with some simply pruning, a little watering, and a bit of TLC as indicated by Best Gardening Practices.

What is Humus in Soil? Explore the Critical Advantages for Your Crops – Forestry.comhttps://forestry.com/guides/what-is-humus-in-soil/

In Evergreen Seeds (https://www.evergreenseeds.com/what-fertilizer-for-blackberries/), Larry Meyers writes in the Oct. 9, 2025 edition, "It's important to consider not just N-P-K ratios but also micronutrients like iron which can be critical based on soil tests."

SupremeAG™ contains Iron along 72-Ionic Minerals to include N, P, and K.

"Nitrogen (N), phosphorus (P), and potassium (K): Key Nutrients for Healthy Blackberries:

The key nutrients for growing healthy blackberries are nitrogen (N), phosphorus (P), and potassium (K). These macronutrients are essential for the plant's overall health and fruit production. Nitrogen promotes leaf and cane development, phosphorus aids in root development and flowering, and potassium supports fruit ripening and disease resistance. Additionally, micronutrients like iron, manganese, zinc, boron, and copper are also important but in smaller quantities. Proper fertilization timing and application methods are crucial for maximizing yields and enhancing fruit quality."

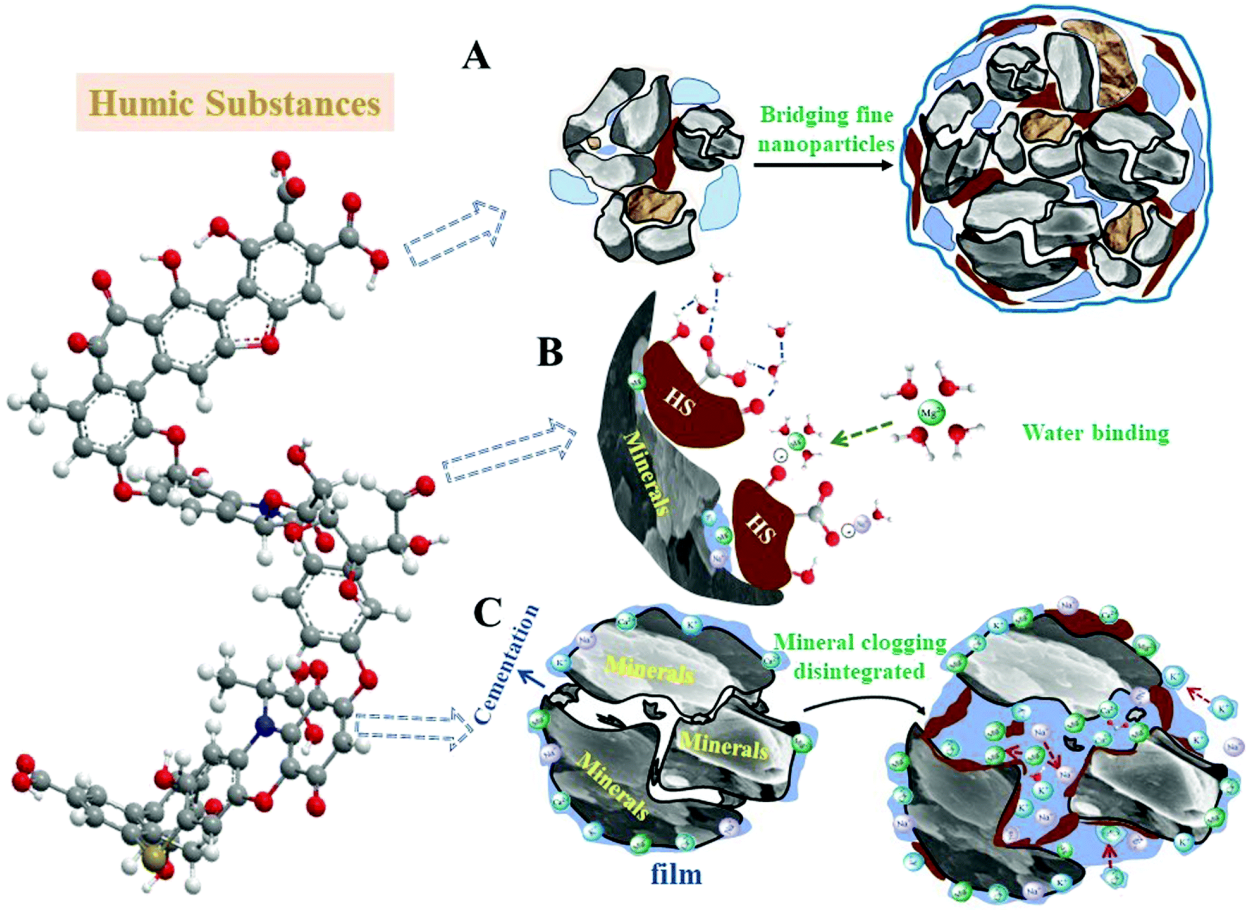
In Diagram 3 below, we find an illustration of the effect of Humic Acid, which then

produces three synergistic effects if found in proper balance:

(A): The "Bridging of Fine Nanoparticles".

(B): The Interaction of Minerals with HS (Humic Substance) to create water binding necessary for natural hydration of the plant.

(C): "Mineral clogging" disintegration of the "cementation" effect, hence releasing key minerals required for plant nourishment.



Source: https://pubs.rsc.org/image/article/2021/cs/d0cs01363c/d0cs01363c-f4_hi-res.gif

In (A), we find nanoparticle formation. "Nanoparticle formation is indeed important in humic soil. Nanoparticles can enhance nutrient delivery, improve soil structure, and increase microbial activity, which are crucial for sustainable agriculture. They can also minimize soil contamination and aid in precision farming, making them valuable tools for soil health and crop growth. The unique physical, chemical, and biological properties of nanoparticles differentiate them from bulk materials, offering potential solutions to major soil and crop management issues."

Source 1: Ahmed, B., Rizvi, A., Ali, K. et al. Nanoparticles in the soil–plant system: a review. Environ Chem Lett 19, 1545–1609 (2021). https://doi.org/10.1007/s10311-020-01138-y

Source 2: Multifaceted impacts of nanoparticles on plant nutrient absorption and soil microbial communities, Front. Plant Sci., 12 November 2024, Sec. Technical Advances in Plant Science, Volume 15 - 2024 https://doi.org/10.3389/fpls.2024.1497006

In (B) we find the effect of minerals in water binding, leading to proper hydration of plants, trees, and shrubs. Of note, those applying SupremeAG™ in consideration of Best Gardening Practices for the respective plant, a general reduction of about 30% in hydration requirements to sustain the plant occurs.

In (C), we find "Cementation in humic soil is primarily caused by the interaction of humic acid (HA) with soil particles, leading to the precipitation of calcium carbonate (CaCO3). This process, known as microbial induced carbonate precipitation (MICP), is facilitated by microbial urease, which catalyzes the hydrolysis of urea to produce carbon dioxide and ammonia. The ammonia then reacts with calcium ions in the soil to form CaCO3, which can stabilize the soil structure and improve its properties. The presence of humic acid is crucial for this process, as it enhances the binding capacity of the soil particles and facilitates the formation of stable aggregates." Cao J, Liu F, Song Z, Ding W, Guo Y, Li J, Liu G. Effect of Ultra-Fine Cement on the Strength and Microstructure of Humic Acid Containing Cemented Soil. Sustainability. 2023; 15(7):5923. https://doi.org/10.3390/su15075923

For phytochemical formation critical to plant nourishment (especially from the degradation and depolymerization of lignin), the biochemistry must function in a symbiotic manner such that the microbial community (biome) can perform its actions and interactions…all while maintaining is relationships. This creates homeostasis, and when required supports an energetic form of managed chaos (Enthalpy) required to produce very specific phytochemicals in very specific concentrations. This balancing act is vital to plant health and vitality.

Based on successful plant trials and the physical inspection and application of SupremeAG™ with Nutri-Mastic™ in these trials, the IFUS Scientific Team believes there exists plausible evidence as to the efficacy of SupremeAG™ (when applied with Best Gardening Practices for any respective plant, tree, or shrub). The underperformance of control plantings supports this contention.

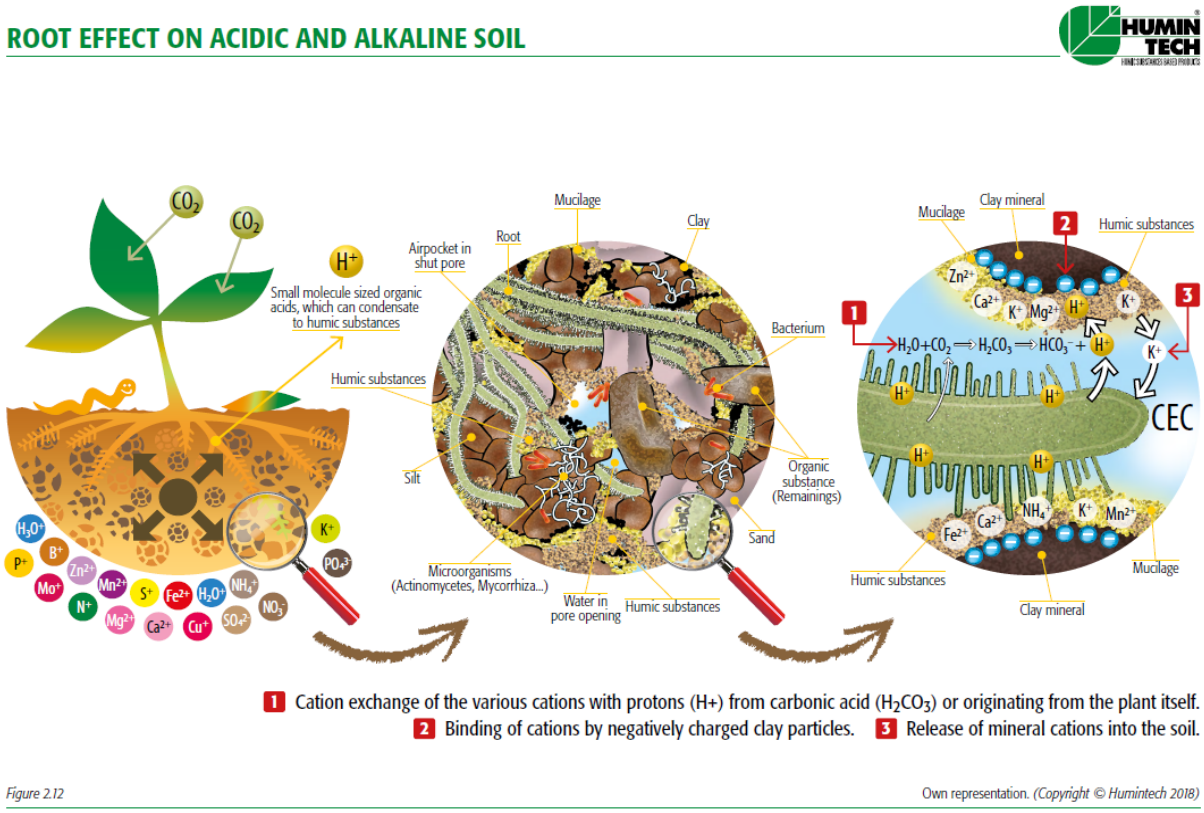
Furthermore, when considering Diagrams D, E, F, G, and H (each of which progressively illustrate the impact and involvement of minerals in root development, plant health, plant yield, and ultimately nutritive value), the IFUS Scientific Team finds reinforcing evidence for its contentions.

Diagram D: Note in Red:

1. Cation Exchange

2. Binding of Cations

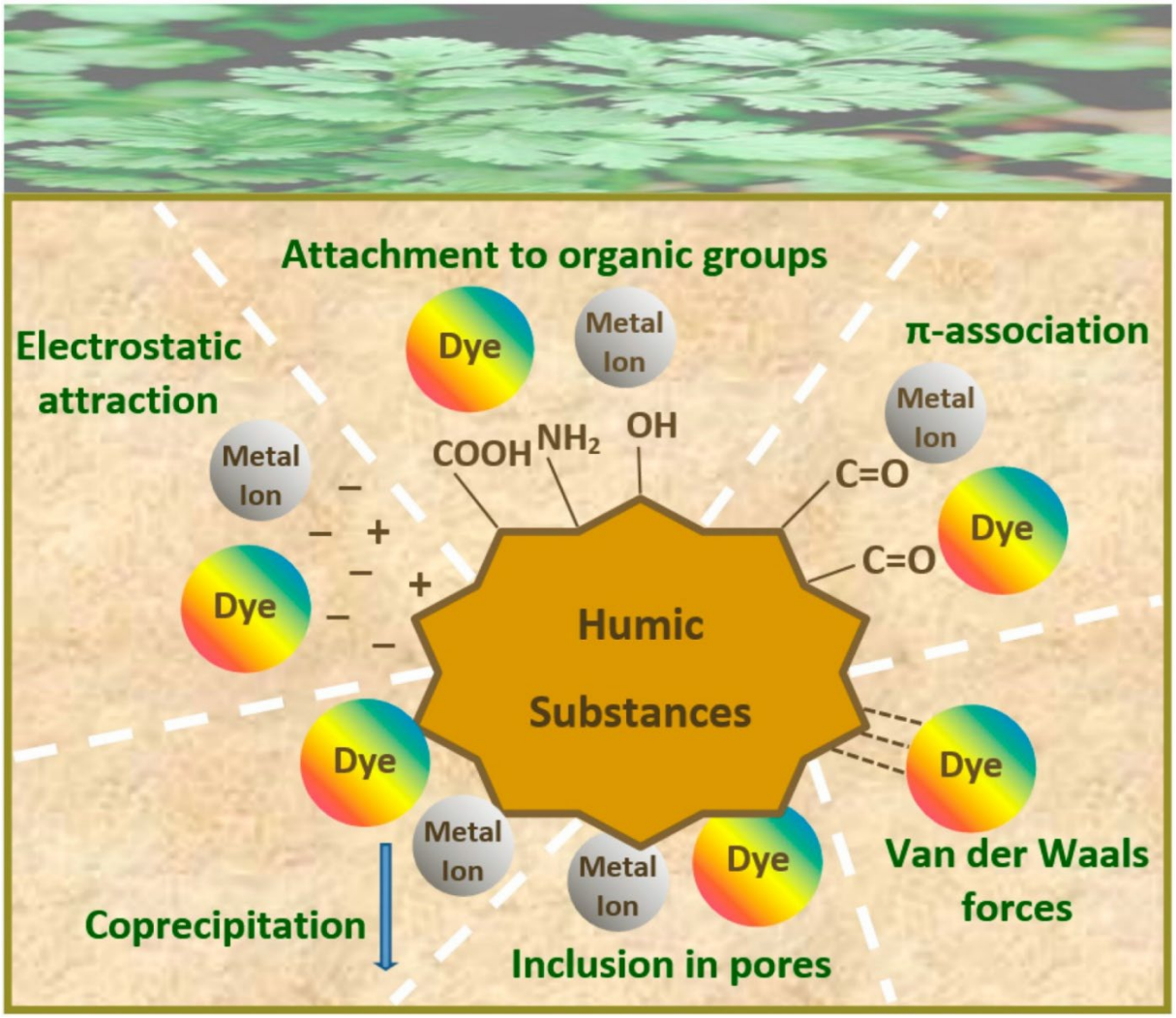
3. Release of Minerals



Source: [Root_effect_on_acidic_and_alkaline_soil_-_Humintech.png (1130×798)](https://www.humintech.com/fileadmin/content_images/agriculture/information/what_are_humic_acids/Root_effect_on_acidic_and_alkaline_soil_-_Humintech.png)
https://www.humintech.com/fileadmin/content_images/agriculture/information/what_are_humic_acids/Root_effect_on_acidic_and_alkaline_soil_-_Humintech.png
From a scientific perspective, the 72-minerals contained in Nutri-Mastic™, coupled with minerals found in the other natural ingredients in SupremeAG™, as well as the reported performance on plants being soil-amended and/or mulched with product, one could logically offer the aforementioned as plausible science in support of the efficacy of SupremeAG™.

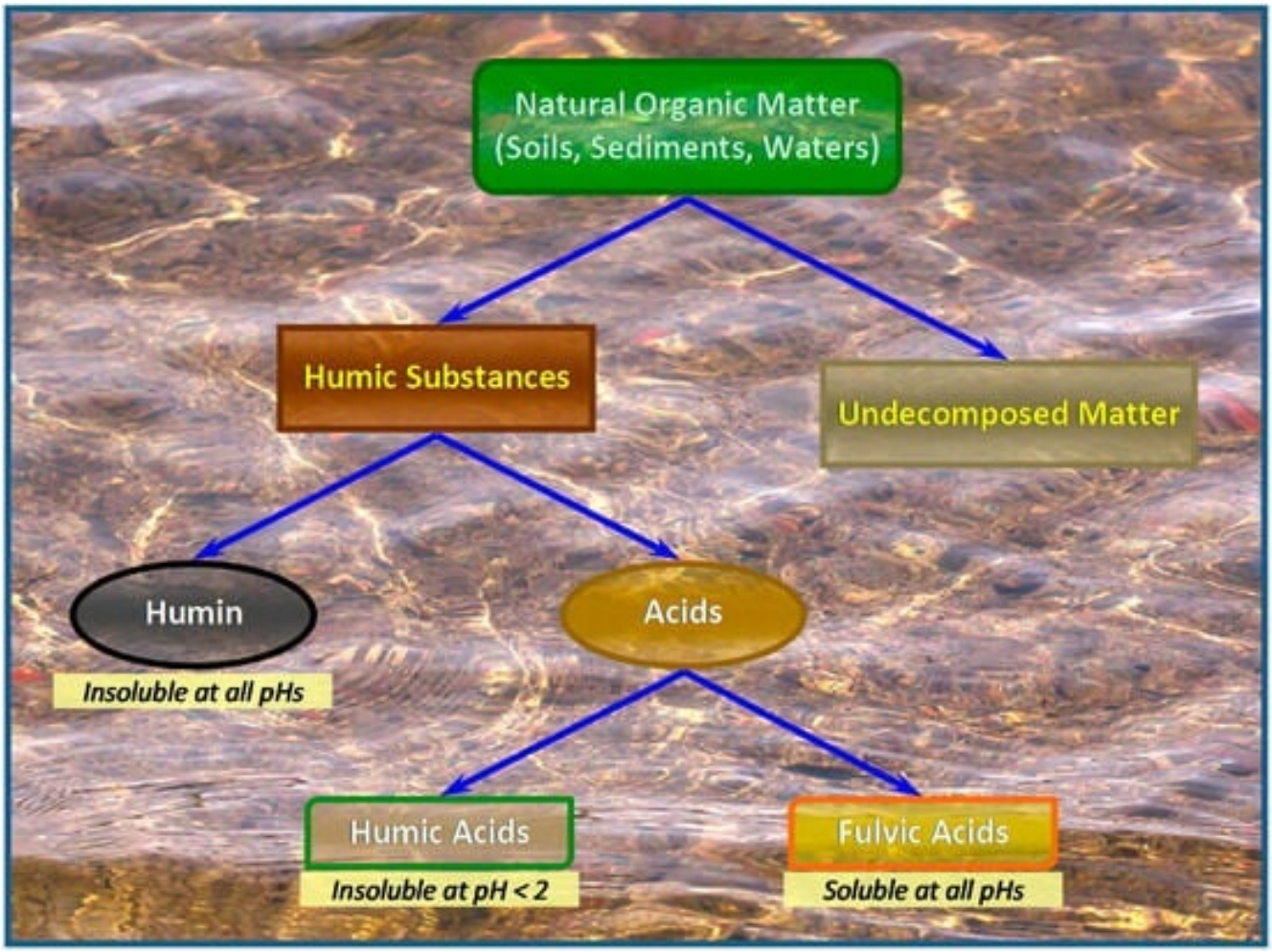
Diagram E offers further scientific explanation of the effect and synergistic interaction between minerals ("Metal Ion"), "organic groups" (various phytochemicals), "Humic Substance", and natural physical and chemical forces that allow for healthy plant performance:

Diagram E:



agronomy-13-02926-g002.png (1799×1558)
https://www.mdpi.com/agronomy/agronomy-13-02926/article_deploy/html/images/agronomy-13-02926-g002.png

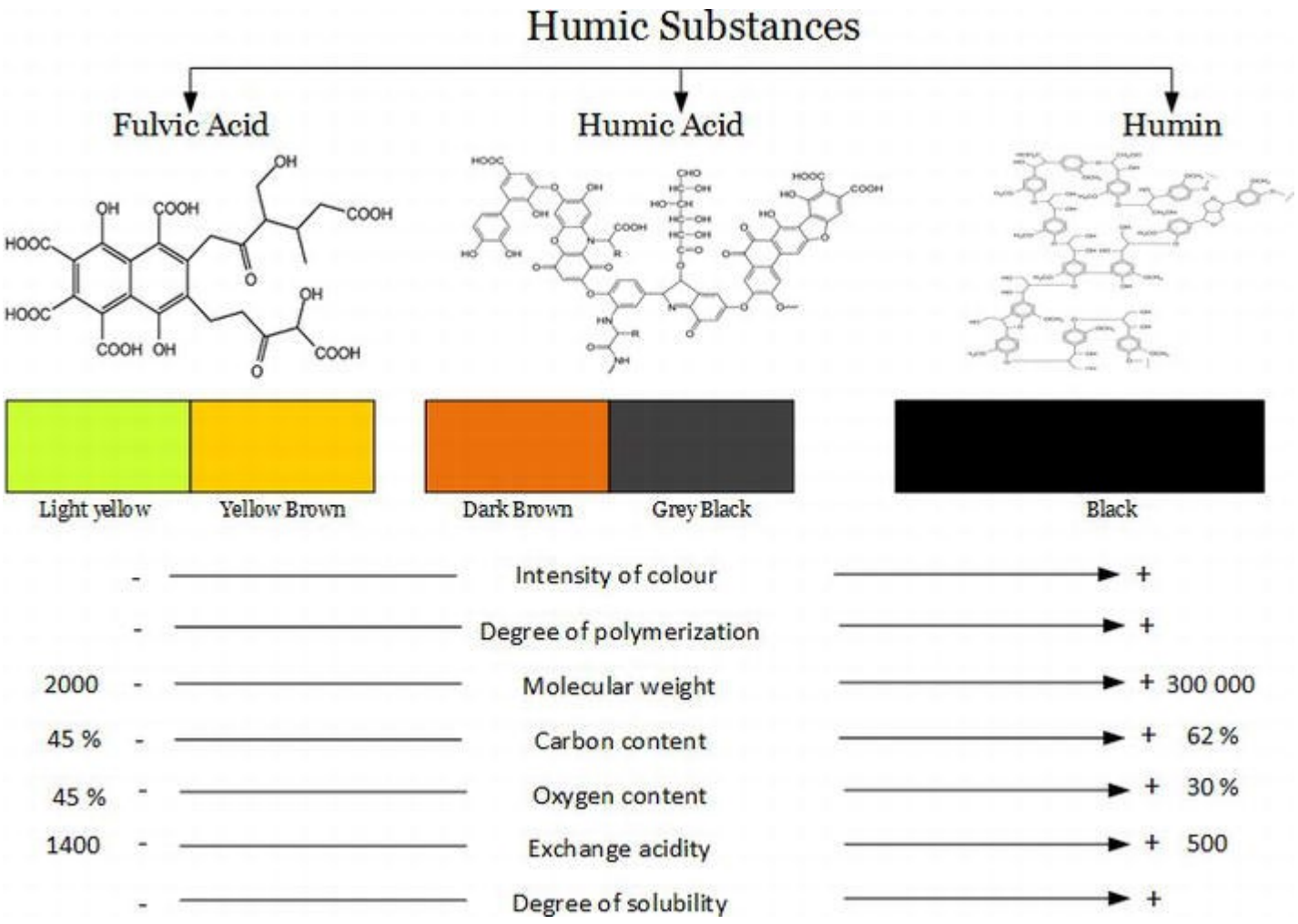
Diagram F: **Based on this diagram of Humic Substance found naturally, it is plausible that SupremeAG™ with Nutri-Mastic™ could increase the concentration of beneficial "Natural Organic Matter",** so as to overcome that which (per Dr. Pettit of Texas A&M) is said to be negatively affected by the application of synthetic acid fertilizers. This is notwithstanding other negative practices or impacts like over-farming, topsoil erosion, climate change, and more.



Source: [656eb90300ea2agronomy-13-02926-g001-550.jpg (550×410)]

Of note is the notion that Nutri-Mastic™ is believed to assist in the regulation of gut pH in humans and animals. The IFUS Scientific Team is wondering if a similar beneficial regulation in soil is occurring, which impacts Humic and Fulvic Acids.

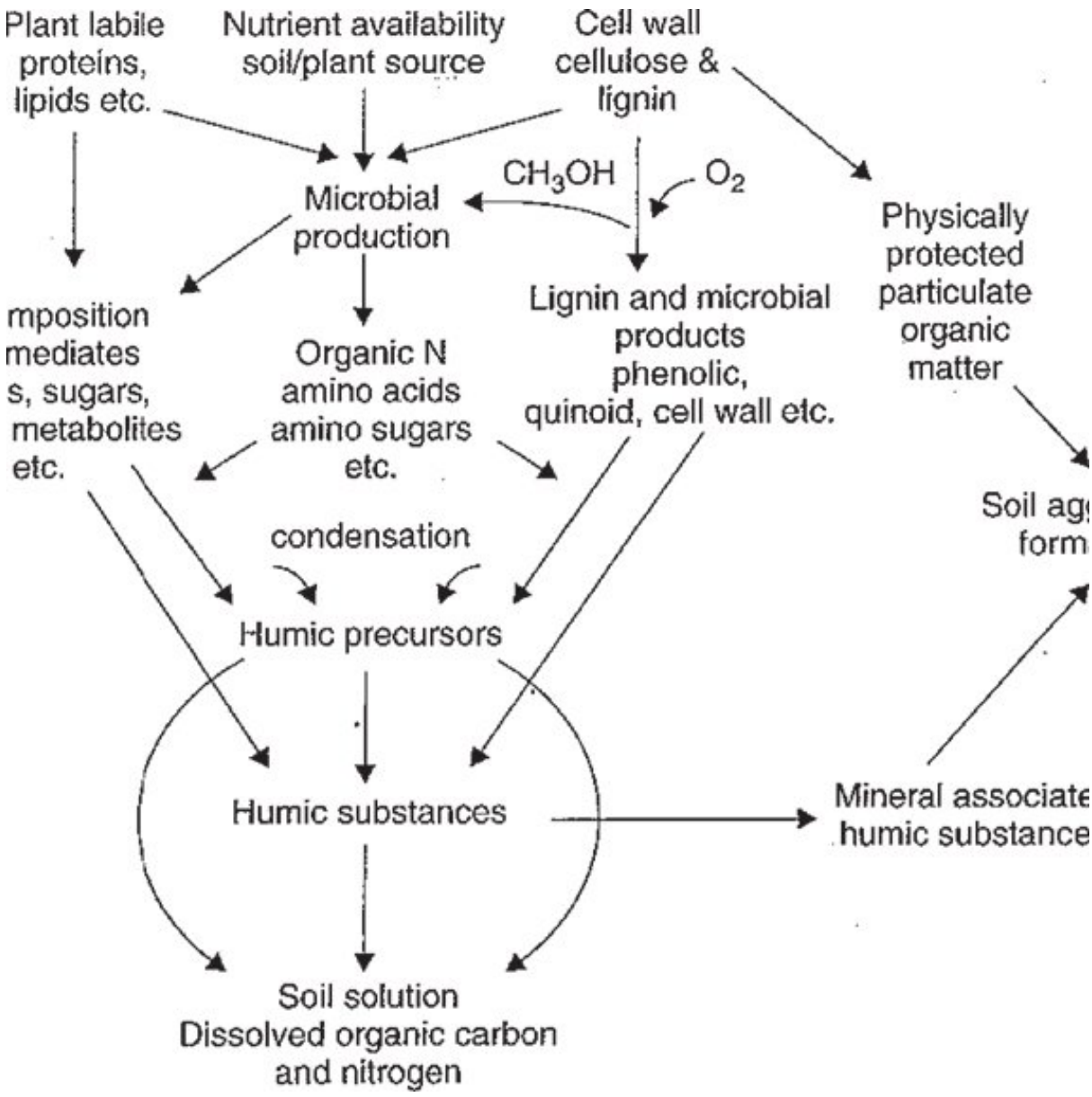
Diagram G: Assuming SupremeAG™ has significant levels of Humic Substance, the diagram below provides guidance for the application of SupremeAG™ (the product) as a technology that can be reconciled to plant performance outcomes. As an example, the color transformation indicated below can be overlayed to the progression of bagasse from freshly cut Sugarcane (light yellow/tan) to aged SupremeAG™ (black). Hence, the IFUS Scientific Team is delving into a deeper understanding of the nature of Humic Substances in fresh Sugarcane Bagasse as compared to freshly formulated SupremeAG™ (with continued observations made as the SupremeAG™ ages).



Source: Humic Substances: Its Toxicology, Chemistry and Biology Associated with Soil, Plants and Environment, Rajneesh Kumar Gautam, Dimuth Navaratna, Shobha Muthukumaran, Amarendra Singh, Islamuddin and Nandkishor More
Submitted: 19 November 2020 Reviewed: 21 May 2021 Published: 07 June 2021
DOI: 10.5772/intechopen.98518

Furthermore, with the guidance provided above, the application of SupremeAG™ with Nutri-Mastic™ could plausibly be applied as a technology based on Best Gardening Practices" for respective plants, trees, and shrubs. Color grading and pH could be applied to provide a level of qualitative determination of the specific phytochemical present.

Diagram H: Finally, we gather a view of the array of critical actions, interactions, and relationships of Humic Substances as it relates to plant performance. **This is but a mere snapshot to offer a glimpse into the complex science and why SupremeAG™ is not only a product, but an evolved technology.**



Source: [Hypothesized-mechanism-for-formation-and-stabilisation-of-humic-substances-in-soil-This_Q640.jpg (572×572)]
https://www.researchgate.net/profile/Peter-Clinton-2/publication/226546194/figure/fig3/AS:870903890055168@1584651076634/Hypothesized-mechanism-for-formation-and-stabilisation-of-humic-substances-in-soil-This_Q640.jpg

Lastly, from a nutritive perspective (Diagram I), we find on Forestry.com (https://forestry.com/guides/how-to-grow-blackberries/), an article written by Kristine Moore on March 14, 2024: "How to Grow Blackberries: Easy Steps to Grow and Nurture Your Own"

Diagram 1:

Nutritional Benefits of Blackberries

Benefit	Description
High in Nutrients	Blackberries are rich in vitamins C and K, fiber, and manganese, offering a variety of essential nutrients.
Antioxidant Rich	They are high in antioxidants like anthocyanins, which help combat oxidative stress and may reduce disease risk.
Supports Oral Health	Certain compounds in blackberries have antibacterial and anti-inflammatory properties that may benefit oral health.
Brain Health	The antioxidants in blackberries may improve brain health and help prevent age-related memory loss.
Skin Health	Vitamins C and E in blackberries help promote skin health and can protect skin against UV damage and aging.
Heart Health	The fiber, potassium, and other heart-healthy nutrients in blackberries can support cardiovascular health.
Immune Boosting	High vitamin C content strengthens the immune system and helps the body fight off infections.
Digestive Health	The high fiber content aids in digestion, helps prevent constipation, and contributes to a healthy digestive tract.
Weight Management	Being low in calories and high in fiber, blackberries can promote satiety and aid in weight management.
Anti-inflammatory	Their anti-inflammatory properties can reduce the risk of chronic inflammation, a precursor to many diseases.
Blood Sugar Regulation	Blackberries have a low glycemic index and high fiber content, which can help regulate blood sugar levels.

Hence, IFUS contends that when applied as mulch and/or soil amendment to Acid- and Iron-Loving plants, trees, and shrubs (with Best Gardening Practices for the respective plant, tree, and/or shrub), SupremeAG™ is showing promise in the improvement of overall plant performance. Furthermore, if the science is being correctly interpreted, then the impact of plants mulched or soil-amended with SupremeAG™ with Nutri-Mastic™ may enable the uptick in beneficial health improvement as seen in Diagram 1 (immediately above).

Furthermore, these heathier plants may then become more intact such that their respective natural phytochemical defense mechanisms (reinforced by natural ionic mineral interplay) may in fact repel predation from insects, bugs, and pests…as well as diseases. The science certainly suggests this to be the case.