

Healthy Soils
Healthy Plants
Healthy People
VOL 4. | FALL
Love Mother Nature

Get the MicroLife Newsletter every quarter! Sign Up: microlifefertilizer.com/newsletter

ORGANICS IS MORE THAN JUST A LABEL BY THE EDITOR

What does it really mean to Go Organic?

Going Organic is a mental & physical belief system that transcends beyond just eating Organic food. Focusing on the food side of Organics is very important but it equally backs the vastness of the Organic movement into a small corner, as it is a much larger trend. It's a mindset of how we view everything in life: relationships with our landscapes, Mother Earth, each other & the purchases we make. Once you understand the ethics, logic, economics, & reasoning of 'why organics' you won't want to go back to non-organic ways.

Upfront some will argue that an Organic lifestyle is too costly. But can they really justify having a more sustainable planet & healthier future is just too expensive? Part of shifting to this kind of lifestyle is being mindful about the type of purchases we make for food, household cleaning products, cosmetics & products for our landscapes. Good news is: we save money by Going Organic.



Eating healthy Organic food improves our immune systems & reduces our risk of illness, which means less doctor visits.
Purchasing household cleaning products without harsh chemicals is much safer for our families & pets at home.

Gardening Organically creates healthier plants, conserves water & no need to use pesticides. These financial gains greatly outweigh the initial costs of Organic products across the board. Knowing how our food is grown, trusting that our cosmetics are clean & haven't been tested on animals, having the ease of mind about our kids & pets freely running around a healthy house will save us a lot of stress.

By embracing an Organic lifestyle, we are automatically developing a healthier society for all. When we go out, we choose local farm to table restaurants over fast food. We don't use pesticides because we care about the health of our families, pets & neighbors. Organics is civilization's best hope for sustaining a bright future for all, so it is much more than a label it is a lifestyle.

Sara Missinger





- 1. ORGANICS IS MORE THAN JUST A LABEL SARA WISSINGER
- 2. BROWN PATCH IN YOUR LAWN? HOW TO AVOID, PREVENT & CURE IT
- 3. FALL VEGGIES
- 4-5. FALL ORGANIC GARDENING MOLLY PIKARSKY
- 6. THE IMPORTANCE
 OF REMINERALIZING
 OUR SOILS
 JOHN FERGUSON
- 7. PLANT
 INTELLEGENCE
 SOFIA QUAGLIA
- 8. OHBA & YEAR-ROUND FOOD GARDENING BOOK

BROWN PATCH IN YOUR LAWN? HOW TO AVOID, PREVENT & CURE IT.



Brown Patch, caused by Rhizoctonai Solani, is a turfgrass disease that may affect St. Augustine & Zoysia grasses in the Fall. The Brown Patch disease likes cool temperatures, high humidity, excess water - all of which is brought on during Fall.

'May affect' are the operative words because Brown Patch is largely an avoidable problem. In the Organic world we do not see *Brown Patch* as a major problem. Conversely if the property is maintained chemically then Brown Patch is most likely to occur each & every year.

Avoiding & preventing Brown Patch: It's all about soil health. Healthy soils will prevent Brown Patch from taking hold as the good microbes 'beat up' on the bad microbes. Good microbes need oxygen & a clean environment. Just like us! Soil pathogens (soil diseases) are anaerobic & like the exact opposite. Soils go anaerobic when they are compacted & too much water is applied.

Most turfgrass areas are maintained on compacted soils. Chemical applications further compact the soil & the property owner generally applies way too much water. The result Anaerobic soils that are conducive to Brown Patch growth. The solution for many homeowners & lawn professionals is to apply a chemical fungicide in response. That is absolutely the wrong thing to do! Chemical fungicides are toxic poisons that kill good microbes & only temporarily abate Brown Patch.

Without the good microbes to protect the turfgrass, Brown Patch becomes a recurring problem.

The Organic approach, by solving the core issue of soil health, will solve the problem on a permanent basis & will do so safely. This is important because all chemical fungicides are dangerous to humans & animals.

TO AVOID & PREVENT BROWN PATCH IS PRETTY EASY. JUST FOLLOW THESE STEPS:

• *Never* use chemical fertilizers as they compact the soil.

- *Never* use chemical fungicides as they kill off the natural enemies of *Brown Patch*.
- Remember the Fall Equinox, September 23RD. At that date turfgrass physiologically changes. It goes from active growing to its dormant state. This means it needs much less water.
- Avoid too much water! Most people remembering the hot Summer, forget to turn their turf irrigation water down. As a general rule, after September 23RD, turfgrass does not need more than one irrigation per week.
- Throughout the year only use quality Organic fertilizers like MicroLife to loosen the soil & increase the good microbes population numbers.
- To further prevent & treat Brown Patch apply a well proven Bio Inoculant like MicroGro Granular which colonizes around the root system, protecting the plant from harmful root pathogens.

FALL FERTILIZER & FIGHT BROWN PATCH AT THE SAME TIME.



A great product for this is MicroLife Brown Patch 5-1-3. It will correctly feed your turf in the fall, reduce compaction & add billions of protecting microbes.

ACTIVE BROWN PATCH? WHAT TO DO.

At this point apply
MicroGro Granular at
10 lb per 1,000 sq ft.
to the active area & a
5' perimeter around
the affected area.
Also make sure that
the irrigation is turned
down. If the turf is



treated early enough then we will still have a chance for the turfgrass to grow before it goes completely dormant.

FALL VEGGIE CARE



THE VEGGIE 3-STEP PROGRAM







Ultimate 8-4-6

MicroGro Granular

Ocean Harvest

Most complete, nutritious, non-burning veggie fertilizer EVER!

Biological Root Protection

Liquid
Organic Nutirition

- 1. At time of planting, work in MicroLife Ultimate & MicroGro.
- 2. Water in with Ocean Harvest & foliar spray every 2 weeks. Voilà, now you're set for the best veggies ever!



Stay up to date with the latest in science, join the MicroLife Newsletter today!

Head over to microlifefertilizer.com

CHECK OUT THE NEW MICROLIFE GUIDE TO FALL PLANT SUCCESS!









Guide To Fall Plant Success

Download the new guide today @

microlifefertilizer. com/what-todo-now

FALL ORGANIC GARDENING MOLLY PIKARSKY | RAIN LILY DESIGN

I am ready for Fall, y'all! Goodbye heatwaves and Gold Bond Powder! Hello fuzzy boots and pumpkin spice everything. I love my Fall and Winter gardens. Especially in Texas, we have that miraculously cool weather season that does not mean dead, dormant, and boring. Our cool months are magical and can be even more enchanting with some easy Organic practices.

In general, focus on providing steady, quality fertilizer, supporting your microbiology, and protecting plants, roots, and the creatures that make up your backyard biome.



For impressive Fall and Winter color, my best advice is do not forget to fertilize those flowers. Some food for thought - in the cooler months, when temperatures are lower, things move along more slowly; nutrients are not absorbed as quickly, transpiration is slower, and even the microbes in the soil slow down a little. It is important, therefore, to make sure your plants, especially those who are putting energy into blooming, have an abundant food supply. I love to use MicroLife Ultimate in containers and flowerbeds to deliver steady release organic fertility and critical microbiology. I also use Maximum Blooms liquid feed about every 2 to 4 weeks to maintain stunning color. Do not forget to mulch! This will provide excellent insulation for the root zone. And a wonderful winter gift from your flowers - most are edible, including pansies, violas, dianthus, and calendula.



For trees, shrubs, cactus/succulents, and herbaceous perennials, the goal is to gently feed them and to protect them through the cooler temperatures. In the Fall, an application of MicroLife 6-2-4 is just the ticket. This will ensure that they have nutrients available, and a shot of beneficial bacteria and fungi to maximize the absorption of those nutrients and to stave off pathogens while they sleep.



Mulch them in the Fall to insulate the root zones, or, even better, leave the leaves! The leaves from deciduous trees and plants provide a perfect layer of insulation. Those leaves also provide food for microbiology and shelter and food for the native fauna, like our beneficial insects, reptiles, and small mammals. If you cannot leave all the leaves, concentrate what you can around trees and in the flowerbeds.

FALL ORGANIC GARDENING CONTINUED... MOLLY PIKARSKY | RAIN LILY DESIGN



The culinary garden is especially magical in the cooler months. To get my leafy greens like kale, mustard, lettuce, and chard off to a great start and to keep them producing, I have had great success with MicroLife Ultimate every 8 to 12 weeks. I use it on herbs, cole crops, like broccoli, beets, and radishes, too. In short, the entire garden will benefit from the slow release Organic fertilizer.

MicroLife Molasses is excellent to use in the cool season garden, too, to add sugars which benefit plants and microbes, alike. Now is a great time to do some composting - and I love adding MicroGro Granular to the compost pile to jump start the process. It is so easy to use and works beautifully.















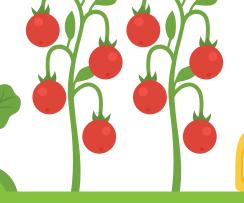
For turf, the Fall is when things slow down and get easier. Grass is not growing quickly, and in some regions, not at all. Focus on a Fall application of MicroLife 6-2-4 or MicroLife Brown Patch. These will provide a slow, steady stream of food for your lawn without dangerously pushing too much tender growth. With a good program of Humates and fertilizer, you can create turf that does not need weed control products.

A good, holistic approach to lawn fertility creates an environment that weeds do not thrive in, but turf does. As stated above, if you can leave the leaves where they are, they provide insulation and fertility for the following spring.

Remember, the name of the game going into the cooler months is to protect and to provide slow and steady fertility. Enjoy the change in the seasons!







THE IMPORTANCE OF REMINERALIZING OUR SOILS

JOHN FERGUSON | NATURE'S WAY RESOURCES



Professional landscaping is thriving & gardening is America's biggest hobby. People want beautiful landscapes & delicious foods from their vegetable gardens & orchards. To achieve this, it all starts with the soil, especially nutrient rich soil full of minerals. One of the best ways to do this is to add rock dusts in the form of mineral sands. Trace minerals to plants are like vitamins to humans, one does not need a lot, but if you are low in one, we get ill. For plants it is increased insect & disease issues plus slower growth. There are 79 elements found in the human body & if they are not in the soil, they are not in our food & we have more health problems. When the soil is full of trace minerals, microbes from bacteria to algae can collect nitrogen from the air & take carbon to create valuable organic matter in the form of humus.

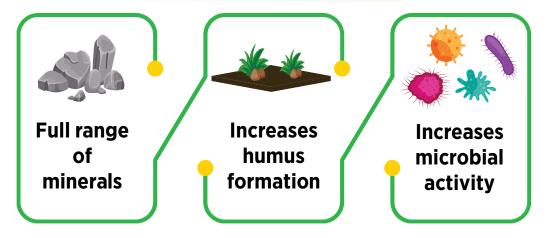
Re-Mineralizer is a blend of basalt sand, granite sand & green sand, all from Texas to ensure the full range of elements are available.





A 40-pound bag will cover 800 square feet & rock minerals will not burn plants hence they can safely be applied at much higher application rates for maximum benefit.

Benefits of Re-Mineralizer



New studies have found that basalt sand can increase humus formation in the soil 4.5 times faster than soil without basalt sand. The most nutrient rich sources of rock dusts (contains the most elements) are found in igneous rocks like granite & basalt & in some rocks that form in the deep body of the ocean like glauconite, from which we get greensand.

PLANT INTELLIGENCE SOFIA QUAGLIA | JOURNALIST AT GIZMODO.COM

Although plants make up over 80% of the biomass on Earth, for centuries they have been thought of as inanimate & passive things. Researchers even coined the term "plant blindness" to refer to a cognitive bias that literally makes our brains zone out plants in our view & underestimate their importance.



But as research into the plant world has blossomed over the past 40 years, thanks in part to new biotechnologies allowing scientists to study gene expression, scientists are discovering how truly alive plants are. Even as new revelations change our knowledge of plant abilities, though, the debate on whether plants can be considered sentient remains contentious.



"I think plants are massively taken for granted. I think they are extremely sophisticated organisms. They are adapting exquisitely well to the changes around them all the time," Claire Grierson, a plant biologist at the University of Bristol, told Gizmodo. "I think we can learn a hell of a lot from plants philosophically."



Scientific research into plant cognition dates back to Charles Darwin, who would draw parallels between plant roots & the brain. Ever since, studious circles around the world have taken a leaf out of his book, from the controversial publishing of Secret Life of Plants in the 1970s, which goes as far as saying plants can read human minds, to Daniel Chamowitz's 2013 book What a Plant Knows, which explores how plants' acute senses teach them about the world.

Although no plant has a central nervous system, some researchers are exploring the field of neurobiology in botany. The International Laboratory of Plant Neurobiology (LINV) in Florence, Italy argues that having a brain should not be a prerequisite for intelligence. "We firmly think that all the behaviors observed in plants, which look very much like learning, memory, decision-making, & intelligence observed in animals, deserve to be called by those same terms," the LINV website reads.

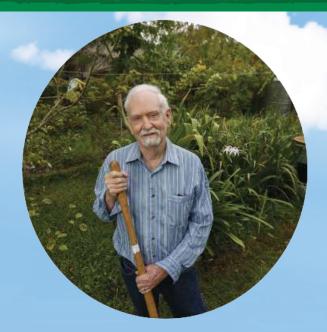
Plants are conscious, according to LINV director Stefano Mancuso, an arboriculture professor at the University of Florence. Mancuso's case for plant consciousness hinges on evidence that they are aware of their existence, of their surroundings, & of the passing of time. Among other things, Mancuso quotes the renowned physicist Michio Kaku & argues that, if consciousness is the ability to build a model of yourself in relationship to space, others, & time, then plants therefore must be conscious, because of their sensitivity to chemical & physical stimuli, to their competitors, & between themselves. Plants even deserve rights, Mancuso writes in his book La Nazione Delle Piante, where he drafts out an eight-article plant constitution for the "only, true & eternal powerful nation of the planet."

Intriguing but controversial studies into plant consciousness have been conducted by Monica Gagliano, a researcher in plant behavior at the University of Sydney.....

READ FULL ARTICLE HERE

Article Source: https://gizmodo.com/is-plant-intelligenceiust-a-human-fantasv-1844217825

The Greatest Food Growing book for Houston & Southeast Texas! Check out Bob Randall's Book, 'Year Round Food Gardening.'



Bob Randall, PhD. is a founding member of Urban Harvest & OHBA. Dr. Randall has received many awards & two degrees in permaculture. He has been helping Texan gardeners & farmers through teaching hundreds of classes all over the region & writing fascinating vegetable growing books.



On Sale \$55 per book

"FOOD GARDENING IS EASIER THAN SHOPPING FOR FOOD, PAYING FOR IT, & MOWING THE LAWN." - BOB RANDALL



WORLD CLASS EDUCATION

OHBA is a locally run, community focused 501(c)(3) non-profit organization dedicated to Organic horticulture & Organic human health education. We believe in a happy, healthy & beautiful world for all. We host a variety of live events, webinars & field trips with local & international Organic experts.



OHBAONLINE.ORG

