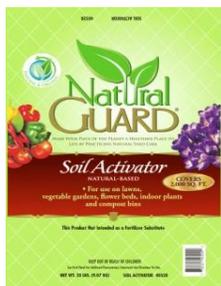


SOIL ACTIVATOR / TOP DRESSING AND COMPOST MAKER HUMATES AND HUMIC ACID



Horticultural and turfgrass experts agree that the key to healthy plants and turf begins with the soil. *Soil Activator* and *Top Dressing* contain humates, a natural soil conditioner, that will improve the soil tremendously.

With continued use of this product, you will see noticeable improvements both in your lawn and in your gardens.

Humates Humates are highly compressed prehistoric matter consisting of plant and animal matter. This prehistoric organic matter has decomposed over thousands of centuries. This product is also high in humic acid and contains most of the known trace minerals necessary to the development of plant life. This product contains valuable plant nutritional substances not found in chemical fertilizers; such as organic matter, carbon, chlorophyll, protein, and humic acid. A series of geological events enriched this product by compacting it deep beneath the earth's surface, and then aerated it by bringing it to the surface through volcanic eruptions. The carbon in humates stimulates micro-organism activity in the soil that uses and breaks down nutrients they need. The humic acids, in humates, chelates those nutrients that are already locked up in the soil, and breaks them down to a form that allows plants to use them easily. There are different sources and grades of humate material. The humate material in these products contain a high level of pure humic acid (35 percent) along with an excess of 35 percent organic matter and carbon. Much of the humate material on the market is derived from a salt water source. Natural Guard humates come from a fresh water environment, and from a sand base. A fresh water source versus salt water is important because the Natural Guard source (fresh water source) has no clay content and is extremely low in sodium, making it a premium choice as a soil conditioner.

Advantages of Humates

- Humates are natural products that have no chemical additives.
- Humates contains a high concentration of humic acid which is being recycled back into the soil.
- Humates hold the nutrients in a usable form and releases them to the growing plant as needed.
- Humates release "locked-in" nutrients, making them more available for plant use.
They promote chelation of available nutrients converting the nutrients into a form more available for plant growth: they aid in correcting plant chlorosis (iron deficiency).
- Humates help aerate the soil. Its colloidal action assists in preventing formation of large clods and stratification of the soil.
- Humates activate the decomposition of "plowed under" crop remains, new compost, and grass clippings.
- Humates retain water soluble inorganic fertilizers and releases them to the growing plants as needed. It helps stretch out the food availability between lawn feedings.
- Humates increase the water holding capacity of soils. Soil containing humates resist drought more effectively and produces better yields where rainfall or irrigation may otherwise be insufficient. (water holding capacity may be increased by up to 1000% in sandy loam soils and 700% in clay soils)
- Humates are a supplement to crop rotation, to green manure crops, to animal manures, and to the inoculation of soil with micro-organisms. Treated soils show a 35% greater microorganism activity.
- Humates reduce soil erosion by increasing the cohesive forces of very fine soil particles and promotes desirable drainage and water intake.
- Humates improve the tilth or workability of the soil and thus heavy clay soils can be worked into satisfactory seed beds, and marginal soils into profitable soils. Soils become more crumbly and suitable sized particles are formed in the aggregates.
- Humates help promote better drainage in clay soils.

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Humates do not provide a "quick fix" to the soil. Your soils and lawns did not become poor overnight, thus it will take time to correct. Continued use must be maintained to produce long term results. You should start seeing

visual results within two or three weeks after application, however, the long-term results will start to appear as you continue to use this amazing product over the years.

Benefits Of Humates

- Produces healthier, stronger plants which withstands pests and stress more effectively.
- Enhances seed germination when applied, before or after seeding.
- Aids in turfgrass root development when applied in conjunction with lawn core aeration. (*New Lawn Starter*)
- Promotes better uniformity within the stand of grass.
- Improves plant vigor and visual appearance.
- Increases Availability of Some Soil Nutrients (Improves Plant Nutrition). The product does not replace the application of fertilizer, but enhances it. It does permit reduction in the amount and frequency of fertilizer used.
 - Creates little or no increase in frequency of mowing.
- Enhances Soil Life: Better Residue Breakdown and More Earthworm Activity.
- Significantly improves poor soil structure when used in combination with a balanced lawn care program. Tight soils may become more friable. Sandy soils may show improvement in moisture retention.
- Soil Activator and Top Dressing speed up the decomposition of lawn thatch.

Some or all of these benefits may be observed in each lawn and garden, depending on the soil, the species of plants used, and the management program. Variations may be expected from lawn to lawn, and from garden to garden, because the soil structure, the soil fertility, and the amount of humates you apply.

Thatch Has Met It's Match

Thatch occurs in your lawn due to dead grass and grass clippings. Thatch, if not properly controlled, can require the use of more water for your lawn and can result in poor control of lawn insects and diseases. Soil Activator and Top Dressing eliminate thatch from your lawn. These products help microorganisms to thrive, to break down thatch and to recycle it back into lawn nutrients, Naturally.

What Does Thatch Do To A Lawn?

1. It prevents water from penetrating and serves as a breeding ground area for insects.
2. It harbors diseases, especially brown patch, dollar spot, and fusarium.
3. By reducing the penetration of light thatch forces grass to grow fast and become spindly.
4. It prevents turf roots from spreading as they should.
5. It can cause winter dieback by desiccating the grass.
6. It leads to uneven mowing and results in ugly brown patches on the lawn.
7. It greatly reduces the effectiveness of lawn chemicals and fertilizers.

Nutrients
N, P, K, S, Mg,
Na, Fe, Al, Mn,
Ca, Cu, Zn
& more

How To Apply

Established lawns: Apply 1 lb per 100 sq. ft. For soils low in organic matter apply 2 to 3 lbs per 100 sq. ft.

New Lawns: Apply 1 to 2 lb per 100 sq. ft prior to soil preparation. In sandy soil apply 2 to 3 pounds per 100 sq. ft.

Flower & Vegetable Gardens: Apply 1 to 2 pounds per 100 sq. ft. as you prepare the soil for planting each spring.

Apply twice a year: once in the spring (April or May), and again in the fall (September or October).