



Rockin E Gardening Handouts

Tips and Suggestions for 'Year-Round' Gardening

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HuMate - Soil Activator

Horticultural and turfgrass experts agree that the key to healthy plants and turf begins with the soil. **Natural Guard HuMate** contains 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.

It is for Vegetables Gardens, Flowerbeds, Indoor Plants and Compost Bins. It is a Highly concentrated soil conditioner. It is derived from remains of decomposed organic plant materials. Humic acids enhance nutrient uptake, and stimulate soil microbial life. Humic Acid encourages root development. It is not a fertilizer, and it is not intended as a fertilizer substitute; it helps the nutrients, already in the soil, become more available for plants to absorb and utilize.

Humates

Humates are highly compressed prehistoric matter consisting of plant and animal matter (dinosaurs and other prehistoric reptiles). 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 **Natural Guard HuMate** contains 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 humate comes 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. (Up to 1000% in sandy loam soils and 700% in clay soils).

* Humates help promote better drainage 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 than untreated ones.

* 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 reduce soil erosion by increasing the cohesive forces of very fine soil particles and promotes desirable drainage and water intake.

* Humates are not, by themselves, a significant source of nitrogen, phosphorous, and potash, nor do they restore organic matter to the soil in any quantity. Your fertilizer and organic material will come from the sources you add.



Visual Results

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.

Apply **Natural Guard HuMate** twice a year: once in the spring, along with **Fertilome Lawn Food** (with Pre-emergent Weed Control if needed); and again in the fall, along with **Fertilome Winterizer**.

Benefits Of Humates

Natural Guard HuMate is a natural organic substance that has proven benefits when used on turf grasses, gardens, trees and shrubs. **Here's what to look for:**

- * **Natural Guard HuMate** speeds up decomposition of lawn thatch.

- * Enhances Soil Life: Better Residue Breakdown and More Earthworm Activity.

- * 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.

- * Promotes better uniformity within the stand of grass.

- * Improves plant vigor and visual appearance.

- * Creates little or no increase in frequency of mowing.

- * Produces healthier, stronger plants which withstands pests more effectively. Plants also have a better resistance to stress.

- * Enhances seed germination when applied, a week before seeding, into the top two inches of the root zone.

- * Aids in turfgrass root development when applied during lawn core aeration.

- * 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.

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 humate you apply may vary.

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. **Natural Guard HuMate** eliminates thatch from your lawn. This product allows microorganisms to thrive, to break down the 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.



How to Tell If You Have A Thatch Problem

One of the mysteries of thatch is its identity. A lawn may show some scattered, dried-up grass clippings, but that's not thatch. You've got to take a close look at the turf. Any time of the year that the grass is green, grab a ruler and walk out into the lawn. Stroll around a bit and get a feel for the lawn under your feet. Is the lawn firm or springy?

If your feet sink deeply into the turf or your steps are especially bouncy, that's a sign of too much thatch. Pick another spot in the lawn and look straight down at the grass. If you can see patches of brown or dark soil under the grass blades you do not have a serious thatch problem. If you cannot see any soil, but you can only see a total blanket of netted grass blades or roots you may have a thatch problem.

Where you think you have a thatch problem get out a ruler and measure the depth of the thatch.

If it is:

1. Less than 1/4 inch thick there is no cause for concern.

2. If it measures between 1/4 and 1/2 inch, it bears watching.

3. If it is over 1/2 inch thick it is time to use **Natural Guard**

HuMate, which will speed up the natural decomposition of the thatch problem.



How To Apply

For Established lawns: Apply one pound per 100 sq. feet. For soils low in organic matter apply two to three pounds per 100 sq. feet. Re-apply in early fall.

For New Lawns: Apply one to two pounds per 100 sq. feet prior to soil preparation. For sandy soils apply 2 to 3 pounds per 100 sq. feet. Re-apply in early fall.

For Flower & Vegetable Gardens: Apply one to two pounds per 100 sq. feet as you prepare the soil for planting each spring.

More Information

<http://www.fertilome.com/ProductFiles/40525%20Soil%20Activator%20Approved%2009-20-11.pdf>

<https://www.fertilome.com/Products.aspx?catid=608ccfb5-5a54-4612-86b4-811a981782bc>

<http://homeguides.sfgate.com/natural-guard-soil-activator-do-87504.html>