SINCE 1996 4894 West Lone Mountain Road, Suite 191 Las Vegas, Nevada 89130 USA

Telephone: (+1) 702-645-1390 Fax: (+1) 702-656-2305 Email: <u>info@biomassters.com</u>

Agriculture Website: www.biomassters.com Ethanol Website: http://home.earthlink.net/~test-results2/



FOR POOR SOILS ~ Lawns, Grasses & Grains

"Always use MicroSoil® with your Nitrogen applications"

Most soils throughout the world are in poor condition due to excessive use of chemical fertilizers and pesticides, climate conditions, deforestation, erosion, over grazing and a wide range of other factors.

Over a period of time, depending on current soil conditions, most soils can be reclaimed with a management system that centers around elevating the organic matter content of the soils while reducing chemical fertilizers and pesticides. This can be done in many ways such as re-incorporating crop residues back into the soil after each growing season, adding compost, cattle manures (dairy cattle manure is best), manure teas, crude oil, humus, fish by products and oils, wood chips, molasses and a wide range of other organic substances to the soil.

To ensure a carbon and nutrient source for the soil microorganisms in poor soils, we highly recommend blackstrap or feed grade molasses as an excellent product to use with MicroSoil® where you have low organic matter conditions. Even better, combine MicroSoil® and molasses with any of the above referenced organic substances if and as available locally to hold down costs.

When applying MicroSoil® to lawns and grassy areas, we highly recommend adding 1 gallon to 3 gallons of molasses per acre or (4 liters to 12 liters per hectare). A second application of 1 gallon per acre (4 liters per hectare) is ideal if applied 60 days after initial application. Molasses is high in carbon content and rich in nutrients.

Minimum Molasses (CARBON) Application Rates noted below are based on soil's present content of organic matter:

Organic Matter	Minimum Application Rate
2% =	1 gallon per acre or 4 liters per hectare
1.5% =	2 gallons per acre or 6 liters per hectare
1% =	3 gallons per acre or 12 liters per hectare

Molasses is a very inexpensive product and is generally available in most parts of the world. If necessary, additional water (warm water is best) can be added to the dilution (up to 200-1) if filters tend to get clogged with standard applicators. DO NOT extend this application over larger areas than specified.

INSTRUCTIONS for TURF/LAWNS/GRASSES: For best results, thoroughly shake MicroSoil® concentrate then dilute by adding (1) one liter (quart) of MicroSoil® concentrate into 100 Liters (25 gallons) of water. Mix thoroughly before applying this dilution over (1) one hectare (2-½ acres) then sprinkle/water area thoroughly. If using pivot or flood irrigation, 1-½ to 2 parts of MicroSoil® may be needed on first application, then apply the 20 gallons of dilution per acre. For best results, apply as early in the season as possible. Mow and water grass before using MicroSoil® and water again after application. Always dilute (1) one part MicroSoil® with 100 parts water and apply in conjunction with your nitrogen applications. Apply every 60 days for best results. Use all diluted product within 3-5 days.

NOTE: 1. Due to thick thatch and dense grass foliage, mixing with twice as much water is usually recommended, as the water is used as a carrier for **MicroSoil®** to get into the root area of the soil.

2. You can mix ALL other water-soluble organic/inorganic materials, fertilizers, pesticides, herbicides, etc. in and with **MicroSoil®** dilution before applications.

"The Mineral Theory"

*Formulated in 1847 by Dr. Justus von Liebig

"The principle guiding our mission is based on this profound irrefutable revelation."

"The crops on a field diminish or increase in exact proportion to the diminution or increase of the mineral substance conveyed to it in manure." (Manure, in this sense, is anything applied to the soil to serve as plant nutrient.) Liebig's Law stressed the value of mineral elements derived from the soil in plant nutrition and the necessity of replacing them to maintain soil fertility.



The yield potential of a crop is like a barrel with staves of unequal length.

The capacity of the barrel is limited by the length of the shortest stave
(in this case, nitrogen) and can only be increased by lengthening that stave.

When that stave is lengthened, another one becomes the limiting factor.