

## THOSE HUMIC SEA MINERALS

by Robert H. Faust published in ACRES U.S.A. 1986

Humic sea-mineral was discovered around the turn of the century near the town of Panaca, Nevada on what was once the coastal area of a giant inland sea that existed millions of years ago. The Great Salt Lake is a remnant of this sea. Mule skinnners working for the railroad discovered one of their mules missing. They located it at the deposit eating the mineral.

The mineral has been mislabeled montmorillonite, a common clay found throughout the region. It is actually a humic substance comprised of interbedded lake silt with high humus lignitic silts. The strata averages 1 inch to 4 inches thick. The organic matter is very fibrous and the pattern of kelp-like vegetation can be seen. The material tests out around 38% humus, along with high levels of potassium and iron. The material is found to a maximum height of 75 to 100 feet from the valley and is exposed due to an uplift. The area was once a vast inshore swamp and marsh abounding in the massive fern-like plants common in that period.

At one time, giant reptiles roamed the warm swamps. These animals were large yet had very small mouths. It is calculated that feeding on vegetation available in today's swamps they would not be able to sustain themselves even if they ate constantly. Therefore the food of the dinosaurs had to be of a food value unknown today. This once ultra-rich vegetation helped form what we call Soil-Min, a super concentrated compost layer many feet thick that was compressed into a layer only inches thick over millions of years. The swamps of this area had high levels of nutrients raining down from the volcanoes of central Utah. Later in geologic history the climate dried, and with it the swamps. During this time hundreds of feet of sediments built up. Later, as faulting occurred, the strata was inundated with geothermal fluids that mineralized the humus, then it was acted upon by unknown but beneficial fungi and bacteria. Cultures from the dry mineral were sent to the Communicable Disease Center in Atlanta, Georgia in 1978. The organism could not be identified, but it was non-pathogenic when tested.

The mined product called Soil-Min contains about 38% humus, 17% soluble silica, 5% potash, and 9% calcium. It contains nearly all trace elements.

A new theory first advanced by Dr. Graham Cairns-Smith of the University of Glasgow proposes that clay may hold the key to evolution, since it has several properties that would be needed to generate life. The two most important properties are the ability to store and transfer energy. Clays have the ability to process inorganic raw materials into the more complex molecules from which the first life arose some four billion years ago. The clay crystals create the conditions by which it traps and holds energy for thousands of years. Research done in Germany by Armin Weiss of the University of Munich shows that clay can act as a catalyst in chemical reactions and may be capable of self-replication. Weiss reported in experiments he conducted that he observed reproduction of clay crystals from a parent clay to several generations of daughter clays. This finding adds evidence to the theories of Dr. Wilhelm Reich on "orgone energy." Reich said that "orgone" or cosmic energy when contained and directed at inorganic, sterile clay led to formation of "bions" which were a type of transitional organism between mineral and animal. The bions with continued exposure became a type of microorganism capable of reproduction. These theories were never accepted by the scientific community even though they were demonstrated experimentally to such high priests of science as Albert Einstein. As time goes on, more and more of Reich's theories will be likely accepted.

### DO CLAYS REPRODUCE?

Clays "form" over rock, usually mineral rich rocks like granite. Anyone who has worked with soils has observed clays overlaying hard rock. Clay is more plastic near the rock surface and more granular near the soil surface. It has been said that rock "decomposes into clay," but I have never heard how very hard granite deep in airless, cold and sterile soil could decompose. Perhaps the new theories indicate that the clays actually reproduce, somehow using energy to feed off the "parent" rock. This underlying rock is called "parent material" by geologists. Perhaps by combining ancient humic clays with mineral soils, the clays "feed" on the minerals, producing daughter clays and "build the soils." Perhaps "orgone" energy is the energy source and perhaps some of the energy devices now used in agriculture somehow intensify this energy and stimulate this soil building process. Soil rich in organic matter can also build soil. Reich's "orgone" theory says that organic matter attracts and holds it. The orgone is then the energy source for microbial synthesis in the soil.

How can life come from energy and dead minerals? Deep sea exploration has proved that a whole food chain is supported near deep sea geothermal vents. This complex food chain is supported by a chemo-synthetic organism which derives its energy solely from sulfur. Perhaps this chemosynthesis is stimulated or energized by orgone energy which is also attracted and concentrated in water. Tube worms and strange fish live in water so deep that light has never reached there. The only energy is the heat from the geothermal water and sulfur compounds. There are also clay minerals in the water and perhaps on the sea bottom around the vents. So maybe life did spring from minerals and the energy of life is "orgone." I feel that the process that led to a deep sea food chain which includes six foot tube worms also is responsible for soil formation from dead minerals.

#### MODERN PRODUCTS

The benefits of the end product to agriculture are many. In general, when the material is fed to animals (including man) the digestion of food is increased and the absorption of food nutrients is increased. In plants, increased levels of trace minerals are noted. The humic acids and silica in what we now call Soil-Min can increase phosphate uptake. Silica can increase resistance to both insects and disease.

#### DR. DIKKER'S RESEARCH

Melchior Dikkers, Ph.D., a distinguished biochemist and mineral authority, wrote in his book [The Trace Mineral Story](#) that the mineral deposit was brought to his attention in 1931 when he was professor of bio and organic chemistry at Loyola University. Dr. Dikkers wrote that "The properties (of the deposit) were so amazing and unique that I became deeply involved in a research program that was to take me into many years of painstaking analysis and findings." Dr. Dikkers contended that deficiency disease comes about not only because of the insufficiency of a certain element, but also "As the result of an imbalance or disequilibrium between various mineral elements." He found that only a deposit such as the one in Nevada provided the needed proper balance of minerals and trace elements.

[Nutra-Min](#) is the feed supplementation form of the mineral for ruminants and non-ruminants, and for fish as well. It has proved to be both economical as well as useful as a feed supplement. Soil-Min as a fertilizer and soil conditioner has many benefits. It can be used preplant, side-dressed or with the seed at planting.

Many people have discovered or learned about the benefits of this geologically formed product in the many years since Dr. Dikkers did his work in 1931. The lesson is clear that trace minerals in an organic form (humic acids) are much more available and useful as trace element and major mineral nutrition sources. The principle of balance and new knowledge about the interactions of trace minerals again reinforces the concept of using a natural humic product with natural balance built in.

#### HUMIC ACIDS

Humic acids or humus can be defined as the end product of the decomposition of organic matter by aerobic organisms. Humic acids serve many complex purposes in the soil. Humic substances are a colloid and coat soil particles, acting as a cushion and an interface between the dead mineral of the soil and the living plant root. Without this coating the soil can become a gummy mass. With it, the soil becomes friable and granular in structure. These humic substances possess a high cation exchange capacity, which means that it helps hold the essential cation elements ammonium, potassium, calcium, et cetera. In the absence of the clay or humic colloid, the cations are either lost by fixation or leaching, and thereby they are lost to the plant root. Humic substances are very complex and are different depending on conditions and minerals available. Due to an inundation of geothermal fluids into this bed of humus, this product is unique, as it has high levels of attached cations, such as nearly 5% potassium.

In addition to the cations, the deposit contains very high levels of trace minerals in an organic form. That may be one of the keys to its beneficial properties. Plants and animals can absorb these elements readily in this humic form because it has already been assimilated and chelated by the microorganism which utilized parent organic matter eons ago. Trace elements are required in only minute amounts in this form. I know of no other natural product that has this mineral-organic makeup. That is what makes the bio-mineral fertilizer and feed supplement so unique.

<http://www.humate.net/humicacid2.html>

<http://www.humate.net/humsemin.html>