ROCK DUST AND PARAMAGNETISM

By Steven G Herbert

(This is a condensed version of a very scientific, technical, and fascinating report submitted by Steven G. Herbert, who may be contacted for more in-depth information.)

In a practice of organic agriculture, our aim has been to produce through environmentally sustainable practices, the most nutritious fruits and vegetables possible, while maximizing overall quality balanced with economically viable quantities. This goes hand in hand with optimizing the health of the whole plant, while minimizing the encroachment of pests, diseases and weeds. The organic approach is to balance the chemical, physical and biological requirements of both soils and crops. However, more attention is now being put on energetic, and even spiritual requirements as well. In the search for inputs, which could cater to this broadest spectrum of requirements, it is paramagnetic rock powders which have risen to the forefront.

Re-mineralization of the soil through rock dust is an alternative means of fertilization fast gaining in recognition and application. Its virtues were discovered accidentally from dust blown from construction sites, which revived nearby forests. The first to popularize rock dust as an intentional application was Julius Hensel in the late 1800s with his book Bread from Stones. Rudolf Steiner was the next most prominent advocate in his lectures of 1924. Then came John Hamaker and Don Weaver with their book, The Survival of Civilization. Joanna Campe followed to champion the cause with her newsletter turned quarterly magazine entitled Remineralize the Earth, between the years of 1986 and 2000. By then the practice was becoming mainstream.

THE PARAMAGNETIC FORCE

Any discussion of the use of rock powders, however, goes hand in hand with that of the forces of paramagnetism and diamagnetism. The application of rock dust was first appreciated for its re-invigorating soi8ls with nutritive minerals. Rock powders measuring strong in the forces can accentuate the already wide range of fertilization benefits. These include the balancing of pH, increased water retention capacity, spurred growth, and higher yields, pest and weed suppression, tolerance of

thermal extremes, proliferation of microbial activity, protection against disease and fungus, greater germination rate, reduction of salinity and reduced mortality. Produce will be improved in quality, taste, nutrient content and brix levels. In general, the paramagnetic and diamagnetic forces increase the life force of fruits and vegetables.

The forces of paramagnetism and diamagnetism can be scientifically described. Praamagnetic and diamagnetic materials are not technically magnetic in the usual sense like iron, nickel and cobalt of classic ferromaqnetism. Paramagnetism is define in the Dictionary of Chemistry as when "the atoms or molecules of the substance have net orbital or spin, magnetic moments that are capable of being aligned in the direction of the applied field." Diamagnetism is defined as "the magnetizatino in the opposite direction to that of the applied field." The relative strength of attraction or repulsion is determined by the measured portion of one second that it takes for one gram of a substance, to move one centimetre from a magnet. Gauss Is the centimetre-gram-second (CGS) unit. In the case of paramagnetism, CGS itself is known as susceptibility (to being attracted to a magnet). Values usually range from 0 to several thousand, extreme low, to extreme high, and by convention are assumed to be multiplied by 10-6, or one millionth of a CGS., The values are also positive for paramagnetism (attraction) or negative (repulsion).

Phil Callahan, et al. designed a hand-held meter, called the PCSM(Paramagnetic Count Soil Meter), which can measure Gauss of paramagnetic materials. It is limited only to positive values as it measures only the attractive force and not the repelling force. There is a more precision instrument, called the Brownington Research Meter. The PCSM, however, can be purchased for a reasonable $495.00 and can be very useful to the farmer. On the positive scale, 0-100 CGS is considered poor, a reading of 100-300 is good, 300-8—very good and 800-1200 and up is excellent. Paramagnetism is one aspect that the Carey Reams soil test assesses. Paramagnetic crushed rock or dust can be a very effective soil stimulant, but knowing the CGS value is important, as the more potent it is, the less you need.

The paramagnetic and diamagnetic values of various elements have been measured and can be researched. These can be found in the Handbook of Chemistry and Physics, 50th edition. Most organic

molecules are diamagnetic, and most all plants with few exceptions ae diamagnetic. The water molecule is a curious case. Our atmosphere is paramagnetic due to oxygen, but though oxygen makes up a large percentage of the atomic weight of H2), the water molecule itself is diamagnetic. The highly paramagnetic Moon's attractive force on the oceans explains the tides.

PARAMAGNETIC ROCK

Basalt is an igneous rock (cooled from magma) typically associated with volcanic activity and commonly measuring highly paramagnetic. This can be either an extrusive (flowing lave) rock, or a more dense intrusive rock, which cooled at shallow depths in the earth. The highest paramagnetic values tend to be associated with the deeper depths. Rocks which have been long exposed to the elements tend to have lower values. Excessive tilling of soil can produce the same effect. Granite, a larger-grained intrusive igneous rock, had a longer time to cook and crystallize than a finer-grained and darker basalt. This is typically a lighter coloured rock made up of potassium-rich feldspars with quartz or mica, termed felsic. Silica content in granite is at least 20 percent and may be as high as 70 percent.

There are pros and cons for both basalt and granite. Basalt usually tests higher on the paramagnetic scale but one must be careful that the iron level is not too high. From a nutritional standpoint, it may be rich in trace nutrients, but low in the major macronutrients of nitrogen, phosphorus and potassium. Granite may have more potassium, but also trace uranium, and thus a slight radioactivity. You may ask for a mineral analysis of your local quarry's products. A high iron level may also distort the paramagnetic value and the mineral analysis. Many commercial blends of rock powers are available, combined to offer a broad and more balanced suite of nutrients.

Rock ground finely into dust will allow the benefits to be maximized for both nutrition and paramagnetism. These insoluble rock powders then represent a long-term supply of nutrients, which are slow-released by the action of the micro-organisms of the soil. Ground rock purchased in the form of chips are cheaper, but basically only provide the paramagnetic advantages. Crushed in this way, the many angular extrusions serve as "antennae" to increase receptivity to the energetic

environment. One must bear in mind that a particular rock dust may be more suitable to one crop than another.

Paramagnetism in the general sense, refers to the ability and degree of ability to resonate with, take in and pass on cosmic energies in this way. Appreciating this, we may be tempted to attribute a kind of "aliveness" to paramagnetic materials, and this is how we have come to use the language "enlivened rock powders."

APPLICATIONS TO AGRICULTURE

The polaric forces of paramagnetism and diamagnetism should be balanced in the soil, but should be insulated from one another such that they don't short-circuit. Within the soil, organic material serves as the insulator. Only one rock powder should be applied per year and always together with humus, and this should be given time to "digest" in the soil.

Another positive effect of proper management of paramagnetic forces on the farm is pest control. Healthy crops produce good quality and nutritious fruits and vegetables, but paramagnetic forces also strengthen the energy fields of these plants. This deters insect pests in a number of was. If the insect itself is paramagnetic or diamagnetic, the opposite force will drive it off. More importantly, an unhealthy plant with a weakened energy field will produce slightly higher ethanol and ammonia levels and associated infra-red signals which insect pests are equipped to detect.

Besides direct application of rock powders as fertilizers or amendments, these can be indirectly applied by addition to the compost pile. Sprinkled between the layers of dry brown carbon materials and moist green nitrogenous materials it should amount to about ten percent by volume of the pile. Paramagnetic rock powders will be even more effective having been previously digested.

There are a multitude of other benefits of paramagnetism in agriculture as well A well-aerated soil will allow highly paramagnetic oxygen to invigorate it. Foliar applications of rock dust can help deter insects. Spread on the soil surface around plants, it can provide an effective physical barrier against slugs and snails, than an application of lime. It can reduce odours in animal manures. Electromagnetic or geopathic radiation may be remediated with rock dust. It can be used as a dietary supplement for animals. Teas can be made from paramagnetic rock dust. Even just a few trees left scattered in the farmscape can help

retain paramagnetic forces. Raised beds can attract paramagnetic forces. Rock mulches and stone circles can help create and retain them.

PARAMAGNETICS AND AGRICULTURAL DOWSING

If you are both a farmer or gardener and a dowser, there are many ways that dowsing can guide you. Working with a suite of charts and a pendulum is the most effective way. Begin by taking a representative sample of your soil. Put it before you and ask whether the soil is predominantly paramagnetic or diamagnetic (as opposed to balanced) alternating or neutral. You can dowse the CGS values, whether positive paramagnetic or negative diamagnetic. Consider the plants to be grown in that soil and ask whether the addition of rock dust or chips would be advantageous to their optimum growth and well-being. Ask whether it is in the highest good, all things considered, to use dust or chips. Next, dowse whether you need rock powder or chips from the silica, clay, lime or anomalous categories. You may then go to the appropriate charts you can make yourself to determine the specific rock powder or chips. Then dowse application rate, depending on your scale as a farmer (tons per acre) or gardener (pounds per 100 square feet). Remember, only one rock powder / chips per year, always applied with humus, applied together with/in compost which has time to digest the minerals.

Done properly, you can reap the rewards of healthier crops and greater yields of nutritious produce, raised in an environmentally friendly way. Providing for the energetic and spiritual needs of soils and plants also benefit you with energetic and spiritual nourishment.

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