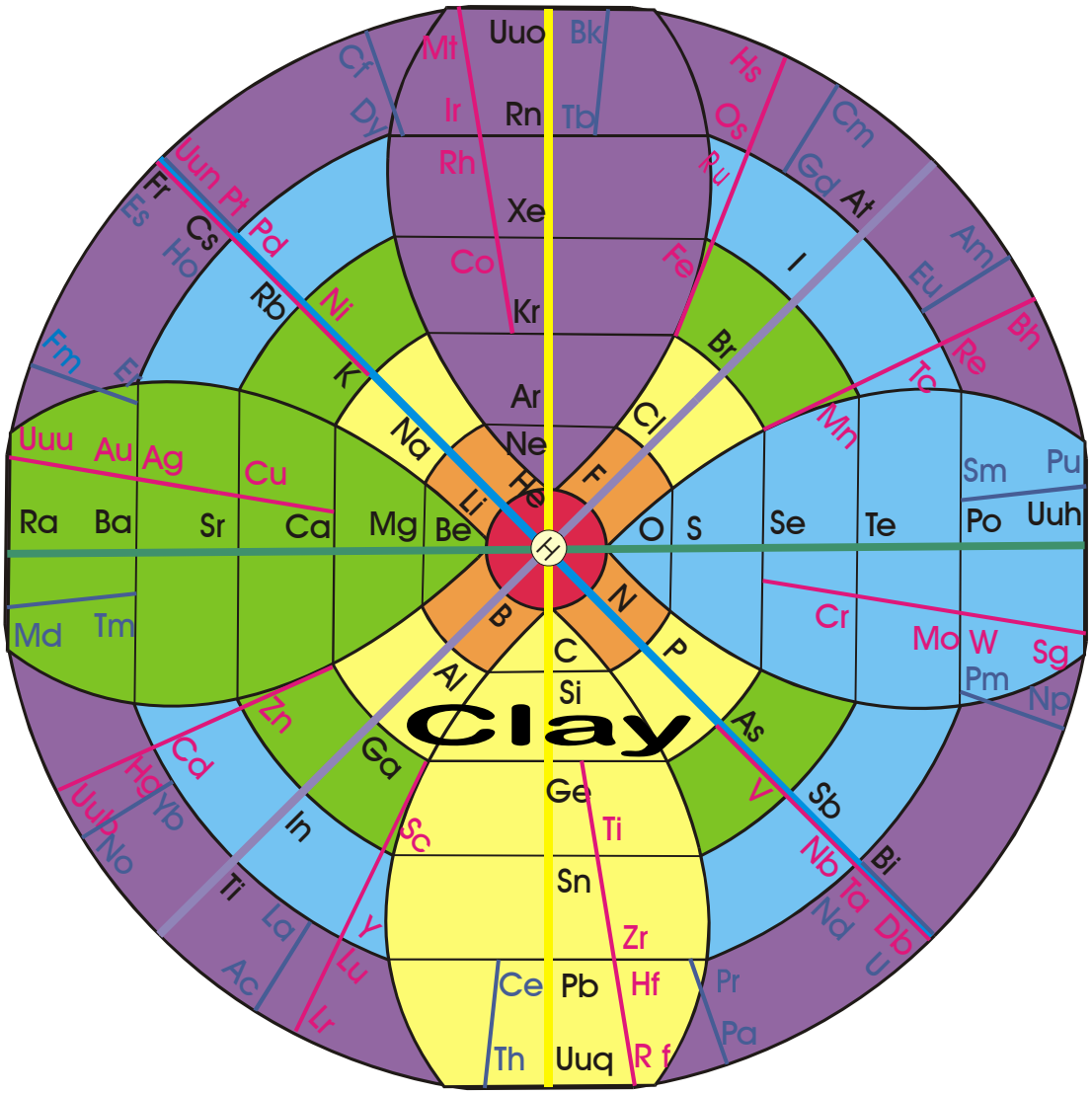

There has been some response to my inclusion of Hugh Lovels Boron article in the Harvests issue I edited.

While some of the questions, surround the exact chemical terminology to use in certain circumstances, there was a loud questioning of the main thesis of Hugh article. Hughs article put forward a clear suggestion, that if we wished to activate the upward moving Cosmic Silica stream, Dr Steiner talks of in plant growth, we will need to look to Boron's functioning. He put forward that to activate Borons role in the Cosmic Silica stream, it needs to be incorporated with humates. In this form Boron acts as an activator of the Silica's upward movement up the plant. In doing so it drags with it the (Earthly) Calcium that acts as its companion in plant growth.

The question is "that there is no proof Boron is involved in this process."?

Hugh has said that he has direct experience of this and that he has seen raised Boron and Silica levels in plant tissue analysis. He has not however 'written these findings up" and so has not supplied the reports in question to prove his point scientifically.

Looking at my "Biodynamic Chemistry" diagram the question arises as to why would Boron not be involved in the process, rather than why would it be.

I have written about the background to this diagram in my "Biodynamic Chemistry" which is freely available at …….. So I will not go into the introduction of this diagram, here.

Dr Steiner has stated that the upward moving Silica stream is facilitated by the clay in the soil.

Clay's main chemical elements are Al, Si & P.

The wonder of the Periodic Table of Elements is that none of these elements exist in a void. They all interact with each other. Very simple understandings exist , namely that all elements on the same arm of the chart are all mutually exclusive. If one element becomes more dominate in a soil solution, the plant will take up the excess element , indiscriminately. Thus leading to a deficiency in the plant of the blocked element. Common relationships are those of Calcium and Magnesium, Chlorine and Iodine, Sodium and Potassium. This understanding of elements displacing each other is extended to elements that are next to each other on the table as well.
In the understanding of 'Base Saturation Ratios" we become aware of how the twins Calcium and magnesium are influential on the twins Potassium and Sodium, for example.

When we look to the upward movement of Silica in the plant, we must associate it with Dr Steiners Cosmic Silica stream activated by Clay. On the Periodic Table we see the elements of clay, Aluminum, Silica and Phosphorus are sitting next to each other in a group. Inside these three elements we find the elements Boron, Carbon and Nitrogen, respectively.

When we examine Hugh's proposal he is suggesting to get Boron active, we need to combine it with Humates. Humates are formed when Carbon and nitrogen interact with each other, leading to the breakdown of the solid carbon forms, such as wood and other plant fiber into compost and ultimately humus.

So Hughs simple proposal is that this whole family of six elements must be joined together to activate the clay process. This seems to me to be a very straight forward and self evident suggestion.

Good noticing Hugh.

The simplicity of this suggestion is further emphasised when we look into the Biodynamic Gyroscopic Periodic Table cross references.

As we are looking specifically at life processes it is appropriate to orientated this chart onto the Internalised Physical arm,. It becomes obvious that the physical body processes, indicated by this arm, is anchored by Carbon and focused by its sibling Silica. Supported by their siblings Germanium, Tin and Lead.

Silica , Aluminum and Phosphorus are all on the Physical body ring or activity, thus emphasising clay as an important basis for physical forms.

On the inner ring of the external or 'Cosmic' substances, Boron sits as the base element of the World Physical Arm, Carbon the base element of the internal Physical arm and Nitrogen is the base element of the World Astral arm. So this suggests this combination of six elements, sits as the base of the chemical elements manifestation into life. Clay itself, is easy enough to accept in this role, especially in the soil, as is Carbon and Nitrogen. Thus with the significance of these five elements ,being so easily accepted, as of primary significance, the question must be asked, as to Boron's role in this vital activity. The answer, must also be sort in exploring Borons interaction with these fellow elements, of clay and humus. This Hugh has offered us.

Hugh suggestion, and subsequent scientific research in support of this proposal, would appear on this basis to be an obvious explanation of how Silica's role in plant growth is activated.