

Garuda Biodynamic Research Institute (NZ)

by Glen Atkinson
Research Director

The Garuda Biodynamic Research Institute, (GBRI) has engaged in the exploration of the Homeopathic Biodynamic Preparations influence of plant growth, since 1980, following on from the work of Drs Steiner & Kolisko, and my 4 years experience working for Weleda NZ.

The homeopathic potentising of the biodynamic preparations dates back to the work of Doctors Eugen and Lily Kolisko, during the 1920. Their work was carried out upon the instructions of Dr Steiner and was greatly appreciated by him. In the Agriculture course he refers very positively to their work, at the Stuttgart Biological Institute. (page 93)

This work focused on potentising of all sorts of substances, including the biodynamic preparations and was reported in their book "Agriculture of Tomorrow" (1939).

It is clear from Dr Steiner's encouragement of the Kolisko's work, his other suggestions in 'Agriculture', and his effort in Anthroposophical Medicine, that he was very much in favour of homeopathic methods use in all spheres of life.

The potentising method we use is the same as that done for peppering. Dilutions of the individual preparations are diluted at 1 part to 9 parts water and alcohol, as carried out by Weleda, and then rhythmically shaken for two and a half minutes. This dilution process is then repeated for up to 30 times.

One important feature that has defined our approach, has been to actively take up Dr Steiner's indications, regarding the central role played in all life and disease, by the energetic 'spiritual' bodies. Thus our reference for looking at the source of influence, has been from how the physical, etheric, astral and spiritual spheres are manifesting in any particular situation.

The initial research at GBRI through the 1980s, focused on the experiencing of the effects of potentised 500 and 501 on vegetable and fruit crops. In the late 1980s work began on experiencing the effects of the potentised compost preparations on vegetable and flower plants.

The work done by the Koliskos, on establishing the effective potencies, using seed baths on wheat seedlings, followed by measuring the root and first and second leaf lengths, was redone in 1991. This enabled our accurate potency choice for the preparation stock we had.

At this time, a series of products were made available to the NZ commercial market, many of which are still available in this original or slightly altered form.

Many different avenues of research have been followed during the years.

Philosophical

The biodynamic preparations exist within Dr Steiner's world view. I hardly need to say that this view is complex, multi layered and described in somewhat vague and confusing terms. The early years of our research focused on bringing the indications within the Agriculture lectures, into some cohesion and overall framework, so that various conclusion could be drawn as a basis for practical experimentation. A key part of this process was establishing an essential similarity between basic astrological understandings and Dr Steiner's agricultural and medical world view.

Dr Steiner talks often in a language based upon 'patterned laws'. It can be seen he talks of 2 fold – polarity (Ca & Si), 3 fold (Nerve Sense, Rhythmic and Metabolic) or Astrology's Modes, 4 fold - the four elements, 7 fold the Planets, and 12 fold - The Constellations. This is the same ordering used by traditional Astrology.

Part of the 'Agriculture' Course's difficulty is that he talks of several of these levels all at once, without any definition or explanation. By acknowledging this similarity it allowed for many of the 'old' understandings of Astrology, to be applied to the organisation of Biodynamic information, into a vortex form. Once the information is so organised, many points of commonality and correspondence can be established. This work was first published in 1989 as "Biodynamics Decoded" and is available for free at www.garudabd.org - 'online books'.

Our specific studies into the 'Agriculture Course', lead to my writing a commentary to the course, which provides a unified image of how all the various bits of the course fit together, as a comprehensible overview. This is available for free at our books site.

I have been fortunate to present this overview to the 2005 Dornach BD conference, and have been invited again to specifically present my overview of the course, at this coming 2008 Dornach conference, focused on 'the Agriculture Course'. This work, is also now incorporated into the Emerson College BD course, where I present an annual two to three week series of lectures, to the course members. A shortened course has also been presented to the Spanish BDA in recent years.

These philosophic endeavours form the rational and conscious basis upon which our various research efforts have been based.

Plant Growth

Trials into all aspects of controlling plant growth have been attempted, - increase flowering, reduce flowering, increasing and decreasing ripening, increased bud burst on kiwifruit, reduced splitting of stonefruit, increased root growth and frost protection. Some pictures of these trials are available at www.garudabd.org "Case Studies"

A more formal trial of some of our products was carried out by Gill Bacchus, MSc, and it is available

http://www.garudabd.org/plant_trials/bdmax_efficacy_study.htm

Other formal trials are outlined below.

The conclusion of this report says "There were clearly observable effects from spraying with the various Garuda biodynamic sprays, on plant growth, rate of growth, form, leaf, root, flower and bean development. These effects related generally to the effects that are indicated by the spray names."

We have also experimented with BD based fungal controls, however we did not find much support for this outcome, as growers are content to use sulphur and copper or very inexpensive solutions such as baking soda and milk. This work has begun again in recent years, as growers have become aware of the negative effect of both Sulphur and copper. Results on grapes, apples and stone fruit look very promising.

Compost

Trials have been carried out using a prep compound product called 'Etherics 1000', on the breakdown of liquid manures, compost heaps and effluent ponds. In all cases a marked improvement in the speed and quality of the manures was recorded.

Pest Control

Our research thrust into pest control, has been centred around a small paragraph in lecture 6, of the Agriculture course. It is the paragraph where Dr Steiner talks of nematodes in Sugarbeets. Here he comments that, if the energetic environment of the pest is changed, then the pest has to die out.

We noted with our experiments into peppering, that while peppering discouraged the particular pest, it did not change the energetic environment that allowed that pest to be there in the first place, and thus a similar pest would return to fill the still existing niche. Thus the method we have developed seemed the most appropriate for long term solution to pest problems.

Successful trials have been carried out with ants, cockroaches, mice and rats, rabbits, possums, slugs and various other insect pests, along with most birds, voles, wolves, and cats.

This research field has convinced us that this method has great potential. While the effectiveness of some of these treatments last only three weeks, in some instances one application is adequate for 12 months control. (See Case Studies)

Formal Research

Since 2001 four pieces of third party replicated research, have been collected. Three research projects, were carried out by HortResearch, while the fourth was a collaborative effort by several participants. {Simon Bud (HortiCentre), Gill Bacchus MSc (Soil to Soul), Glen Atkinson, Dip Hort (GBRI), application by the growers concerned. Testing by Ag First consultants}.

Results have shown a) 'ThermoMax' provides a 50% increase in fruit set of apples following a -2C frost, b) 'BirdScare' provides a 50% decrease in the levels of high bird damage on ripe grapes, (Client Report No 11255) c) 'PhotoMax' provides a 20% increase in photosynthesis and 30% increase in stomatal conductance, (Client Report No 11255) d) 'ZeroIn provides an average of 25% increase in payout on kiwifruit from a 1.5% increase in dry matter and significant reduction in standard deviation of that dry matter. (The full trial papers are available at www.bdmax.co.nz)

These trials not only confirm the effectiveness of these particular products, but provide very solid confirmation of the general effectiveness of homeopathically potentised biodynamic preparations.

Chemistry

During the late 1990s part of our research development focused on soil science. Naturally, we had to explore the effects of the chemical elements, as outlined in the Periodic Table.

An early problem many people encounter in this study, is the need to continually translate the rectangular periodic chart and images, into a spherical image of the nucleus and electron shells. It seemed only reasonable given we are asked to imagine spherical forms for the elements, to attempt to draw the Periodic Table in a circular and then 3D spherical form. This proved to be a very interesting and fruitful journey. The results of this can be seen at www.3dpt.org

A further and more difficult problem arose, when we were confronted with the existing information on the elements effect, and our need to see everything in the light of their energetic activity. While there was some comment on these energetic effects in the Steiner medical literature, many of these indications are contradictory, amongst the various authors. Also, it is only possible to get suggestions for around 20 of the elements, while on the Periodic chart there is some 120.

This need for a energetic interpretation of all the Periodic Table was able to be addressed, by following the 'patterning' processes first identified in "Biodynamics Decoded". The outcome of this study has been made available in our book "Biodynamic Chemistry". Again free on our Garuda website. Research into the practical application of this information has been ongoing, with early trials providing convincing evidence that this 'translation' of the Periodic Table has much more to reveal into the future.

We are now beginning to explore how the results of this research, can be included in our products to enable them to act longer and stronger.

Funding

All of this research has been self funded, by outside employment and from direct sale of the products, arising from it. The ONLY outside funding, has come from a \$1500 grant from the Hawkes Bay Organic Pipfruit growers, to

fund the initial ThermoMax trials by HortResearch, for which we are very grateful. This trial did allow our business to grow significantly, especially with sales into the conventional horticultural industry.

Self funding however can only go so far. The cost of the formal research requirements and product registration, required by government and the individual industry boards, are such, that the exploitation of this technology is severely hampered. Simply by the hurdles one has to jump to be able to sell products to very willing growers. We are in no doubt far more could be achieved with an appropriate level of financing.

I trust, this overview of our research, can stimulate further interest in this exciting field of Biodynamic endeavour.