



What is Biological Agriculture?

Biological farming is a 'best of both worlds' mix between conventional and organic farming practices, involving careful monitoring of crops and soils to ensure production is of high quality.

The dual goals and indicators of success are steadily increasing soil humus and product nutrient density levels. The approach emphasizes application of calcium and amendments that feed soil microbes along with practices that reduce nitrogen and pesticide usage.

How?

By combining an understanding of soil chemistry, physics, biology, and microbiology with sound farm management practices, we address and solve weed, disease, and insect problems at their root causes rather than masking the symptoms with pesticides. The result is maximised yield, quality, food nutrition, and profit potentials.

The basis of the approach is re-establishing mineral balance through calcium availability and microbial strengthening. There is a focus on soil monitoring of plant available nutrient levels and tissue brix readings. The process uses small, frequent applications of fine lime, RPR, foods for the biology such as humic acid and molasses, trace minerals, and water-soluble technical fertilisers all applied with carbon sources, such as humate powder.

What happens?

This results in a diversification and strengthening of the soil foodweb, a deepening of the carbon profile and a consistent level of energy release for plant growth. Optimum crop residue management and green manure cropping is a key aspect of the programme. The aim is to achieve continuous plant brix levels in excess of 12, which tends to eliminate insect and disease susceptibility and ensure higher vitamin and mineral content in the plant.

On-farm implementation of the science underpinning biological agriculture promotes rapid humus formation and carbon sequestration with reduction of leachate and erosion. The longer term production results are high yields of nutrient dense, pesticide-free products for a market clamouring for quality food.

Through biological agriculture, New Zealand has a tremendous opportunity to capitalise on our market differentiation while providing real solutions to climate change, environmental challenges and our relationship to the land. This is a comprehensive natural science approach that answers the issues vexing our environment and economy.

Implementation in NZ is around 60,000 hectares with dramatic results in dairy production and cropping. Please see the accompanying uptake document for more details or ring me.

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