

A unique soil extract for healthier crops, animals

Andrew Geddes, director of AlgJem Global Trading, explained to **Glennis Kriel** how L'équilibre de la Nature's unique range of products, made from soil extracts, can restore the natural balance in soil and livestock.

How did L'équilibre de la Nature originate?

L'équilibre de la Nature products are manufactured for AlgJem Global Trading in Atlantis in the Western Cape. Manufacturing started in 2002, but South Africa was not quite ready for these products back then, as awareness of environmentally responsible production, nutrient-dense foods, and the prevention of antimicrobial resistance was not as great as today.

After struggling to enter the local market, the company focused on exports. Today, 95% of its production is exported to 48 countries under various brand names.

What was the catalyst to develop the product?

The product developer, whilst involved in a hydro-energy project in Congo-Brazzaville back in 1996, was seeking a method to decompose tree stumps in the flood basin of the Congo River. His research led him to Bologna University in Italy.

Thirty years before, the university had appointed a team of scientists to establish how the switch to chemical fertilisers would affect agricultural production in the long run, and to look at ways to buffer this impact. They predicted that chemical fertiliser would destroy the biological balance and structure of the soil, and that farmers would have to use more and more fertiliser to get the same results as in the past.

They then researched various ways to counter this effect, with one study looking at the development of a combination of bacteria to produce humus. Humus-forming organisms help to accelerate the decomposing process, which particularly interested the developer. He was so impressed that he bought the intellectual property rights to this solution and underwent extensive training on its production and preservation.

What are the unique properties of the product?

It is an extract consisting of micro-organisms, including fungi, bacteria and enzymes, found in the soil. Of the 36 000 groups of bacteria found in the soil, the 42 groups that are responsible for making humus are extracted.

How is the solution produced?

The extracts are derived from virgin soil in the African savannah. (This is preferred to forest soil as the latter is too diverse.)

A 'soft' extraction method that doesn't disturb the soil is used, and nature replaces the extracted organisms within hours.

Thereafter, the organisms are sequenced, placed in a dormant state in molasses, which acts as a suspension carrier, and bottled. The organisms are reactivated once they come into contact with water. The extract has a shelf life of five years.

Is it a high strain of pre- or probiotics?

No, probiotics usually contain only a few strains of bacteria, while a prebiotic provides food for probiotics. Our solution contains a wider variety of soil bacteria as well as other organisms.

What are the product's applications?

We have a range of products under the L'équilibre de la Nature label that can be used for human, animal, and plant health. We even have products that can be used for rehabilitation of areas affected by coal mining, industry and sewage.

And what are the results?

Unlike medicines that offers blanket treatments for specific problems, L'équilibre de la Nature helps to restore the biological balance within the organism and thereby improve its resilience or immunity.

As a result, you don't have to do any tests to identify deficiencies; you merely apply the solution and it will respond as required. The organisms within the solution 'know' what to do based on the environment in which they find themselves – the way Mother Nature 'knows' how to heal herself.

It sounds too good to be true.

Don't get me wrong, it's no wonder cure. It doesn't work for everything, but it can result in great improvements in production and animal health.

Can you give an example of how it might benefit crops?

By balancing the soil, the solution helps to unlock nutrients that might have been unavailable and creates a healthier root zone. This in turn could help to reduce the volume of pesticide, fungicide and fertiliser required for a crop.

Our products have been subjected to trials and studies in various countries. One such study by Technova Technology Centre in Spain found that cucumber grown in soil treated with the solution required 30% less fertiliser than the untreated control.

Tests also showed that fruit and vegetables grown with the help of the solution were far more nutrient-dense.

Along with this, physical differences have emerged. Seed-producing plants, such as cucumber and tomatoes, had fewer seeds when planted in soil treated with the solution. We think this is because the plants are 'happier' and therefore [direct less energy into reproduction].

In the Spanish study, the tomatoes in the treatment also had three instead of four bulk heads. We think this is because the bulk heads of the treated plants are stronger.

What about livestock applications?

Intensive pig and poultry producers who use L'équilibre de la Nature's solution have no need to use antibiotics as growth stimulants. The product also helps to stimulate an animal's gut, reducing the incidence of diarrhoea.

What has most impressed farmers is that the solution helps to treat and eradicate cryptosporidiosis ('crypto'), a protozoal disease that causes severe diarrhoea. Sheep and dairy farmers who were on the brink of closing their businesses because of high crypto mortalities no longer suffer any losses, thanks to the use of L'équilibre de la Nature.

The solution also works wonders for hoof rot and some forms of blindness.

The manufacturer donates product to animal rescue organisations, which has allowed these organisations to treat really serious injuries.

How can farmers use the solution to curb crypto losses?

They can use it preventatively by adding it to the bedding of newborn animals, such as lambs and calves, or curatively by mixing the extract with water and then administering it with a syringe into the mouth of the affected animal.

Is it effective where bacterial resistance has developed?

Yes, because it's not an antibiotic. It works by restoring the natural biological balance within organisms. The manufacturer relates how a personal friend of his, a doctor, had a stubborn bacterial infection in his elbow after an operation. No medical treatments helped and it looked as if the arm would have to be amputated. The manufacturer advised him to apply the product, refined for human usage, on his arm, and the infection cleared completely after only two weeks.



What about the safety of the product?

The product has been tested and certified for export to various countries and is approved for agricultural use under Section 23 of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (No. 36 of 1947).

Being a natural product, it's bee-friendly and doesn't harm the environment, even if you apply more than the recommended dosage.

How do the extracts for humans, animals and plants differ?

They're formulated differently. The product for human consumption, for instance, is far more refined and purer than the one for soil applications.

What is your aim in the medium term?

We'd like to get every retail outlet in South Africa that supplies basic food needs to carry products depicting our L'équilibre 'Nature's Balance' accreditation logo.

We aim to take the product up into Africa over the next three to five years to help farmers become more self-sufficient and less dependent on food and chemical imports.

We also plan to grow our product footprint locally, as more exporters look for environmentally friendly solutions in response to Europe's Green Deal, which requires farmers to move away from chemical fertilisers.

Do you think organic production is the future?

Absolutely. But we won't be able to move away from the use of chemical pesticides and fertiliser completely if we want to feed the growing population. Solutions like ours, however, can help to reduce farmers' reliance on chemical inputs and by doing so improve their financial sustainability.

Email Andrew Geddes at andrew@algjem-global.com, or John Mann at john@algjem-global.com. **FW**

ABOVE:
John Mann (left) and Andrew Geddes, directors of AlgJem Global Trading.
GLENNEIS KRIEL