MAJOR CROPS

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In this document, major crops imply Corn, Maize, Barley, Sorghum and the likes. Often the prices of these crops are set nationally or internationally, therefore limiting the budget for fertilization. In some cases, a crop with superior protein content or a better Brix count does not increase the sales price for the farmer.

There is serious consideration in terms of possible crop failure due to disease or the yield increase where balanced soil makes a difference. As for rain, no one can do much about it. The exception is when a plant has a thick feeder roots system; it retains nutrients and fertilizer rather than loose it right through the roots when it rains.

ERGOFITO:

The benefit of Ergofito is that it stimulates microbial activity allowing beneficial micro-organisms to occupy spaces in the rhizosphere allowing plants to grow to their full potential See the document “Ergofito Benefits” for a more in depth explanation.

Plants respond positively when exudates are eliminated from roots and mineralized humus (due to prolonged use of chemical fertilizers) is converted back to active humus.

Fig.1

A maize plant root system fully fertilized. The anchor roots are strong, but the feeder roots are minimal.

Fig. 2

Fig.2 shows a maize plant, which was planted 10 meters away from the first plant in Fig. 1. The field was fully fertilized but Ergofito was added in this area.

The Anchor roots are similar, but the feeder roots have increased by 500%, demonstrating the power of a balanced rhizosphere. **This plant yielded 25% more produce weight.**

ERGOFITO APPLICATION:

Shortly after harvest, apply Ergostart Bio. This will decompose any organic matter left behind in the field, as well as initiate and strengthen bacterial activity. Normal fertilization can be reduced by 25-30% when Ergofito is applied.

Apply after harvest:

Following the application of the Ergostart Bio, wait 15 days before seeding or transplanting. The above is applied with sufficient water, generally diluted 1:50, (1Kg of product to 50 litres of water). Ergostart Bio will immediately start decomposing all inert organic matter into plant food. More importantly it will de-mineralize any accumulation in the rhizosphere that has suffocated the soil. It will start by converting all of the above into humus, rejuvenating tired soils and allowing normal and healthy root development.

If the budget allows for further beneficial applications it is recommended

Bio Agent	Quantity	Area
ERGOSTART BIO	125 Kg	Per Hectare

Whilst Ergofito Biostart is available. Our new Product, Ergo Plus is able to achieve the same results with much less product (lessens transport costs)

PRODUCT	HOW MUCH	WHEN
ERGO PLUS	10 KG per HECTARE	ANYTIME- with major crops, preferably straight after the harvest.

Second application:

Apply	When	Quantity
Ergofito Universal Plus	When Plant is 30cm High	15Kg per Hectare

Please note the second application is usually done when the last of the fertilization is applied.

Apply the above to the soil; mix Ergofito Universal with water at a minimum ratio of 1:200. (1Kg Universal Plus to 200L Water).

As Ergofito increases the abundance and size of the leaves it directly stimulates the production of chlorophyll, which in turn builds up the number of chloroplasts while increasing their efficiency. With a greater surface area exposed to sunlight more energy is captured.

This energy is utilized more effectively now because the principle nutrients are available and assimilable and the chlorophyll has its chloroplasts working at maximum efficiency. In these conditions crops can grow stronger in all aspects, in particular:

- Cells are larger.
- Cuticles are thicker and stronger and so less vulnerable to disease and phytophagous (insect) attacks.
- Lymphatic vessels get bigger letting the lymph circulate easier therefore consuming less energy.
- Plant fibres expand in size due to the increased levels of sugars, cellulose fibres, lignin, vitamins, mineral salts, organic acids, etc.
- Plants do not possess a ‘means of transport; they cannot run away from areas where they experience fungal infections and insect attacks. They have their

own incredibly robust, evolved and bio-engineered defence systems. Unifying the best properties in active and passive defences they:

- Strengthen their membranes, which makes them resistant to damage from cryptogamous (plant like organism) attacks.
- Produce antibodies, bactericides
- Manufacture combinations of repellent, noxious and toxic substances for fighting phytophagous elements.

Regular use of ERGOFITO creates the conditions where plants can grow and produce to the best of their potential.