

Restoring Soil with Nature



WHAT IS DEGRADED SOIL:

Soil degradation is when soil deteriorates because of human activity and loses its quality and productivity. It happens when soil loses its nutrients, or its organic matter. It also happens when the soil structure breaks down, or if the soil becomes toxic from pollution. Simply, it is the breakdown of soil particles. When the humus level falls below 1%, the beneficial micro-organisms can no longer survive and disappear totally. At the point plant growth is severely compromised.

The situation mentioned above can be reversed; the degraded soil can become productive again. Often the main culprit of soil degradation is the inconsiderate and prolonged use of chemical products, weed killers, fungicides and insecticides over a long period of time.

SOIL CHECKS:

- pH. of the soil
- Soil characteristic (sandy, clay, stony, calcareous etc.)
- Rain fall in the area in mm per year

- Rainy season (which months)
- Agricultural practiced in that area
- History on usage and topology of fertilizers (urea, phosphates, nitrates, sulphates etc.) as well as the usage and types of pesticides (quantity per year)

LOSS OF FERTILITY IN SOIL AND LOSS OF AGRICULTURAL PRODUCTS:

- The radical exudates intoxicate the soil (if there is lack of microbial activity in the rhizosphere) until it becomes unproductive.
- The applied fertilizers are lost due to leaching and then pollute water tables, lakes and streams. Or become insoluble therefore not beneficial.
- The agriculture produced in the field remains un-composted which then help in the propagation of plant sicknesses.
- Necessity to increase the usage and dosage of pesticides and chemicals to resolve ever increasing insects and plant health problems.
- Agricultural produce yields are reduced yearly and the shelf life is drastically reduced.



RESTORING DEGRADED SOIL WITH ERGOFITO:

First step to remediation: apply ground preparation Ergostart Bio

- Spread organic matter (leaves, grass cutting etc.) on the degraded area.
- Add all missing trace elements to the area
- Balance the pH. if necessary
- Apply 250 to 500 Kg of Ergostart Bio ground preparation per hectare, diluted with water at 1:100 (1Kg product to 100Litres water)
- Wait three days and if possible disk the above 100 mm deep into the soil

www.advalli.com

Please direct any queries to: cheyne@advalli.com/ [+27 82 678 0070](tel:+27826780070)



The above intervention will decompose and convert all the above added organic matter as well as all exudates and mineralized toxic substances into plant food.

The Ergostart Bio's fulvic acid reaction will facilitate root development.

It will repopulate the Rhizosphere and restart the natural humus production.

Second step to remediation: apply Ergofito Universal Plus:

- Apply 24 Kg of Ergofito Universal Plus per hectare, diluted with water at a ratio of 1:200 (1Kg product to 200Litres water)
- This application takes place 30 days after the ground preparation application.
- Planting or seeding can now take place.
- Repeat step 2 with the same quantity (24 kg) three months later if possible.

All of the above products can be applied via the existing irrigation system.

Conclusion:

Levels of organic matter must be kept in the ground. This is generally achieved by allowing all organic matter to remain in the field during harvesting. It can also be added in the form of straw or hay.

Each time organic matter is added to the soil, it is recommended that 125 Kg Ergostart Bio per hectare be applied.

These are guidelines and variants will be applied according to the soils requirements.