

# RENERGI AGRICULTURAL BIOCHAR

*“A Swiss Army Knife for Soil Health”*

**Renergi's Agricultural Biochar is a natural, organic-based and high carbon soil amendment that will supercharge your soil.**

Academic expertise and years of R&D have created a specially formulated 'fine particle' biochar that achieves an optimum surface area and porosity for enhancing microbial life while holding and releasing moisture and nutrients, leading to healthier 'living soil' and crop yields.



### Available Formats:

4 Litre Pail | 15 Litre Pail |  
750 Litre Bulkabag



### Enhances Moisture Retention

Able to hold 2-3x its weight, it drastically improves water holding capacity



### Improves Soil Fertility

Enhances nutrient density and plant availability



### Regulates Soil pH

Depending on application, biochar acts as a liming agent, reducing soil acidity & improving conditions for plant growth.



### Boosts Soil Microbiota

Biochar supports beneficial soil microorganisms, which play a crucial role in nutrient cycling & plant health.



### Reduces Fertiliser Requirements

Biochar's high surface area & porous structure reduces nutrient runoff & the overall need for fertiliser application.



### Mitigates Soil Pollution

Helps reduce the bioavailability of heavy metals & other pollutants in the soil.



### Carbon Sequestration

Biochar removes excess atmospheric CO<sub>2</sub> by adding stable pure carbon to the soil for 1000's of years



### Reduces Greenhouse Gas Emissions

Biochar application decreases the emissions of nitrous oxide (N<sub>2</sub>O) & methane (CH<sub>4</sub>) from soils.

## What is Biochar? The ultimate soil amendment!

Biochar is a very high carbon material produced from the pyrolysis (high heat and low/no oxygen) of a biomass feedstock, safely and stably trapping (and sequestering) the carbon contained in the feedstock for millennia. Good agricultural biochar is produced at 'lower range' pyrolysis temperatures of between 350 to 450 degrees Celsius to maintain beneficial oxygen-containing functional groups, pore sizes hospitable to beneficial microbial life, and porosity that provides an optimal balance between holding and releasing moisture and nutrients.



### The Renergi Difference

Renergi's ground-breaking patented 'grinding pyrolysis' technology produces a superior micron-sized particle sizes strikingly similar to natural biochar like that found in the famous Amazonian 'Terra Preta' soils, while ensuring each feedstock particle experiences the same temperatures regardless of size.

Only highly consistent and stable agricultural and forestry waste residue feedstocks are used to ensure a biochar that is soil safe, highly effective, robust, and a highly sustainable form of carbon sequestration in the soil for millennia.



### Application

Renergi's biochar can be used in a diverse number of ways: it is ideal whether using on small applications, such as the household garden, or for large-scale commercial operations where it is ready-made to be suitable for a wide range of agriculture applicators with no to minimal additional steps. It can be 'pre-activated' with customised nutrient needs upon request. A general rule of thumb for the application amount is 10% or soil volume

- It can be applied directly in soil, mixed into compost, or, with time, converted to a slurry or liquid.
- It is highly recommended to 'pre-activate' (also referred as 'quenching' or 'charging') the biochar with a liquid nutrient of your choice prior to application (such as wood vinegar, other biologicals, or conventional liquid fertilisers).