# **BIOCHAR FOR TREES AND SHRUBS**



# Biochar for Trees & Shrubs

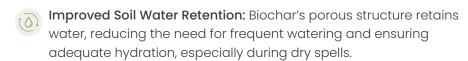
Biochar is a carbon-rich material produced through pyrolysis, a process that thermally decomposes organic matter. Characterised by its high porosity and surface area, biochar is effective in improving soil health by enhancing water retention, nutrient preservation, and microbial activity. Biochar can be used as soil amendment for a range of plants, including established trees and shrubs, flowering and vegetable plants, seedlings and so on. This factsheet will go into detail about how biochar is an excellent soil amendment for trees and shrubs, providing numerous benefits for their growth and overall health.

Parameter	Unit	Green-waste Derived Biochar
рН	_	8.00±0.04
CEC	cmol/kg	29±0.13
BET Surface Area	m2/g	5.00±0.07
Pore volume	cc/g	0.003

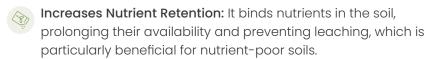
## Properties and Benefits for Trees and Shrubs



**Supports Microbial Life:** Biochar creates a conducive environment for soil microbes, enhancing nutrient cycling and uptake.







## Glossary

Soil Structure: Refers to the arrangement of soil particles and the pore spaces between them. Good soil structure is important for root growth, water movement, and air circulation within the soil.

#### **Nutrient Retention:**

The ability of soil to retain nutrients and prevent them from leaching away with water. Higher nutrient retention means that plants have more prolonged access to essential nutrients.

#### **Microbial Life:**

Microorganisms living in the soil, including bacteria, fungi, and protozoa. These organisms are key to nutrient cycling, breaking down organic matter, and improving soil health and fertility.

**Aeration:** The process of introducing air into the soil, which is crucial for healthy root growth. Aeration improves the soil's oxygen supply, necessary for root respiration and overall plant health.

# **BIOCHAR FOR TREES AND SHRUBS**



## **Our Products**

Onnu presents a specialised range of biochar soil amendments, meticulously designed to enhance the growth and health of trees and shrubs. Our products, rich in nutrients and carbon, are tailored for robust and sustainable plant growth. **These include:** 

#### Soil Improver for Trees 95% Biochar,

Seaweed Extract, Wormcast and Mycorrhizal Fungi for micronutrients and improved soil structure

## Fertiliser Mix for Trees

Biochar and NPK (16-12-12) Fertiliser Blend for added nutrients and improved resistance to environmental stressors

### Soil Mix for Trees Soil (80%), Biochar (10%) and

Biochar (10%) and Compost (10%) Blend. Ideal for root-balled or air pot trees

### rees



Elad et al, 2011



Palviainen et al, 2020

References:



Scharenbroch et al, 2013



Royal Horticultural Society









Compost Mix

for Trees

Biochar

and Compost

Blend for added organic nutrients

and improved

soil conditioning

## **Application Rates**

Application rates for our biochar soil amendments vary based on factors like the environment, soil conditions, and plant type. For precise application guidelines tailored to your specific needs, please visit our website at <a href="https://www.onnubiochar.com">www.onnubiochar.com</a> and refer to the detailed information on each product.

## Frequency of Application

Biochar is stable and persists in the soil for several years. Its benefits accrue over time, so frequent reapplication is not necessary. In general, apply every 2 years for optimum results, followed by a soil assessment for more tailored application rates.

### Find more at:

www.onnubiochar.com