

Help your soil breathe, retain moisture, and thrive – naturally

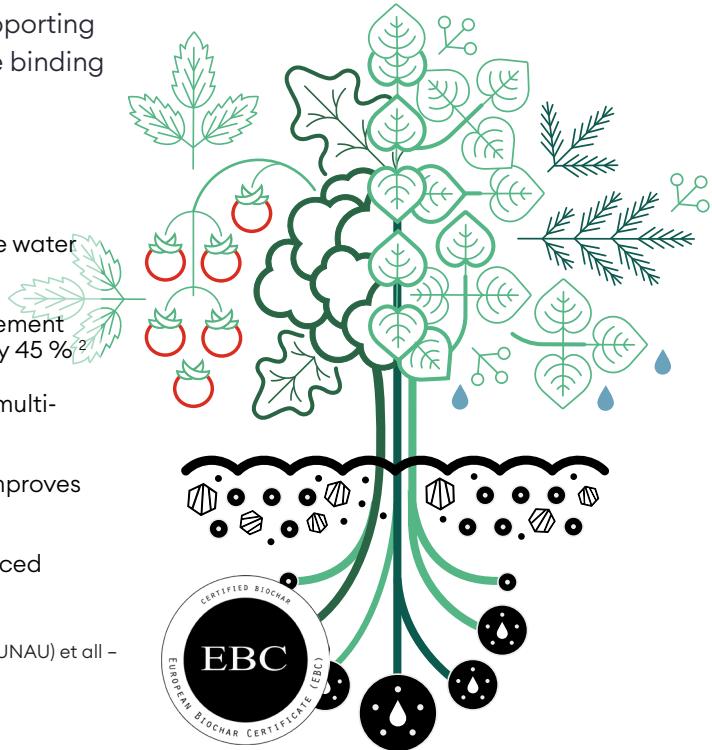
WoodChar Classic is a high-performance biochar made from upcycled wood residues and designed to improve water retention, soil porosity, and microbial life in compacted substrate systems.

It is a sustainable alternative to vermiculite and perlite, supporting healthier root zones and more resilient plant growth – while binding up to 2.3 t of CO₂ per ton biochar.

Your benefits:

- ✓ **Higher water storage capacity:** 5 % of biochar can improve water availability in sandy agricultural soils by up to 170 %¹
- ✓ **More resilient plants and better growth:** significant improvement of height by 30 %, fresh weight of shoot by 35 % and root by 45 %²
- ✓ **Increase in microbial activity and biodiversity:** Ecosystem multi-functionality is significantly increased by 18.7 %–30.1 %³
- ✓ **Less usage of fertilizer:** combining biochar with compost improves soil fertility and reduces chemical fertilizers⁴
- ✓ **Reduction of nitrate leaching:** 10-20 % biochar in soils reduced NO₃ concentration and lower nitrogen leaching to 50 %⁵

¹ Khan N. (JICA) et all – 2022; ² Murtaza G. (IUB) et all – 2024; ³ Ndede O.E. (HUNAU) et all – 2023; ⁴ Wang Hu (WUR) et all – 2023; ⁵ Dorais M. (LAVAL) et all – 2014



WoodChar Classic's specifications compared to other soil additives

Soil Additive	WoodChar Classic	Vermiculite	Perlite	Pumice
Particle Size	< 40 mm	0 - 8 mm	0 - 6mm	0 - 20 mm
WHC*	High	High	Medium	Medium
EC** (mS/cm)	1.1	< 0.2	0.007 < 0.001 (GGS)	0.096
CEC***	Increases continuously to very high	Very high	Low	Low
Bulk Density (g/cm ³ , db)	0.34	0.07 - 0.1	0.032 - 0.4	0.3 - 0.6
CO ₂ Storage Potential	Yes	No	No	No

*WHC = Water Holding Capacity; **EC = Electricity Conductivity ***CEC = Cation Exchange Capacity

Success Case: Stockholm City Trees

The Street Department of Stockholm has rebuilt 2,000 planting beds for trees throughout the city. This project used a rock-based growing substrate with our biochar for the base, which is beneficial for both the resilience of the trees and stormwater management.



Request your free product sample today!

Any questions?
We are happy to help!

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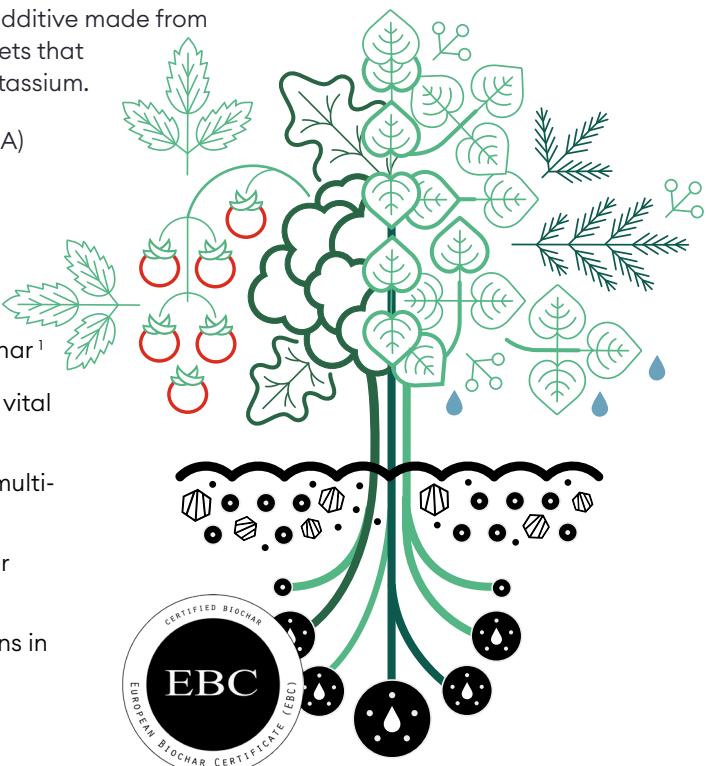


Ready-to-use substrate enhancement for aerated soils and higher nutrient efficiency

Our NutriChar Pellets support plant vitality, water retention, and long-term soil health.

The nutrient-enriched biochar pellets are a high-performing soil additive made from biogas digestate through pyrolysis. Our innovation: NutriChar Pellets that are dust-reduced, easy to apply, and contain phosphorus and potassium.

Replace conventional additives such as light expanded clay (LECA) with a climate-positive, future-ready solution.



Your benefits:

- ✓ **Higher water storage:** in sandy soil the water content was increased from approx. 14 % to 19 % when adding 4 % biochar¹
- ✓ **Less usage of fertilizer:** our biochar is already charged with vital nutrients like potassium and phosphorus
- ✓ **Increase in microbial activity and biodiversity:** Ecosystem multi-functionality is significantly increased
- ✓ **Reduction of nitrate leaching:** thanks to its porosity, biochar pellets in soils lower nitrogen leaching¹
- ✓ **Ensured durability:** 92 % of the carbon in the biochar remains in the soil for 100 years and longer²

¹ University of Copenhagen; ² Schmidt et al., 2022

NutriChar Pellets' specifications compared to other soil additives

Soil Additive	NutriChar Pellets	LECA	Pumice	Perlite
Particle Size	6 - 8 mm (diameter) 5 - 15 mm (length)	2 - 30 mm	0 - 20 mm	0 - 6mm
WHC*	Medium	Medium	Medium	Medium
EC** (mS/cm)	28	< 0.1	0.096	0.007, < 0.001 (GGS)
CEC***	Increases continuously to very high	Low	Low	Low
Bulk Density (g/cm ³ , db)	0.587	0.3 - 0.5	0.3 - 0.6	0.032 - 0.4
Nutrient Content	High in carbon, 1% N, 1% P, 3,5% K, minerals	Not significant	Not significant	Not significant
CO ₂ Storage Potential	Yes	No	No	No

*WHC = Water Holding Capacity; **EC = Electricity Conductivity; ***CEC = Cation Exchange Capacity

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