



GREEN MAN CHAR

Sustainably produced Charcoal and Biochar Products

BIOCHAR FOR SOIL IMPROVEMENT

The production of biochar turns organic biomass into a useful soil amendment product. This is not a new technology, or indeed a new idea. Charcoal production has been practised by civilisations for thousands of years and the current interest in Biochar was in part sparked by the discovery of terra preta soils in South America.



The soils in these regions were known to be poor and lacking many vital plant nutrients. However small patches of darker, very fertile earth were found and these areas were shown to have charcoal incorporated into the soil which has been stable for thousands of years. This charcoal appeared to have allowed the fertility of these traditionally poor tropical soils to increase.

Biochar from Green Man Char can significantly improve both the physical and chemical properties of your soil. The high surface area gives the biochar the ability to absorb large amounts of water, meaning biochar can increase the water holding capacity of your soil. This is especially important in many areas of Australia which are prone to drought and / or restrictions on water usage.

Biochar also improves the physical structure of your soil and can enhance the growth of beneficial soil microbes. Some studies have even shown that it can enhance the abundance of symbiotic fungi called ectomycorrhizae. These fungi are found in soil and help plants access phosphate from the surrounding soil in return for sugars and other key nutrients provided by the plant.

The high surface area of the char also provides a large surface covered in charges. These charges allow many nutrients in the soil to bind with the char. This means that the addition of biochar to soil can help prevent the leaching of nutrients and reduce the need for costly fertiliser application.

All the above factors lead to soils that can enhance plant and crop growth – perfect for all your gardening and horticultural needs. Biochar may in fact be able to act as a replacement for peat in some composts and growing media.

Whilst it provides all the above benefits, it acts as a stable form of carbon in the soil. What this means is that as plants are grown and biochar produced from these plants, carbon is taken out of the atmosphere and stored in the biochar. The biochar acts as a store of carbon in the soil, effectively removing carbon from the atmosphere and helping combat anthropogenic carbon dioxide emissions.

Biochar therefore provides you with excellent soils, improves plant growth and helps combat rising carbon dioxide emissions in the atmosphere – a sustainable, low cost, local solution to a very global problem.

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