

**Mayan Gold®** is a black, coarse wood charcoal product, with particles less than 5mm in diameter

## *Suggested Uses:*

**Potting Mix:** 3% - 6% by volume

**Gardens:** 1 liter per square meter

**Compost Additive:** 1 cup per week

## *How to Apply:*

Add **Mayan Gold** to your soil as you would a fertilizer or potting soil additive, and then work it in as deeply as possible. You can also mix it in with your compost before adding the compost to your garden.

The best time to add biochar to the garden is in the spring before you till the soil or work up the flowerbeds.

*Over the past decade, there has been intense research about the potential benefits of biochar for carbon sequestration, since adding solid carbon to the soil is an effective way to help reduce greenhouse gas (GHG) emissions.*

## *3 Convenient Sizes*

 7.6 litre pail    40 litre bag  
 1 m<sup>3</sup> supersack



**MAYAN  
GOLD**

is being independently tested at these respected institutions:



UNIVERSITY OF  
**WATERLOO**

UNIVERSITY  
of **GUELPH**



Agriculture and  
Agri-Food Canada

For more information about biochar,  
please visit:

**The International Biochar Initiative:**  
<http://www.biochar-international.org>

**The British Biochar Foundation:**  
<http://www.britishbiocharfoundation.org>

**The UK Biochar Research Centre:**  
<https://www.biochar.ac.uk>

**The Ithaka Journal:**  
<http://www.ithaka-journal.net>

Approved for organic production /  
Approuvé pour la production biologique



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Clean, green gardening the Mayan way

**MAYAN  
GOLD**

ALL PURPOSE

**BIOCHAR  
SOIL ENHANCER**

*Your natural way to richer soil  
and better harvests*

**Retains water and nutrients closer  
to the plant roots**

**Increases beneficial soil  
bacteria**

**Improves yields**

**All-natural**

**Chemical and fertilizer free**

**Improves soils for the lifetime of  
your garden**



**Help improve your soil - Mayan Gold is especially beneficial  
for clay-heavy or sandier soils**

## What is Biochar?

Charcoal, or biochar, is a completely natural product that has been used as a medicine by adsorbing toxins for thousands of years.

Egyptians used it as an antidote to poisoning, and the ancient Hindus filtered their water with it. To this day, charcoal is the most common way of filtering water around the world.

Studies have shown that it can lead to significantly increased crop production in poor soils. Added to the garden, it gives beneficial soil bacteria a good place to live.

Biochar can also be used like baking soda to absorb humidity and unpleasant odors.

There is no end to what this natural product can do and it is all because of the physical and chemical makeup of carbon itself.

## How it's Made

**Mayan Gold** is made from ONLY high quality organic wood chips heated at high temperature in a vacuum. This drives off all the water and other elements of the wood, leaving only 100% pure biochar behind.



***"Amending soil with biochar (pyrolyzed biomass) is suggested as a globally applicable approach to address climate change and soil degradation by carbon sequestration, reducing soil-borne greenhouse-gas emissions and increasing soil nutrient retention."***

*- Hangmann N. et al (2017)<sup>1</sup>*

<sup>1</sup>Organic coating on biochar explains its nutrient retention and stimulation of soil fertility  
Nature Communications 8:1089 - <http://www.nature.com/articles/s41467-017-01123-0.pdf>

## Is it Good for the Environment?

Absolutely. Applying biochar to your soil not only is a natural amendment but an effective carbon sink.

Biochar is essentially carbon taken from plants that recently grew using carbon dioxide from the atmosphere. The process of plants taking in carbon dioxide is called photosynthesis. By creating biochar, we are essentially removing this carbon from the atmosphere and sequestering it in soil.

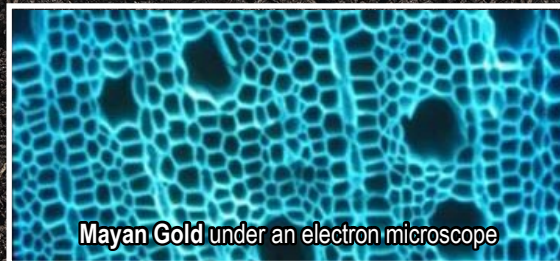
We are all responsible for the release of carbon dioxide from the combustion of fossil fuels like coal, natural gas, and crude oil<sup>2</sup>. For every kilogram of biochar we manufacture, approximately 3 kg of carbon dioxide is removed from the atmosphere.

<sup>2</sup>(Source: US Environmental Protection Agency).

The carbon in **Mayan Gold** stays in the soil permanently, benefitting generations to come.

## How it Works:

The secret to why biochar is so effective is the tiny nano-pores that make up the carbonized wood. Biochar has a structure like a honeycomb, with thousands of little holes, allowing for incredible surface area between 250 m<sup>2</sup> and 1000 m<sup>2</sup> per gram. By comparison, compost usually has only 1 m<sup>2</sup> of surface area per gram. These holes give beneficial soils bacteria a place to live, like an enormous apartment block. Once bacteria move in they can retain a permanent colony in the biochar, improving soil effectiveness over time.



**Mayan Gold** under an electron microscope

Compost and fertilizers give the garden its nutrients, but biochar gives the soil its structure. As the soil bacteria count increases, studies show a darker, richer soil develops. Biochar is not a fertilizer, and benefits do not happen overnight, but it a permanent addition to your soil's health and vitality.

