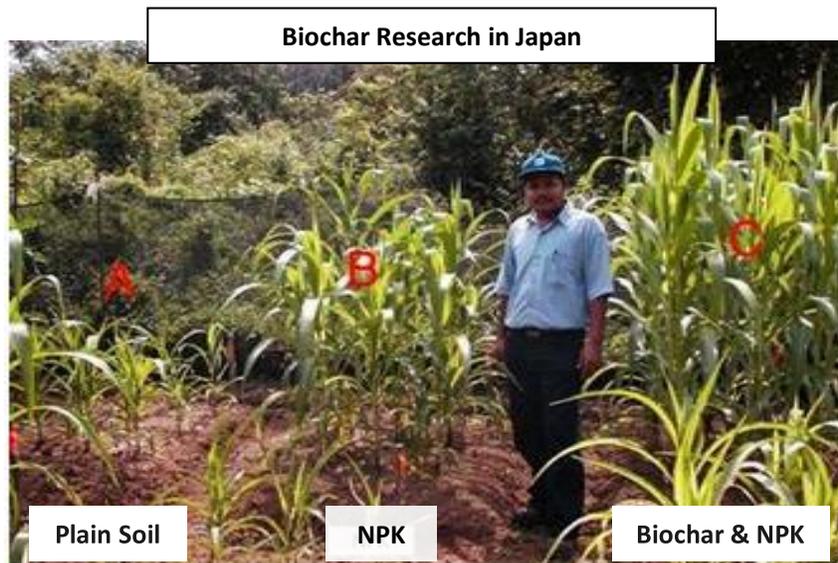


Biochar

Biochar is the carbon-rich product made when biomass, such as wood, manure or leaves, is heated with little or no available oxygen. Sustainable biochar is a powerful yet simple tool that can:

- Fight climate change
- Make soil more fertile and drought resistant
- Reduce agricultural waste
- Produce clean renewable energy
- Improve the health and yield of livestock
- Serve a multitude of other agricultural related functions.



While there is a large body of recent peer-reviewed literature describing the **crop yield benefits** of **biochar-enriched soil**, there is also evidence from thousands of years of traditional use of charcoal in soils. The best example is the fertile Terra Preta soils in Brazil, but Japan also has a long tradition of using charcoal in soil. The Brazilian and Japanese traditions together provide long-term evidence of **positive biochar impact on soils**.

In a document titled, Benefits of Biochar on Agriculture and the Environment - A Review, authors Hafiz Abdur Rehman and Rohma Razzaq made the following significant statement:

“Agricultural soil or land is usually fertilized using natural or synthesized fertilizers. Synthesized fertilizers may be effective in the beginning, but later have side-effects on the crop. Bio-fertilizers, or natural fertilizers, are mostly used, but they cannot sustain the fertility of the soil for long periods.”

This can be solved by adding charcoal to the soil. As charcoal is one of the purest forms of carbon, it helps in sequestering the carbon captured from carbon dioxide emissions. This process retains the quality of soil. It also helps the bound and clumped ions to dissociate and move freely all through the soil.

*This solution was found by some of the researchers in recent years. As we know, charcoal could be the decay of anything. Researchers have found a new method to **sustain the fertility of soil** for a long time, by using **biochar**, instead of random charcoal. **Biochar** is the **form of charcoal** that is only produced from plant organic matter. Biochar has the benefits of absorbing carbon dioxide (CO₂) from the air, and in fertilizing crops.”²*

Converting forest and agricultural waste into a powerful soil enhancer that holds carbon and makes soils more fertile, can:

- Boost food security
- Discourage deforestation
- Preserve cropland diversity

While Biochar can improve almost any soil areas with low rainfall or nutrient-poor soils, all types of soil will experience the greatest impact and benefits from the addition of biochar.

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¹ 2013 State of the Biochar Industry | A report by the International Biochar Initiative (IBI)

² Citation: Rehman HA, Razzaq R (2017) Benefits of Biochar on the Agriculture and Environment - A Review. J Environ Anal Chem 4: 207. doi:10.41722380-2391.1000207

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