From the ancient Amazonian Indians: A modern weapon against global warming

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Scientists are reporting that "biochar" -- a material that the Amazonian Indians used to enhance soil fertility centuries ago — has potential in the modern world to help slow global climate change. Mass production of biochar could capture and sock away carbon that otherwise would wind up in the atmosphere as carbon dioxide, the main greenhouse gas. Their

report appears in ACS' *Environmental Science & Technology*.

Kelli Roberts and colleagues note that biochar is charcoal produced by heating wood, grass, cornstalks or other organic matter in the absence of oxygen. The heat drives off gases that can be collected and burned to produce energy. It leaves behind charcoal rich in carbon. Amazonian Indians mixed a combination of charcoal and organic matter into the soil to improve soil fertility, a fact that got the scientists interested in studying biochar's modern potential.

The study involved a "life-cycle analysis" of biochar production, a comprehensive cradle-to-grave look at its potential in fighting global climate change and all the possible consequences of using the material. It concludes that several biochar production systems have the potential for being an economically viable way of sequestering carbon — permanently storing it — while producing renewable energy and enhancing soil fertility.

More information: "Life cycle assessment of biochar systems: Estimating the energetic, economic, and climate change potential", pubs.acs.org/doi/full/10.1021/es902266r

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