

Turning rice husks into low cost fertilizer – Part 1

The effects of climate change in Kenya are diverse in different regions. Each region is facing different challenges from water scarcity, food shortages and pollution.

Charcoal production has many devastating, ecological and environmental effects like deforestation. Deforestation is the clearance of wood and woodland. Deforestation contributes to the green house gas emission. 15 tons of rice husks are produced and either burnt or dumped which adversely affect the environment. Rice husks double the yields when used as a mender and a fertilizer.

Biochar production

Biochar is charcoal from crop waste. Collect the husk material from fellow farmers and subject the husk through limited oxygen and high temperatures of at least 300 degrees. After 2 hours you will have a substrate.

Load the materials like wood shavings into the kiln and bury the kiln with the rice husks outside. Once they have turned from yellow to black then it is ready for collection.

Grind the blackened rice husks and add nutrient then mix with the burned rice husks and pack them.

Standards for fertilizers

Quality control is crucial when it comes to fertilizers. Ensure you achieve at least 95% of carbonisation and the moisture content has to be less than 20%.

Temperatures depending on the soil can vary the final pH of the final product.

Ensure during packaging the amount of the formulae that you awarding and the weight of the biochar you are going to mix be the right amount.