

## Testing Biochar Made from Coffee Grounds for Increasing Plant Growth

While the main objective of this project - "Complete Utilization of Spent Coffee Grounds To Produce Biodiesel, Bio-Oil, and Biochar," conducted by Drs. Kishore Rajagopalan, B.K. Sharma, and Wei Zheng, was to find a way to make bio-oil for energy use from spent coffee grounds, one co-product of making bio-oil via slow pyrolysis is biochar. Instead of treating biochar as a waste from this process, the scientists investigated a way to turn the biochar into a value-added product.

The options for biochar as a resource include burning as a fuel, using for carbon sequestration, or using as a soil amendment. The researchers examined soil productivity with fertilizer only and with the addition of coffee-ground biochar and fertilizer. Their results sorghum-sundangrass in the study had a 2-fold dry-weight biomass gain when soil was enhanced with the biochar and fertilizer treatment.

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Meet the Scientists

- B.K. Sharma
- Kishore Rajagopalan
- Wei Zheng

#### Presentations

- Coffee grounds to biodiesel, bio-oil, and biochar

#### Publications

- Complete Utilization of Spent Coffee Grounds To Produce Biodiesel, Bio-Oil, and Biochar



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