Science Societies

Know your community—biochar: Agronomic and environmental uses

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Engineers and U.S. Biochar Initiative board member Kelpie Wilson (Wilson Biochar Associates) conducting a workshop with vineyard managers on making biochar from prunings.

The Biochar: Agronomic and Environmental Uses Community is celebrating its 10th anniversary this year and has seen steady membership (560 members) over that time. Our members are spread across the globe, hailing from Africa, Asia, Europe, and North

and South America. We are interfacing with other existing national and international advocacy groups to extend the impact and outlet of research findings. One example is the U.S. Biochar Initiative (USBI), which promotes the production and appropriate use of biochar through networking, education, and demonstration in North America.

Focus and Activities

Our community is focused on the agronomic and environmental impacts of biochar, particularly related to soil application. Our vice-leader (Dr. Zheng) and his team are currently conducting several biochar-relevant projects that involve scaling up an innovative bioreactor and biochar-sorption-treatment system to capture nutrients from subsurface drainage water, recycle biochars as a slow-release fertilizer, and keep nutrients in the closed agricultural loop. Some of the topics currently being addressed by community members include modification of biochar for improved physical, chemical, and biological properties; tailored biochar for increased value; how biochar application affects crop production and soil health; and removal of heavy metals, pesticides, pharmaceuticals, etc., using biochar application.

We invite you to join us at this year's Virtual Annual Meeting of ASA, CSSA, and SSSA for the sessions organized by our community. The Environmental Quality Section will be hosting a "megasymposium" on "Cross-Cutting Issues in Environmental Quality," and there will be a session on "Tailoring Biochar (including its Production and Characterization) for Agricultural and Environmental Application." In addition, there will be a poster session (Biochar: Agronomic and Environmental Uses) including a student competition. Winners of last year's poster and five-minute rapid talk student competition were: first, Lauren Selph (Tarleton State University); second, Andressa Freitas (University of Florida); and third (tie), Aneesh Chandel (University of Arkansas) and Binita Thapa (Saga University). See **https://bit.ly/3hjSj3s** for a peak at the

preliminary program.

The strength of our community is cross-divisional and cross-disciplinary collaborations with other communities and divisions with common interests. Any suggestion or comments would be valuable to make sure that our community provides a platform to discuss any research related to biochar and disseminate information properly to our audiences. Please feel free to contact us: Dr. Biswanath Dari, Community Leader (Send Message); Dr. Wei Zheng, Community Vice-Leader (Send Message); and Thomas Ducey, Community Past Leader (Send Message).

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