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September 2023

A zero-waste method for the sustainable production of textile fibers from agricultural waste

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Citation of this paper:

Batta, Neha, "A zero-waste method for the sustainable production of textile fibers from agricultural waste" (2023). *Inspiring Minds – A Digital Collection of Western's Graduate Research, Scholarship and Creative Activity.* 512.

https://ir.lib.uwo.ca/inspiringminds/512

A zero-waste method for the sustainable production of textile fibers from agricultural waste

Consider this – a vacation with your friends in Hawaii – beautiful location, wonderful food and trendy clothes. But wait, lets make these clothes out of pineapple leaves or banana stalks! No, I am not taking you back in time. This is the future of fast fashion. The current environmental cost of fast fashion is weighing heavy on the planet; the waste generated during the process of making these clothes is a bane to the environment. My work focuses on developing textile fibers from agricultural wastes. I use a combination of chemical and biochemical engineering methods to convert agri-wastes into spinnable yarn ensuring no waste is generated in the process. How? No green-washing here, I make enzyme cocktails and biochar from waste to treat more waste that gives spinnable fibers and grows plants.

So hopefully the next time you plan a vacation, trendy clothes – check; environmentally friendly – check; zero-waste - check!