As climate change threatens to eliminate land suitable for arabica production, cell-based coffee may eventually offer a solution

Scientists in Finland have shed new light on the process of making, roasting and analyzing lab-grown cellular coffee.

Researchers at the VTT Technical Research Center of Finland — a state-owned agency that partners with the private sector — first announced their production coffee-bio-stuff grown from arabica cells in a lab two years ago.

In a “proof of concept” paper published in the Journal of Agricultural and Food Chemistry [December 13], the researchers present their methods and findings in sharper detail, while further suggesting lab-grown coffee should be explored for commercial applications.

To be clear, the VTT project is focused on providing coffee bio-material for roasting and/or brewing, as opposed to plant breeding.

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Supporters of cellular agriculture typically pitch it as a more sustainable alternative to natural resource and labor intensive agricultural activities. The research team in Finland notes that climate change is eliminating the current land suitable for arabica production, despite steady or rising global demand for coffee.

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Measuring it against samples of commercially roasted non-lab coffee and traditional green coffee, the researchers found promising results through the processes of roasting and brewing, taking notes on the lab-grown coffee’s chemical composition, color and sensory attributes.

This is an excerpt. Read the original post here