

TITLE:

THE GROWTHS TRIAL OF SPINACH USING COFFEE CHAR PREPARED GROWTHS AT THE BEST CARBONIZATION TIME

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AUTHOR'S DECLARATION

" I hereby declare that this report is the resof my own work except for quotations and summaries which have been duly acknowledged."

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ABSTRACT

This report investigates about the effect of coffee char on soil amendment and focusing on carbonization of time. The coffee char also represents as soil booster in this project. Coffee char is main byproduct after do the process of pyrolysis and has been recognized as a value-added product. The direct of application of coffee char as a soil amendment is more environmental and sustainable option because it doesn't have any other chemical included. The objective of this research is to determine the effect of coffee char on soil as a booster and how the coffee char can improve the plants growth. Other than that, to outline the method that are often uses to determine the nutrients contained in different types of coffee char focusing on time which is 20 min, 40 min and 60 min and have constant temperature 500 degrees depends on Nitrogen, Carbon and Hydrogen. Moreover, to highlight the potential of coffee char as soil booster percentage of nutrients is important because it can affect the plant growth.

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