



**DEPARTMENT OF LAND MANAGEMENT  
LIST OF DISSERTATION TITLE  
SEMESTER 1 2021/2022**

NO.	TITLE
1.	Development of liquid and solid organo-mineral fertilizers from untreated palm oil mill effluent.
2.	Production of high quality soil amendments from shredded oil palm trunk enriched with clay and chicken manure
3.	Effect of TPS vermicompost on soil physical properties and morphological crop performance.
4.	Influence of Treated POME Sludge (TPS) organic composite on soft clay soil and soil physical properties enhancement.
5.	Evaluation of Soil Loss Rate and Erodibility Factor Using Rusle2 on the Durian Orchards.
6.	Evaluation of treated POME sludge (TPS) compost as an organic amendment or growing medium for vegetable growth.
7.	Survey on soil physicochemical properties of coconut farms correlated to sustainable development goal (SDG).
8.	Evaluation of organic liquid fertilizers on crop performance and soil properties.
9.	Evaluation of pathogen on rubber seedlings performance
10.	Evaluation of mycorrhizal inoculation in soilless system
11.	Impact of organic soil management on soil properties
12.	Effects of biochar application on soil properties
13.	Effectiveness of using washed rice water as liquid plant fertilizer and soil amendment
14.	Effectiveness of using various wastewater types as liquid plant fertilizer and soil amendment
15.	Can we recycle spent/used tea leaves and coffee beans as plant fertilizer? Is it true that they are bad for crop growth?
16.	Soil water properties under oil palm trees growing on different soil textures
17.	How soil texture affects soil evaporation and leaching
18.	Using satellite weather for crop growth and yield prediction
19.	Soil hydraulic properties affected by native vegetation and cash crop management
20.	Effect of rubber seedlings growth on selected soil water contents
21.	Impact of changes in forest land use on soil fertility status
22.	Soil hydraulic properties measurement on different BRIS soil series in Kuantan
23.	Soil fertility index (SFI) study from selected vegetable farm for sustainable farming system.

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NO.	TITLE
24.	Soil salinity effect on vegetable growth, yield and cost-benefit ratio study under urban farming condition.
25.	Soil aluminum toxicity alleviation through calcium silicate application from selected acidic soil.
26.	Kieserite fertilizer study on leaching and residual effect on sandy clay soil from Brownfield areas.
27.	Stevia growth development and quality on sandy clay soil with organic soil amendments.
28.	Ecotoxicological Effects of Insecticides in Plants Assessed by Germination
29.	Phytotoxicity of nanoparticles to seed germination of plants
30.	Isolation and characterization of plant growth-promoting rhizobacteria (PGPR) and their effect on crop
31.	Effect of different rates of zinc on growth and suppression of root disease <i>Rigidoporus microporus</i> and nutrient uptake on rubber seedlings.
32.	Effect of <i>Pseudomonas aeruginosa</i> strain AGKT1 on growth and suppression of root disease <i>Rigidoporus microporus</i> and nutrient uptake on rubber seedlings.
33.	Effect of different rates of magnesium and zinc on growth and suppression of root disease <i>Rigidoporus microporus</i> and nutrient uptake on rubber seedlings.
34.	Effect of Potassium fertilization on physicochemical properties of soil derived from Marine Alluvium and Riverine Alluvium planted with rice.
35.	Effect of adding biochar with wood vinegar on the soil quality
36.	Effect of adding biochar with wood vinegar on the growth of spinach
37.	Effect of using wood vinegar as a stimulant for seed germination
38.	Pelletizing wood vinegar and biochar for ease of soil application.
39.	Development of an Arduino-based smart drip fertigation system.
40.	Development of an Arduino-based smart sprinkle irrigation system.
41.	Dynamics of soil carbon and CO <sub>2</sub> emission of oil palm across growth stages.
42.	Soil CO <sub>2</sub> emissions from a rice paddy under alternate wetting-drying irrigation regime.
43.	Comparison of rice productivity under alternate wetting-drying and conventional irrigation regimes.
44.	Greenhouse gas emission from rice paddies applied with different organic amendments.
45.	Greenhouse gas emission from maize applied with different organic amendments.
46.	C <sup>13</sup> pulse labelling for understanding soil carbon dynamics of rice under different straw management techniques.
47.	C <sup>13</sup> pulse labelling for understanding soil carbon dynamics of rice applied with different organic amendments.

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NO.	TITLE
48.	Influence of different rates and texture of dolomitic lime on soil physicochemical properties and growth performance of durian seedlings at nursery stage.
49.	Nitrification potentials of Durian orchard soils and their adjacent forest soil.
50.	Effects of different N fertilizers on net soil nitrogen mineralization and nitrification: A laboratory study.
51.	Evaluation of soil physicochemical properties and crop performance on gypsum landfill covers.
52.	Foliar Fertilizer Comparison On Chili Pepper ( <i>Capsicum Annuum</i> L.) Varietal Growth And Nutrient Content.
53.	Foliar Fertilizer Comparison On Eggplant ( <i>Solanum Melongena.</i> ) Varietal Growth And Nutrient Content.
54.	Characterization of treated sewage sludge biochar and its application on nutrient use efficiency of leafy green vegetables.
55.	Characterization of treated shrimp sludge and its application on nutrient use efficiency of sweet corn
56.	Distribution patterns of potentially toxic elements in surface soils at an urban area
57.	Assessment of heavy metals pollution and human risk in urban soils around manufacturing facilities
58.	Soil quality assessment under different forest/plantation types.
59.	Effects of different amendments on solubility of different source of fertilizers
60.	Selection of the best ratios/formulations of different fertilizers with amendments and impacts on nutrient release.
61.	Magnesium rich synthetic gypsum as an alternative to GML as liming material on paddy field.
62.	Effects of different amendments with red gypsum on physico-chemical properties of red gypsum.
63.	Nutrients release trend from different source of fertilizers on different soil types.
64.	Effects of polyhalite on physico-chemical properties of soil and growth of rubber.
65.	Immobilization of heavy metals in soils using biochars.
66.	Designer biochar to improve soil fertility.