

**JABATAN TEKNOLOGI PERTANIAN
FAKULTI PERTANIAN**

Tajuk Projek Penyelidikan Pelajar Tahun Akhir Semester Kedua 2023/2024

Precision Agriculture

1. Remote sensing applications in rice
2. Smart farming strategies for durian
3. Spatio-temporal modeling for optimization of crop input management
4. Development Database of Pest and Disease of Durian
5. Rice's Farmers Acceptance on Using Perosak dan Penyakit Padi App
6. Drone spraying technology in rice cultivation
7. Drone spraying technology in oil palm cultivation
8. Development of the drone spraying operational system
9. IoT technology in pest and disease control and monitoring
10. Web-based GIS in knowledge information system for agriculture.
11. Site-specific weed detection using UAV and GIS application in paddy field.
12. Crop growth monitoring using UAV and GIS application.
13. Land Suitability Analysis for Rice Cultivation Based on Multi-Criteria Decision Approach through GIS.
14. Mobile apps development in agriculture application.
15. Geo-tagging application for durian plantation using UAV technology.
16. Greenhouse Micro-Climate Prediction Based on Fixed Weather Station
17. IoT Application for Smart Irrigation based on Crop Water Requirement
18. Crop growth monitoring and control using IoT application in NFT cooling system
19. Evaluation of crop water requirement estimation from on-site weather station and MET climate data for rice field
20. Evaluation of water efficiency for rice field based on precise irrigation water management
21. High temperature verification and impact on yield for rice cultivation in KADA

Agrobiotechnology

1. Characterization of functional cosmetic properties of Citrus hystrix leave
2. Antioxidant and Proximate analysis of Citrus hystrix leave
3. Optimization of antioxidant properties of Citrus hystrix leave
4. Phenotypic and genotypic characterization of wild rice diversity panel for disease resistance
5. DNA fingerprinting analysis of coconut varieties using SSR markers
6. Big data analysis using friendly user software; RapidMiner using data from Metroxylon Sagu (Sago Palm)
7. Computer Simulation for Protein Identification using Multiple Search Engines
8. Preliminary Genomic Analysis on Metroxylon Sagu (Sago Palm) Plant
9. Transcriptomic Data Mining from Public Databases for Bioinformatics Analysis
10. Usage and Analysis of High Performance Computer 10 (HPC 10): Quanta Server for Data Analysis
11. Hyperhydricity in micropropagated ornamental plants
12. Micropropagation of ornamental / herb plants
13. *In vitro* propagation and mutation induction on ornamental / herb plants
14. *In vitro* conservation of endangered and value-added plant species

Agriculture Extension

1. Factors Contributing to the Community Readiness among B40 towards Urban Farming Practices in Malaysia
2. Farmer' Knowledge, Attitude and Practices towards adoption of Smart Farming System in Malaysia
3. Youth Perceptions towards Urban Farming Practices in Malaysia
4. Farmer' readiness towards Organic Farming System among urban community in Malaysia
5. Factors influencing the involvement of Agropreneur towards Good Agriculture Practices in Malaysia
6. Socioeconomic Impact of Climate Change on Agriculture.
7. The Impact of Mobile Phone Apps in the Agricultural Practices.

8. Adoption of IoT Smart Fertigation Application among Youth.
9. Farmers' Knowledge, Attitudes and Practices (KAP) towards Adoption of Information and Communication Technology in Agriculture.
10. Effectiveness of Agricultural Extension Services in Dissemination of Information to the Farming Community.
11. Effectiveness of Information Communication Technologies in Dissemination of Agricultural Information to Smallholder Farmers.
12. Study on the influence of climate change and socio-economic factors on the livelihood of farmers in river basin.
13. Assessment of Pest management behavior among farmers.