



## Opportunity To

## Change The World via

## Agrotechnology Research

Sustainability

Research  
and  
Development

Food  
Security

UNIMAS  
Agrotechnology  
Faculty of Resource Science  
and Technology

**Food Security:** Agrotechnology research plays a crucial role in developing innovative techniques and technologies to enhance agricultural productivity. By improving crop yields and optimizing resource utilization, such as water, fertilizers, and land, agrotechnology helps to meet the growing global demand for food.

**Sustainability:** Agrotechnology research focuses on developing sustainable farming practices that minimize environmental impact. Through precision agriculture techniques, farmers can make informed decisions about when and where to apply inputs, reducing waste and environmental pollution. This research also explores alternative energy sources and water conservation methods, ensuring the efficient use of resources.

**Pest and Disease Management:** Agrotechnology research aims to combat pests, diseases, and invasive species that pose significant threats to crop health and yield. By developing integrated pest management strategies, including the use of biopesticides, natural predators, and disease-resistant crops, agrotechnologists help minimize crop losses and reduce the reliance on chemical inputs.

**Improved Farming Practices:** Agrotechnology research provides farmers with knowledge and tools to adopt best practices. This includes efficient irrigation methods, soil health management, post-harvest technologies, and precision farming techniques. By promoting sustainable and efficient farming systems, agrotechnology enhances farm profitability and livelihoods.

**Innovation and Collaboration:** Agrotechnology research fosters collaboration among scientists, researchers, farmers, and industry stakeholders. This interdisciplinary approach encourages knowledge sharing, technological advancements, and innovation in agricultural practices. By promoting open dialogue and partnerships, agrotechnology research accelerates progress and ensures the adoption of cutting-edge solutions.

# OUR EXPERTS

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## TALK TO OUR EXPERTS....



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# SOME OF AGROTECH RECENT WORKS

Articles Faculty Faculty of Resource Science and Technology Global  
Innovation News Research Sustainability

## UNIMAS Agrotechnology Researcher Advances Food Packaging Research and Technology at M. Auezov South Kazakhstan University

© MUHAMMAD REDZA MOHD RADZI © NOVEMBER 22, 2024



Interactive discussion with postgraduate students from the Department of Technology and Safety of Food Products at the Higher School of Textile and Food Engineering, M. Auezov South Kazakhstan University

Dr. Bernard Maringgot, a lecturer and researcher from the Agrotechnology Programme at the Faculty of Resource Science and Technology (FRST),

Articles Biodiversity Faculty Faculty of Resource Science and Technology  
Media Release Sustainability

## Bengkel Agrotek – Fertigasi Terung Tingkatkan Kemahiran Belia Kampung Semera

© MUHAMMAD REDZA MOHD RADZI © DECEMBER 11, 2024



Peserta – peserta Bengkel Agrotek-Fertigasi Terung yang terdiri daripada penduduk tempatan bangsawan benama urusida dan penceramah di tapak fertigasi

Kampung Semera, 30 November 2024 – Program Bengkel Agrotek – Fertigasi Terung, salah satu inisiatif di bawah Program Semera Lestari, telah berjaya dilaksanakan di Kampung Semera. Program ini, yang dianjurkan oleh Universiti Malaysia Sarawak (UNIMAS), bertujuan memperkenalkan teknologi fertigasi dalam penanaman terung kepada komuniti setempat.

Seramai 30 peserta terdiri daripada remaja dan belia berumur 18 hingga 45 tahun menyertai program ini. Mereka diberikan pendedahan teori dan praktikal mengenai sistem fertigasi, termasuk teknik penyediaan baja A&B, pemasangan sistem fertigasi, dan kaedah penanaman terung.

Selain itu, peserta turut menerima ceramah asas mengenai kelebihan teknologi ini dalam meningkatkan hasil pertanian dan pendapatan ekonomi. Pengarah program, Dr. Mohamad Hilmi, menjelaskan bahawa program ini dirancang untuk memupuk kesedaran tentang pentingnya penggunaan teknologi tinggi dalam sektor pertanian.

Articles Biodiversity Entrepreneurship Faculty  
Faculty of Resource Science and Technology Media Release Research

## Industrial Attachment Experience at SinoPlant: A Journey into Agrotech-Driven Ornamental Vegetable Breeding and Crop Innovation

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Industrial attachments are vital in bridging the gap between theoretical knowledge and practical application. Dr. Freddy's attachment at Shenzhen SinoPlant Biotech Ltd provided him with an invaluable hands-on

Articles Community Faculty of Resource Science and Technology Sustainability

## AGROTECHNOLOGY INSPIRE: WHAT DO AGROTECHNOLOGISTS DO?

© MICKY VINCENT © JANUARY 12, 2024

The Agrotechnology Programme is the latest addition to the academic offerings provided by the Faculty of Resource Science and Technology (FRST) in UNIMAS. Recently, UNIMAS Gazette had the privilege of interviewing Dr. Surisa Phornvillay, a lecturer, and Ms. Esther Hansen, a second-year student in the programme, to explore the question: What do AGROTECHNOLOGISTS do?



Students enrolled in the Agrotechnology Programme embark on a comprehensive four-year journey covering various facets of agriculture and technology. In the initial stage, they participate in a lecture-based

Articles Faculty Faculty of Resource Science and Technology Global  
Sustainability Sustainable Development Goals (SDG)

## UNIMAS Strengthens Global Collaboration in Agrotechnology at the Executive Meeting of FANRes 2024

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Dr. Walitor Dumin presented UNIMAS's expertise and collaborative opportunities during the Executive Meeting of FANRes 2024

Makassar, Indonesia – Dr. Walitor Dumin, a lecturer and researcher from the Agrotechnology Programme at the Faculty of Resource Science and Technology (FRST), played an integral role at the 9th International Conference on Food, Agriculture, and Natural Resources (FANRes 2024).

Articles

## UNIMAS Hosts Knowledge Sharing Session on Remote Pilot Certificate of Competency – Basic (RCOC-B)

© BUNGY TERRY AUGUSTINE DAVIN © APRIL 4, 2025



Dr. Anwarul and participants posing for a group photo after an engaging session on drone competency and certification, which was joined by 100 participants both online and offline.

# INSPIRASI!

# TEKNOLOGI

## BANTU TINGKATKAN HASIL PENGELUARAN PADI

**SARAWAK** tekana dengan kepelbagaian sumber maklumat teknologi dalam pertanian. Padi bukan sekadar sumber makanan tetapi juga keabadian identi budaya masyarakat setempat. Namun, cabaran yang dihadapi semasa kompleks – daripada keberuntungan kepada sistem tradisional, kekurangan tenaga buruh, perubahan iklim, hingga ke infrastruktur yang belum mampan. Dalam era kemajuan teknologi, pertanian padi di Sarawak kini berada di persimpangan antara mengkalakan warisan tradisi dengan menerima inovasi moden untuk meningkatkan produktiviti serta menjamin sekuriti makanan negeri. Adakah gabungan kaedah pertanian moden dan teknologi mampu mengubah landskap industri padi di Sarawak? Bagaimanakah petani tempatan dapat memanfaatkan kemajuan ini? Menurut Pengerusi Fakulti Sains dan Teknologi Sumber (FSTS) Universiti Malaysia Sarawak (UNIMAS), Dr. Hollana Non, pertanian padi di Sarawak "Mauzuriya lagi, salah satu cabaran utama adalah infrastruktur yang kurang mampan, termasuk jalan raya yang sempit dan tidak sesuai untuk saiz jentera berat. Selain pengangkutan, sektor fabrikasi, dengan penanaman padi bergantung kepada hujan. Tambah belaka, petani biasanya menanam padi pada Oktober, bergantung kepada musim hujan yang bermula pada November dan berakhir sekitar Februari, dengan penanaman dilakukan pada Mac. Bahkan, katanya, antara cabaran lain yang dihadapi adalah usia petani yang semakin tua dan kurang berminat untuk meneruskan aktiviti pertanian."



# JOIN US TODAY!

## BE A PART OF OUR AGROTECH STORIES.....



### Think About it

*"If Agriculture Goes Wrong, Nothing  
Else Will Have A Change To Go  
Right"*