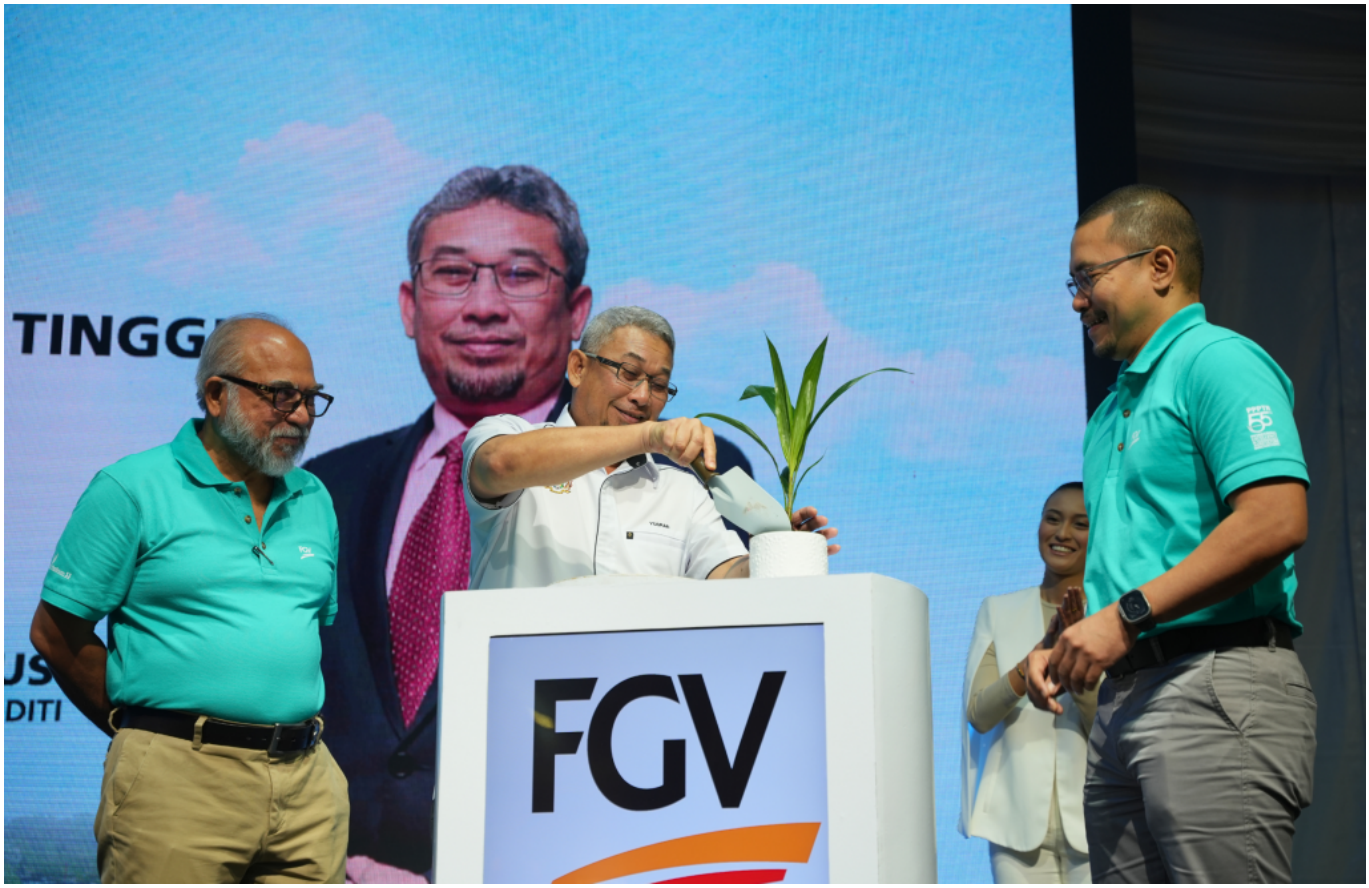
55 Years of Innovation: PPPTR Drives Sustainable Growth in Malaysian Palm Oil Industry

SERDANG, 13 JULY 2024 – Pusat Penyelidikan Pertanian Tun Razak (PPPTR), an agricultural research centre under FGV Holdings Berhad (FGV), proudly commemorates its 55th anniversary at the Festival FGV @ Hari Peneroka FELDA 2024 in Malaysia Agro Exposition Park Serdang (MAEPS).

This anniversary celebration, inaugurated by Dato' Yusran Shah Mohd Yusof, Secretary General of the Ministry of Plantation Industries and Commodities, marks over five decades of transformative contributions to Malaysia's agricultural landscape especially in the palm oil sector.



PPPTR has been a hub for oil palm field scientific discoveries and agro-product development which are equipped with laboratories, specialised equipment and workspaces for researchers with expertise in areas such as plant breeding, agronomy, chemistry and entomology.

Since its inception in 1968, PPPTR has been instrumental in Malaysia's oil palm-fuelled

growth. Established to address the need for science-driven agricultural innovation to leverage on nature's bounty to bring prosperity to the nation. Since then, FGV has produced various planting materials, making it the largest producer of oil palm seeds in Malaysia, with an annual production of 30 million seeds. Among its award-winning planting materials is the Yangambi ML161.

"PPPTR created the world's first palm tree lysimeter in 1975, which has been instrumental in propelling the palm oil industry. Our commitment to innovation remains steadfast as we continue to play a role in developing a steady supply of high-quality planting material for major oil palm plantations and smallholders. This year's celebration holds a special significance as we recognise and thank the Federal Land Development Authority (FELDA) settlers, the backbone of Malaysia's palm oil success story as smallholders," said Dato' Nazrul Mansor, Group Chief Executive Officer of FGV.

The centre's culture of collaboration with researchers and advisors at local and international level was initiated from the very start with partnerships with advisors from the World Bank. Initially focused on producing high-quality planting materials for the FELDA land development project, PPPTR quickly expanded its scope to include fertiliser analysis, agronomic studies, and crop cultivation practices, particularly in oil palm.

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Over the decades, PPPTR has developed palm oil tree breeds with agronomic traits that are now common in Malaysian plantations today such as dwarfed palm trees for easy reaping, high disease tolerance, adaptability to various environments, water and nutrient efficiency, as well as high yield performance.

Innovation and discoveries by PPPTR also extend beyond palm trees which include systems and solutions catered to the plantation industries. One notable finding is the use of black soldier fly larvae to convert palm oil mill wastes into protein-rich fertilisers.

Other eco-friendly practices introduced by PPPTR to FGV plantations include using barn owls as natural predators to control rodent populations and employing non-toxic herbicides to manage weeds. Technological innovations are also developed by PPPTR to improve plantation operations including drone and geo-tagging technology as well as advancements derived from Internet-of-Things innovations.

“Celebrating our 55th anniversary, we are proud to introduce the Yangambi Platinum S3 clonal seed, a new variant of planting material for the palm oil industry. Developed through cutting-edge breeding and tissue culture techniques, this innovative seed will further revolutionise the industry by enabling the mass propagation of elite and high yielding oil palm planting materials. This advancement has the potential to significantly boost overall productivity and oil yield per hectare compared to the conventional planting materials, aligning with Malaysia’s agricultural sustainability goals. With the implementation of this new seedling, FGV aims to achieve better oil extraction rate (OER) and fresh fruit bunch (FFB) production,” Dato’ Nazrul continued.

Dato’ Nazrul added, “We are proud of our role in Malaysia’s agricultural success story. As we celebrate this milestone, PPPTR remains steadfast in its mission to innovate, collaborate, and sustainably contribute to the nation’s agricultural sector.”

In alignment with its commitment to Environmental, Social, and Governance (ESG) principles, PPPTR integrates Good Agricultural Practices (GAP) throughout its operations. Initiatives such as biological pest control, eco-friendly cultivation methods, and adherence to certification standards like RSPO; underscore the centre’s dedication to sustainable agricultural practices and biodiversity conservation.

From left: Encik Romzi Ishak, Head of Research & Development Division, Tan Sri Rastam Mohd Isa, Chairman of FGV, Dato' Yusran Shah Mohd Yusof, Secretary General of the Ministry of Plantation Industries and Commodities , Dato' Nazrul Mansor, Group Chief Executive officer of FGV and Mr Edwin Yeoh Tiong Chin, Senior Record Consultant, Malaysia Book of Records.

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