

The project titled "Technology Transfer and Effectiveness Study of CP Organic Fertilizer, Mo Din NT 009, in Increasing Nutrient Levels and Reducing Plant Disease Pathogens in Durian, Rubber, and Oil Palm Gardens" is led by Associate Professor Dr. Warin Intana, a faculty member at the School of Agricultural Technology and Food Industry. The objective of this project is to provide farmers with access to technology for producing organic fertilizer mixed with *Trichoderma asperellum* NST-009. This organic fertilizer is designed to both nourish and promote plant growth, restore soil conditions and structure in crop fields, and reduce plant disease pathogens. By reducing the use of chemical substances, it enhances safety for both farmers and consumers, increases the value of agricultural products, and promotes sustainability in farming careers. The focus is on key economic crops in Thailand, namely durian, rubber, and oil palm. The activities will be conducted free of charge in the year 2024.

1. Walailak University, led by Associate Professor Dr. Warin Intana from the School of Agricultural Technology and Food Industry, in collaboration with scholars from the Center for Agricultural Biochemical Production and Services, organized a training activity on plant disease diagnosis principles. The target participants included farmers growing durian, rubber, and oil palm. The objective of this activity was to enable farmers to learn about various symptoms of plant abnormalities through hands-on practice. The training covered how to describe plant abnormal symptoms, identify preliminary causes of these abnormalities, collect plant disease samples for diagnostic testing, and understand basic principles of accurate symptom diagnosis. The focus was on key economic crops in Thailand, namely durian, rubber, and oil palm.



2. Associate Professor Dr. Warin Intana, a faculty member at the School of Agricultural Technology and Food Industry, Walailak University, in collaboration with scholars from the Center for Agricultural Biochemical Production and Services, organized a training activity on the management of plant diseases and pests. The target participants were farmers growing durian, rubber, and oil palm. The objective of this training was to educate farmers on integrated pest management, reduce the use of chemical substances, and increase awareness of the use of biological control products. These biological controls are safer for farmers, consumers, and the environment, ultimately contributing to more sustainable crop production.



3. Walailak University, led by Associate Professor Dr. Warin Intana from the School of Agricultural Technology and Food Industry, in collaboration with scholars from the Center for Agricultural Biochemical Production and Services, organized a training activity on the production technology of organic fertilizer mixed with *Trichoderma asperellum* NST-009. This high-efficiency fertilizer controls 31 economic plant diseases across 14 crops and pests. The target participants included farmers growing durian, rubber, and oil palm. The training aimed to educate farmers on how to mix *Trichoderma asperellum* NST-009 with organic fertilizer and the optimal application

rates for different plant growth stages. The goal was to ensure the proper quantity of *Trichoderma asperellum* as specified by the Department of Agriculture, which helps reduce plant disease pathogens in farmers' fields. This approach enhances soil fertility, improves soil structure, and increases soil aeration, allowing the soil to retain more nutrients and water. Consequently, plants receive better nutrition suitable for their growth. Additionally, the university plans to promote the production of safe agricultural products by encouraging farmers to adhere to Good Agricultural Practices (GAP). This system aims to prevent or minimize risks associated with agricultural and food products.

