

## **The current status of *Sri Lankan cassava mosaic virus* (SLCMV) in Thailand**

In 2016, cassava mosaic disease caused by *Sri Lankan cassava mosaic virus* (SLCMV) was reported in cassava plantations in Cambodia and Vietnam. Emergency action plan for SLCMV was established by the Department of Agriculture (DOA) of Thailand. In the meantime, detection surveys in line with ISPM No.6 were conducted in the endangered area of cassava plantations in six provinces (Ubon Ratchathani, Buriram, Sa Kaeo, Prachin Buri, Srisaket and Surin) adjacent to the border of Cambodia in order to monitor and prevent the introduction of the disease into Thailand. The result of this survey during 2016 - 2017 showed that SLCMV was not detected in Thailand.

Furthermore, the survey was continually conducted and in July – August 2018, 22 plants with the similar symptoms to SLCMV were found in 68 rai (2.27 ha) of the cassava plantation of Srisaket and Surin provinces. Infected plant samples were collected for SLCMV confirmation based on molecular diagnosis by using Polymerase Chain Reaction (PCR) technique. The results showed that the causal agent was CMV. The emergency action plan was implemented immediately to prevent the spreading of the disease. All cassava plants in the infected plantation areas were eradicated.

Realizing the confirmation result, DOA had extended the detection surveys to cover 51 provinces in Thailand, or around 8.9 million rai (297,661 ha) of cassava plantations. Furthermore, infected plant samples were also sent to the recognized laboratory for re-confirmation based on Next Generation Sequencing (NGS) technique. Latterly, the result confirmed that the causal agent was SLCMV.

SLCMV infected Cassava plants were further detected in 250 rai (8.36 ha) of cassava plantations of Prachin Buri province. To avoid the spreading of the disease, DOA has launched the notification on the pest control area according to the Plant Quarantine Act B.E.2507 (and its amendment) as an official control to enforce the eradication program on all cassava plants in the infected plantation areas. As a result of this strictly eradication program, SLCMV was eliminated. Following the continued surveillance program until date, the status of SLCMV in Thailand is determined as **Absence: pest eradicated**. Nevertheless, the surveillance program for SLCMV in cassava plantation areas will be continued.

The successfulness of SLCMV eradication in Thailand is complimented by immediate actions of government sectors in defeating sources of disease prior to the precise confirmation of causal agent, as well as the joint collaboration among farmers, private, local and central government sectors.