

Charin Phonmak 2015: Plant Pathogenic Fungi of Durian Seedling Production Under Nursery Conditions. Master of Science (Plant Pathology), Major Field: Plant Pathology, Department of Plant Pathology. Thesis Advisor: Associate Professor Somsiri Sangchote, Ph.D. 108 pages.

The plant pathogenic fungi population in durian seedling production in the nurseries was investigated in 3 locations of 3 districts including Muang, Leam-Singh and Khlung district in Chanthaburi province. Therefore, three growing media conditions consist of growing media before planting, 21 days growing media after planting, and 2 types of growing media before grafting (56 days after planting in Muang and Leam-Singh district and 70 days after planting in Khlung district) which they were used for fungi isolation on Rose Bengal agar and P₅ARP agar. The results show that the contamination of *Phytophthora palmivora* (cause of root rot stem rot disease), and plant pathogenic fungi of durian seedling were not presented in three growing media conditions.

Moreover, detection of fungi associated with durian seeds for rootstock production was investigated on half potato dextrose agar. The results showed that *Phytophthora palmivora* was not founded on those seeds of all nurseries. However, *Phomopsis* sp. were received.

In case of durian seedling (eg. root tip, stem, young leaf) in stock phase (21 days after planting), grafting phase (49 days after planting in Muang and Leam-Singh district, 70 days after planting in Khlung district), and after grafting phase (66 days after planting in Muang and Leam-Singh district, 100 days after planting in Khlung district) were tested for associated fungi on half potato dextrose agar. The results show that *Phytophthora palmivora* was found in root tip in stock phase of seedling from the nursery of Muang district, and after grafting phase of Muang and Leam-Singh district. In addition, *Colletotrichum* sp., *Phomopsis* sp. and *Rhizoctonia* sp. were received.

Student's signature

Thesis Advisor's signature