

**Effect of culture media, temperature, light and pH on *Corynespora cassiicola*; a fungal pathogen of leaf spot disease on *Carica papaya***

ABSTRACT

There are many factors influencing the ability of fungal pathogen pathogenicity. It is critical to understand the characters and the behavior of the pathogen on environmental factors influences in order to design suitable control methods for specific pathogen. In this study, different media, temperature, light density and pH levels were tested for their influence toward the *Corynespora cassiicola*, the causal agent for leaf spot disease of papaya. Six different media were tested in this study. Based on the result, the most suitable media for the *C. cassiicola* growth were Potato Dextrose Agar (PDA) half Strength and NA with 31.83 and 31.46 AUGC respectively. Meanwhile, Corn Meal Agar (CMA) showed the worst performance among those media tested with 24.09 AUGC value. Temperature of 30°C is the best for *C. cassiicola* growth and 12h UV 12h Light was the best combination for *C. cassiicola* spore production. Other than that, pH range level from 7 to 8 shows the best pH level for both growth and sporulation of *C. cassiicola*.

**Keyword:** Leaf spot disease; *Corynespora cassiicola*; Plant disease; *Carica papaya*; Temperature; pH; Light; Leaf spot disease; Papaya; Plant pathology

