

**ANTAGONISTIC EFFECT OF SOME NATIVE
Trichoderma ISOLATES ON ECONOMICALLY
IMPORTANT FOLIAR PATHOGENS OF RUBBER**

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ABSTRACT

Rubber foliar diseases play an important role in latex yield losses of rubber plantations in Sri Lanka. The frequent use of chemical fungicides to control causative pathogens leads to environmental pollution, hazardous to human and may lead to the development of new chemical resist pathogenic strains. *Trichoderma* species are the most widely studied bio control agent (BCAs) against many economically important plant pathogens. Hence, an attempt was made to investigate the antagonistic effect of some native *Trichoderma* strains on the plant pathogenic fungi; *Colletotrichum* spp., *Corynespora cassiicola*, *Phytophthora* spp. and *Drechslera heveae*. Foliar pathogens were isolated and identified based on the symptoms, cultural and reproductive characteristics. Five *Trichoderma* strains isolated from different rubber growing soils in Sri Lanka were tested *in vitro* for their antagonistic effects against the four foliar pathogens. The results obtained from dual culture tests showed that all the five *Trichoderma* isolates effectively checked the growth of the four foliar pathogens. The test antagonists grew faster than the pathogen limiting their growth. *Trichoderma* isolate A was the best antagonist against *Drechslera heveae*, *Corynespora cassiicola* and *Colletotrichum* spp. showing percentage inhibition of 75.63 %, 51.34 % and 74.46 % respectively. Isolate B showed the best inhibition rate (70.99 %) against *Phytophthora* spp. All antagonists showed their lowest inhibition rates against *Drechslera heveae*. In conclusion, all the tested *Trichoderma* isolates showed antagonistic effects against four foliar pathogens under investigation. Therefore, the fungal strains can be used for further greenhouse and field studies to confirm the feasibility of using for the management of rubber foliar pathogens.

Key Words: *Trichoderma* spp., *Drechslera heveae*, *Corynespora cassiicola*, *Colletotrichum* spp., *Phytophthora* spp., Bio Control Agents