DEVELOPMENT OF COMPOST AS A MEDIUM FOR *Trichoderma* spp.; THE BIOLOGICAL CONTROL AGENT AGAINST WHITE ROOT DISEASE OF RUBBER

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ABSTRACT

White Root Disease is the most destructive and wide spread root disease in rubber plantations and the causative agent is *Rigidoporus microporus*. Control of pathogens using bio control agents is an environment friendly approach. This study was conducted to develop compost as a medium for the growth of *Trichoderma* fungal isolates against *R .microporus* and to select best pH in the media for the multiplication of antagonistic fungi. Dual culture technique was used to test antagonistic effect of *Trichoderma* isolates under the investigation by evaluating the inhibition%. Compost together with rice bran and molasses were formulated into 10:4:5 ratio. Molasses in pH 3.0 and 4.0 levels were used to achieve favorable pH in the medium and a control without molasses was prepared. *Trichoderma* colonies were counted to determine the best pH in the medium for the growth of *Trichoderma* isolates. The effect of sulphur as a soil amendment in immature rubber plantations was studied. The change in the pH in soil after amendment with sulphur was recorded. Compost medium can be successfully used for the mass multiplication of *Trichoderma* spp. *in-vitro*. Adjustment of pH to 4.0 in the compost medium facilitated the growth of *Trichoderma* spp. in the medium significantly. Sulphur amendment decreased the pH preferably for the growth of *Trichoderma* spp.

Key words: White root disease, *Trichoderma* spp., Biological control agent, Sulphur amendment