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Control of *Colletotrichum* species – causative agents of *Colletotrichum* leaf disease of rubber

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Among the foliar diseases of rubber *Colletotrichum* Leaf Disease (CLD) is considered as one of the major causes of declining yields of rubber in the Asian continent. The pathogen *Colletotrichum gloeosporioides* has been considered to be the causative agent of this disease in early 1900's in all rubber-growing countries in the world. However, observations of a more recent survey performed in Sri Lanka revealed that the fungus *Colletotrichum acutatum* also plays a significant role in the development of CLD in rubber plantations of Sri Lanka. Due to the yield loss incurred by the disease, development of methods to control the organisms is of great importance. Therefore, *in-vitro* investigations were carried out to identify the most suitable fungicide for managing both *Colletotrichum* species pathogenic to rubber. A range of concentrations of three fungicides namely copper oxychloride (Cobox, 50% a.i, BASF), hexaconazole (Contaf, 5EC, Bayer) and tebuconazole (Folicur, 250 EC, Bayer) were screened employing two screening techniques; conidial germination inhibition technique [CGIT] and poisoned food technique [PFT] to evaluate respectively, the efficacy of inhibiting conidial germination and mycelial growth. Fungicides hexaconazole and tebuconazole were identified as effective fungicides in controlling mycelial growth and spore germination of *Colletotrichum* species, as both these species are responsible in causing CLD in Sri Lanka. The fungicide hexaconazole was most effective in controlling the mycelial growth of *Colletotrichum*

acutatum and *Colletotrichum gloeosporioides* at markedly low concentrations of 5 μgml^{-1} and 10 μgml^{-1} respectively and the germination of conidia of both species was inhibited by hexaconazole at 10 μgml^{-1} and 20 μgml^{-1} respectively.

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