

Efficacy of fungicides against *Koleroga noxia* Donk, the Black rot pathogen of Coffee

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Black rot of coffee caused by the fungus *Koleroga noxia* Donk. is one of the major disease which causes yield loss up to 20-30% and infects both arabica and robusta coffee cultivars. Presently carbendazim 50% WP @ 0.6% was recommended for management of black rot as an alternative to this fungicide is required to avoid the development of fungicide resistance by the pathogen. Hence, different fungicide molecules viz., carbendazim 50% WP, tebuconazole 25% EC, hexaconazole 75% WG, propiconazole 25% EC, pyraclostrobin 133 g/l + epoxiconazole 50 g/l, propineb 70% WP, copper oxychloride 50% WP, carbendazim 12% + mancozeb 63% WP, zineb 68% + hexaconazole 4% WP at the concentrations of 0.05%, 0.10% and 0.15% and Bordeaux mixture @ 0.5%, 1.0% and 1.5% were tested under laboratory condition against *Koleroga noxia* by adopting food poisoning technique. Among the tested fungicides, carbendazim 50% WP, tebuconazole 25 % EC and carbendazim 12% + mancozeb 63% WP recorded 100% inhibition of the mycelial growth at all the concentrations tested over control. The fungicide pyraclostrobin 133 g/l + epoxiconazole 50 g/l could completely inhibit the mycelial growth at 0.1% and 0.15% and copper oxychloride 50 % WP was least effective against the pathogen and could inhibit the mycelial growth only up to 52.59% at the highest concentration tested. The results of the experiment indicated that the fungicides carbendazim 50% WP, tebuconazole 25% EC and carbendazim 12% + mancozeb 63% WP were found effective in arresting the growth of *Koleroga noxia*.

Key words: Black rot, coffee, *in vitro* evaluation, *Koleroga noxia*
