

RESEARCH ARTICLE

Management of black spot of papaya caused by *Asperisporium* caricae

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ABSTRACT

The black spot disease caused by *Asperisporium caricae* on papaya leaves and fruits causes defoliation and deteriorates the market value of fruits. The disease symptoms observed on upper surface of leaves were round light brown necrotic spots encircled by yellow halo. On the lower surface of the same leaves, the growth of fungus observed as black colour in the area corresponding to the spots, initially they are black later became brown in colour. The different chemicals (fungicides) such as Difenoconazole, Propiconazole, Hexoconazole, Bitertanol, Chlorothalonil, Copper oxychloride, Saaf (Carbendazim 12 % + Mancozeb 63 %) and Quintal (Carbendazim 25 % + Iprodine 25 %) were tested at different concentrations *in vitro* and *in vivo* in a field experiment laid out in Randomized Complete Block Design. Among the chemicals, Chlorothalonil inhabited 100 per cent spore germination at 150 and 250 ppm when tested *in vitro* spore germination inhibition technique. In field experiment, each chemical as treatment was sprayed on leaves and fruits. Among the treatments, Difenconazole @ 0.1 per cent showed effective against the pathogen on leaves (PDI 33.88%) and decrease over control (53.63%) followed by Chlorothalonil @ 0.2% (46.94%). On fruits Difenconazole @ 0.1% showed effective control of disease (PDI 17.26%).

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