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Coupling pre-harvest fungicidal sprays with post harvest chemical dip for the management of anthracnose disease of papaya

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Among various post harvest diseases, anthracnose caused by *Colletotrichum gloeosporioides* Penz. (Penz.and Sacc) is the most serious disease of papaya. The current study was undertaken to evaluate various pre-harvest and post-harvest treatments in different combinations for the management of anthracnose disease of papaya. Papaya plants once reached harvesting stage were sprayed with 0.2% carbendazim 50% WP, 0.1 % thiophanate methyl 70% WP, 0.2% chlorothalonil 75% WP, 02% propineb 70% WP, 0.1% difenoconazole 25 EC, 0.1 % prochloraz 45 EC and 0.1% tricyclazole 75% WP with a control (no fungicide) fortnightly during the experimental period. Pre-harvest sprays of 0.1% prochloraz and 0.1% tricyclazole were found to be effective in reducing anthracnose symptoms on papaya fruits up to two weeks after the harvest. Based on the above results, fruits collected from prochloraz and tricyclazole treated plots and unsprayed plots were subjected to different post-harvest treatments. Among various post-harvest treatments, prochloraz at 0.1% had a significantly lower percentage of infected fruits, number of anthracnose lesions per fruit and lesion diameter. The combined application of 0.1% prochloraz as pre-harvest spray and 0.1% prochloraz as post-harvest dip were more effective in controlling the disease.