Research Article

Prevalence, Epidemiology and Management of Apple Scab (*Venturia inaequalis*) in Dry Temperate Region of Kinnaur, Himachal Pradesh

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Abstract

Apple scab (*Venturia inaequalis*) is one of the limiting factors affecting both fruit quality and yield since last many years in dry temperate regions of Kinnaur, Himachal Pradesh. Surveys of the target disease at different locations indicated the incidence ranged from 1.65 to 62.8 per cent with highest at Kalpa village of Kinnaur district. Occurrence of favourable weather parameters (85.5 and 215 mm rainfall in 8 and 10 RD) in April to May 2014 coupled with low temperature (10.8-15.4C) which favoured disease development. Disease incidence was positively correlated with temperature and rainy days and negative but highly significant with rainfall during the crop seasons 2014 and 2015.Three consecutive sprays of captan 75% +Hexaconazole 5% (1.0%) starting with the first *a*ppearance of disease at 15 days intervals were most effective in controlling the disease (upto 88.6 and 84.7% disease control) during 2016 and 2017 and provided maximum fruit yield (61.5 Kg). Out of the four fungicide spray schedules tested, one comprising of consecutive sprays of hexaconazole (0.05%) at the first appearance of disease followed by captan+ hexaconazole (0.25%) and another three sprays with propineb (0.3%), captan+ hexaconazole (0.25%) and Mancozeb (0.25%) at 14-d interval was found to be highly effective (96.4% disease control).

Key words: Apple scab, epidemiology, fungicides, *Venturia inaequalis*

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