

Research Article

Integrated Management of Stemphylium Blight of Onion Under Temperate Conditions of Kashmir Valley

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Abstract

Stemphylium blight is the most destructive disease of onion crop and pose a grave threat to the very existence of its cultivation in Kashmir valley. During the studies of integrated management of the disease, it was observed that all the treatments, individually or in combination, restrained the disease incidence and intensity to a level significantly lower than that of the control and enhanced the yield appreciably in both the experimental years. The trend followed by various treatments with respect to their efficacy during the two years was also similar. Results reveal that pooled data of disease incidence and intensity of 2015-16 and 2016-17 revealed that treatment combination of soil amendment using vermicompost @ 2 t ha⁻¹ along with prophylactic spray of mancozeb 75 WP @ 0.3 per cent plus post infectional sprays of difenoconazole 25EC @ 0.04 per cent proved best which recorded the least incidence (31.32%) and intensity (6.03%) as against the control with highest disease incidence and intensity of 82.86 and 57.17 per cent, respectively. Among the soil amendments, vermicompost @ 2 t ha⁻¹ proved most effective which resulted in least incidence (48.43%) and intensity (10.18%) as against the control recording the incidence and intensity of 72.80 and 27.16, respectively. Among the foliar sprays prophylactic spray of mancozeb 75WP @ 0.3 per cent plus post infectional sprays of difenoconazole 25EC @ 0.04 per cent proved most effective recording incidence (44.11%) and intensity (9.70%) as against the control recording the highest incidence and intensity of 74.44 and 27.65 per cent, respectively. Other treatment combination, which proved very effective, were soil amendment with *T. harzanium* @ 5 kg ha⁻¹ or FYM @ 20 t ha⁻¹ along with prophylactic spray of mancozeb 75WP @ 0.3 per cent plus post infectional sprays of difenoconazole 25EC @ 0.04 per cent. Highest bulb yield of 240.36 q ha⁻¹ was recorded in treatment combination of soil amendment using vermicompost @ 2 t ha⁻¹ along with prophylactic spray of mancozeb 75WP @ 0.3 per cent plus post infectional sprays of difenoconazole 25EC @ 0.04 per cent against the control (195.75 q ha⁻¹).

Key words: Incidence, intensity, *Stemphylium* blight, vermicompost, yield

Citation: Hassan Mudasir, Yousuf Vaseem, Bhat ZA, Bhat NA, Latief Rabia and Anwar Khan M. 2019. Integrated management of stemphylium blight of onion under temperate conditions of Kashmir valley. *J Mycol Pl Pathol* 2019 (4): 422-434