

Efficacy of a new fungicide Fluxapyroxad + Pyraclostrobin 500 SC against Coffee Leaf rust disease

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Received : 08.05.2019

Accepted : 28.05.2019

Published : 29.07.2019

Coffee leaf rust or Orange rust caused by the fungus *Hemileia vastatrix* Berk. & Br. is the major disease of coffee in all the coffee growing countries. In the present investigation, evaluation of a new combi-product fungicide molecule against coffee leaf rust disease was carried out under *in vitro* conditions and also in field conditions during 2015-16 and 2016-17 season. The results revealed that under *in vitro* conditions, complete inhibition of uredospore germination in fluxapyroxad 167 g/l + pyraclostrobin 333 g/l in three concentrations 0.4 ml/l, 0.5 ml/l & 0.6 ml/l and pyraclostrobin 20% WG (0.5 ml/l), hexaconazole 5% EC (2.0 ml/l) whereas least (20.42%) uredospore germination in fluxapyroxad 333 g/l @ 0.3 ml/l treatment. Highest (92.65%) spore germination was recorded in untreated control. Under field conditions, during 2015-16 least mean rust incidence (8.71%) was recorded in fluxapyroxad 167 g/l + pyraclostrobin 333 g/l @ 0.5 ml/l, where as highest (18.47%) in untreated control. During the season 2016-17 least mean rust incidence (2.36%) was recorded in fluxapyroxad 167 g/l + pyraclostrobin 333 g/l @ 0.6 ml/l, where as highest (17.67%) in untreated control. Use of combi-product fungicides avoids the development of resistance of fungi to systemic fungicides and manages the disease for longer duration.

Key words: Coffee, field evaluation, fluxapyroxad + pyraclostrobin, *Hemileia vastatrix*, leaf rust, uredospores
