USE OF SOME FUNGICIDES IN THE MANAGEMENT OF INFECTION LEVELS OF BLAST ON RICE VARIETIES PLANTED AT DIFFERENT DATES ON YIELD

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Abstract
Separate assessments were carried out to determine the effects of fungicide usage, varieties and planting date, on rice blast disease, caused by Pyricularia grisea (Cooke) sacc, [= Magnaporthe grisea (Hebert) Barr] in the hydromorphic upland site, Badeggi Niger State Nigeria. The four rice varieties were Faros 53, 54, 55, and 56. The results showed that Faro 55 was moderately resistant to leaf and neck blast, with the lowest percentage unfilled grains per panicle. Faro 53 reacted moderately susceptible to neck blast. Faro 54 was moderately susceptible to leaf and neck blast, while Faro 56 showed a highly susceptible reaction to both leaf and neck blast, and a 31% plants population death due to the blast disease. With respect to planning dates (May 16, June 4 and July 22), plants sown in June had the highest leaf blast severity, neck blast incidence, and the lowest yield. Seven fungicides (four are recommended for use in rice in Nigeria : flusilazol, difenoconazole, difenokonazole+propikonazole, and carbendazim (6.2%) + mancozeb (73..8%) and three generally used ones (menefoxam (4%0 + mancozeb (64%), chlorothalonyl, and metalaxyl ) which were evaluated against the rice blast disease, showed that the recommended fungicides for use in rice, were more effective in suppressing blast and protecting yield, compared to the other fungicides.

KEYWORDS: AUNDPC, Field trial, Rice blast, Pyricularia grisea, Susceptibility, Resistance