

Management of Grain Discoloration of Rice with Solvent-Free EC Formulations of Neem and Pungam Oils

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Neem and pungam oil-based emulsifiable concentrate (EC) formulations developed at Tamil Nadu Agricultural University were evaluated for their efficacy to inhibit the mycelial growth of the fungi *Helminthosporium oryzae* and *Pyricularia oryzae* causing grain discoloration on rice under *in vitro* conditions. All three formulations, *viz.*, neem oil 60 EC (acetic acid), neem oil 60 EC (citric acid) and neem oil + pungam oil 60 EC (citric acid), inhibited mycelial growth of the pathogens; they were effective even after 9 months of storage. These formulations effectively controlled the grain discoloration on rice.

KEY WORDS: Grain discoloration; neem oil; pungam oil; disease control; EC formulations.

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