

CONCLUSIONS

Although the rice blast fungus *Magnaporthe grisea* has been studied in great detail, developments related to the infection process are still not fully understood. In the present study, it was observed that the laccases expressed in normal conditions and in conditions which mimic pathogenicity are biochemically different. Properties investigated in this study include molecular mass, the effect of pH and temperature on enzyme activity, thermal stability, substrate specificity, effects of various inhibitors, dye decolorisation potential, DHN polymerization potential and ferroxidase activity. Antisense repression was used for elucidating gene(s) function. Knock-down transformants with weak membrane/wall showed loss of pathogenicity towards the host. Considering that *M. grisea* has to undergo morphological transitions for reproduction and infection of its host, laccase mediated maintenance of cell wall integrity has implications for the pathogenic development of the fungus.