Abstract

Rice culture has some special characteristics, due to the flooding required for optimal production. This fact limits the use of biological control agents because of the anaerobic conditions presents in these systems. Species of the fungal genus Trichoderma have the potential of controlling soil borne pathogens and promoting growth in various plants. In this study the effects of T. harzianum (TV72) and T. asperellum (TV190) on germination, vegetative growth and production of Oryza sativa L. var. Cimarron under different flooding conditions were evaluated, as well as the in vitro biocontrol of Pyricularia grisea and reduction in grain spotting in greenhouse conditions. Both Trichoderma strains significantly increased germination rate, root length and root dried biomass. Production was also increased in plants treated with Trichoderma (30-60%); and reduction in grain spotting (34-45%) and in vitro growth of P. grisea (18-52%) were observed. These results suggest that the use of Trichoderma spp. in the flooding conditions usually found in rice cultures could help control diseases and promote growth and yield.