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INFLUENCE OF PSEUDOMONAS PUTIDA AF7 INOCULATION ON SOIL ENZYMES

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ABSTRACT

Pseudomonas may use as bioremediator and as biopesticide. The use of soil enzymatic assays as biological indicator of possible negative effects in soil functioning was evaluated after *P.putida* AF7 inoculation. For that, AF7 was originally isolated from the rizosphere of rice and was inoculated on three soils: Rhodic Hapludox (RH), Typic Hapludox (TH); and Arenic Hapludult (AH). Soil characteristics were measured in each plot. Acid phosphatase, β -glucosidase and protease activities were measured at 7, 14 and 21 days. The enzyme activity waved during the experimental period but there is a significant reduction of β -glucosidase activity in RH soil on day 14. Corg was positively correlated to the activities of β -glucosidase and protease. The presented data indicate that soil biochemical properties may be useful as indicator of soil perturbations.