

Manuscript Number: 2466 NAAS Rating: 4.96

Economic and Environmental Consequences of Bio-pesticide (*Pseudomonas fluorescens*) Use in Paddy Farms of Southern India

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Abstract: The present study analysed the economic and environmental benefits due to bio-pesticide (*Pseudomonas fluorescens*) application in paddy cultivation. The effect of bio pesticide: *Pseudomonas fluorescens* was the highest at 7.36% in paddy productivity. The hazardous level of pesticide use was minimized in biopesticide user's farms, which was indicated by the differences in EIQ field rating value per ha (-58.13)) between users (EIQ field rating 42.43) and non-users (EIQ field rating 100.56). It would imply that there is a substantial reduction in pesticide pollutants in soil and water of bio pesticide user's farms. The non availability of quality product (mean score value of 67.50) and availability of less virulent culture in the market (mean score value 66.20) were the major constraints realized by the farmers in its adoption. Hence the bio pesticide, *Pseudomonas fluorescens* has positive impact (both economically and environmentally) on paddy production.

Keywords: Pseudomonas fluorescens, Paddy farms, Decomposition analysis, EIQ value