Studies on bio-efficacy of anilofos against grasses and non grasses in transplanted rice (*Oryza sativa* L.)

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ABSTRACT: The study was conducted to evaluate the effect of anilofos with and without emulsifier on weeds and optimising the yield of transplanted rice. Application of anilofos 600 g/ha with emulsifier was most effective in minimizing the density and growth of grasses, sedges and broad-leaved weeds. This treatment had also minimum depletion of N, P and K by weed, weed index and maximum weed control efficiency, which was closely followed by anilofos @450g/ha with emulsifier. The plant height, tiller production and shoot dry weight, yield attributes, number of effective tillers, number of filled grains per panicle, panicle length and weight and grain and straw yield and N, P and K uptake by rice were maximum under anilofos @600g/ha with emulsifier which was closely followed by anilofos @450 g/ha with emulsifier. Application of anilofos without emulsifier had minimum rice growth and yield irrespective of doses.

Key Words: Bio-efficacy, Anilofos, emulsifier transplanted rice, weeds.