OBJECTIVES
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Research Gap

Review of previous works revealed that studies have not been carried out to evaluate the effects of BAAN on bio efficacy, persistence and residual effects. No previous attempts have been made to evaluate the potential effects of BAAN on rice cultivars namely Thanu, B.R.2655, MTU1001, MTU1010, IR30864, IET7575, KMR-3R and KRH-2. The recommended dose of BAAN which is used to control pathogens may be injurious to some crop species and may also leave the residual effect. BAAN being systemic in nature, chemical is transported along with phloem sap which may have effect on physiological status of the plant. Hence a systematic evaluation of the effect of BAAN on the morphology (seed germination), biochemical (pigments, proteins and enzymes) and physiology of eight cultivars of rice were undertaken with following objectives.

Research Objectives

❖ Seed germination studies: Percent germination, dry and fresh weight, vigour index, Percent Phytotoxicity, Tolerance Index.

❖ Morphological studies: Shoot length and Root length.
  a) Biochemical studies: Estimation of total protein content, chlorophyll a, chlorophyll b and total chlorophyll content.
  b) Assay of α-amylase and catalase enzyme activities.

❖ Physiological studies:
  a) Uptake of macro nutrients like N, P, K Na and Ca.
  b) Uptake of micro nutrients like Fe, Cu, Mn and Zn.
  c) Gas exchange parameters studies - Determination of photosynthetic rate, stomatal conductance, intercellular carbon dioxide concentration.
  d) Carbon isotope discrimination studies among eight cultivars of rice.