

**DETERMINATION OF EFFECTIVE DOSAGE
LEVEL AND LEAF STAGE OF TEN SELECTED
WEEDS IN RICE CULTIVATION FOR S3650**

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ABSTRACT

Rice is main crop in Sri Lankan agriculture and it is very much important as a staple food in our country. When considering the cultivation practices of rice, weed management plays a vital role. There are number of selective herbicides can be found in Sri Lanka with different application intervals and weed growth stages. But, controlling of all weeds is somewhat problematic by using one of present market herbicides. There was a new herbicide imported by Opex Holdings Private Limited labeled as S3650 and is a post plant, post emergent, systemic herbicide.

Initially, the field was selected which is most suitable to put trays which are filled by mud. There were ten treatments (nine treatments and one control) for each weed and three replicates were maintained. Weeds emerging before the seed broadcasting were destroyed by using glyphosate.

After germinating the seeds, carefully observed the leaf stage of each weed. With respect to the leaf stage two, three and four, treatments were determined and apply the herbicides according to pre-decided dosage levels. Research analysis was done as CRD (Complete Randomized Design) method and SAS software was used.

After applying the herbicides, died percentage with respect to initial weed count of the weeds were taken. After getting the results, it was analyzed using the SAS (Statistical Analyzing Software). When considering the results, basically S3650 has not significant difference with its competitive herbicide.

However, with the stage of the weeds and type of the weeds, most suitable maturity stage to control is differ. So, this chemical should be tested again in the field conditions with the broad spectrum of weeds.