

**THE EFFECT OF GAMMA RAY ON AGRONOMIC
CHARACTERS OF RICE (*Oryza sativa*)**

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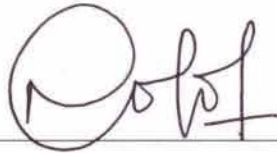
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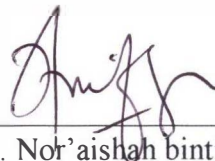
This Final Year Project entitled “**The Effect of Gamma Ray on Agronomic Characters of Rice**” was submitted by Nurul Hanani binti Kamarudin, in partial fulfilment of the requirements for the Degree of Bachelor Science (Hons) Biology, in the Faculty of Applied Sciences, and was approved by



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ABSTRACT

THE EFFECT OF GAMMA RAY ON THE AGRONOMIC CHARACTERS OF RICE (*Oryza sativa*)

Plant mutagenesis by ionizing radiation specifically gamma ray are widely applied to develop better mutant varieties in rice. Thus, the aim of this study was to determine the effect of gamma radiation towards agronomic characters. Seven doses of gamma ray (50,100, 200, 300, 400, 500, and 600Gy) were applied to both seeds of *Bertih* and *Hita* to determine the lethal dose (LD₅₀). Results showed that LD₅₀ for *Bertih* and *Hita* were between 255 and 345Gy respectively. Correlation study demonstrated that there was a positive relation between dose of gamma ray and agronomic characters. *Hita* gave negative results for the correlation study. This study provides fundamental findings for agriculturalists to develop local mutant variations in future.