

SOME RESULTS IMPROVING HOA VANG STICKY RICE BY GAMMA INRRDIATION (Co⁶⁰) IN GERMINATION

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Summary

Germination of Hoa Vang sticky rice is treated with gamma rays (Co⁶⁰) at the time of 69 - 72 hours (after soaking seeds) with 10 and 15 krad dose. Continuous selective conduct from M₁ to M₅ we have obtained some valuable mutant lines to improve variety. Each mutant line have different value in innovating Hoa Vang sticky rice such as: loss of photoperiod sensitivity, (possibly sowing 2 crops/year), plant low can be resistance to lodging, shortening of the growing time, increase number of grains per panicle, ... There are significant lines to improve the plant's height: HV₁, HV₃, HV₇ and HV₁₃; The lines shortened growing time as: HV₂, HV₄, HV₈ and HV₁₃. The lines improved the resistance to logging as: HV₁, HV₃, HV₇ and HV₁₃; the lines increased productivity as: HV₅, HV₇, HV₈, HV₉, HV₁₀, HV₁₂ and HV₁₄. Mutantive lines are evaluated on a number of agronomic biological traits, components result in yield, comparing them with each other and with the original species. Since then chose 2 mutation of lines are promising as HV₁ and HV₁₃: fragrant, plant height reduction, increased resistance to pouring and productivity improvements. The results mutant line's anatomical body and original species show several differences in the anatomical structures related to resistance to logging such as changing the arrangement of vascular bundles in multiple mutant lines towards making plant harder and better resistance to logging.

Keywords: *Anatomical body, resistance to logging, Hoa Vang sticky rice.*