

**DEVELOPMENTAL STAGES OF SELECTED THREE LINE
HYBRID RICE (*Oryza sativa* L.) PARENTALS
USING LEAF NUMBER METHOD**

JULIE ANN GARCIA GAMIT

An undergraduate thesis manuscript presented to the faculty of the Department of Crop Science, College of Agriculture, Central Luzon State University in partial fulfilment of the requirements for the degree.

**BACHELOR OF SCIENCE IN AGRICULTURE
(CROP SCIENCE-AGRONOMY)**

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BIOGRAPHICAL SKETCH

Julie Ann Garcia Gamit was born on September 9, 1996 at General Mamerto Natividad, Nueva Ecija. She is the youngest daughter among the six children of Mr. Eduardo T. Gamit and Mrs. Cecilia G. Gamit.

She finished her elementary education at Balangkare Elementary School and completed her secondary education at REH Montessori College – General Mamerto Natividad Nueva Ecija.

With her dream to pursue a college degree, she took up Bachelor of Science in Agriculture major in Crop Science (Agronomy) at Central Luzon State University. She was an active member and served as Secretary in the Society of Crop Science Majors (SCSM). And she was also elected as Secretary at the College of Agriculture Student Government (CASG) at Central Luzon State University.

As a student, she encountered many challenges and difficulties but she never give up. She overcome all these challenges because she believed that everything happened is according to God's plan and she believed that she can do everything with God's grace.

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“Commit to the Lord whatever you do, and your plans will succeed.”

- *Proverbs 16:3*

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ABSTRACT

The experiment was conducted at the Philippine Rice Research Institute - Central Experiment Station, Maligaya, Science City of Muñoz, Nueva Ecija to determine the leaf counts of CMS, Maintainer and Restorer lines, to determine the panicle stage and to establish the leaf count of selected parent lines as baseline data for F₁ seed production using leaf number method.

The genotypes were laid out in Randomized Complete Block Design with three replications. Eighteen lines used in the study, were: IR80559A, IR80559B, PR2A, PR2B, PR29A, PR29B, PR15A, PR15B, IR80156B, PR36246, PR37246, PR34142, PR35749, PR36244, PR36248, IR73012, SRT-3R and AC66-1R.

Significant differences among genotypes were observed for the leaf count of the main culm at seedling, mid-tillering, panicle initiation, emergence of flag leaves and days to flag leaf emergence, initial heading, 50% flowering, maturity and plant height at 50% flowering. The leaf count at maximum tillering stage however was found not significant.

Results of the study shows that none of the R-lines has exactly same leaf count with the A-line. However, the shortest difference in leaf count is observed between PR2A and PR36248-HY-2-5-1R.

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