RESULT OF SELECTION ON CYTOPLASMIC MALE STERILITY LINE - 11A/B FOR BREEDING THREE - LINE HYBRID RICE VARIETIES IN VIET NAM

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Summary

11A is the aromatic cytoplasmic genetic male sterility line and sensitive temperature which was selected from line introduction 137A/B from 2009 by Nguyen Thi Tram et al. The experience was conducted in 2010 to evaluate and select on each the individual of A line and B line separately. The 11A line has growth duration from sowing to heading from 86 to 108 days in spring crops and from 66 to 68 days in summer crops. The number of leaves per main stem of 11A line are 14 leaves in spring crops and 13 leaves in summer crops respectively. The 11A line has anthers small elongated, the pollen is real sex and the type of intensive plant. However, sexual and fragrance of 11A line is unstable through the crop seasons. It is necessary to select each the individual of A line with aroma, sterility ratio is 100% and B line with aroma to mixed pairs, collected seed of A line and B line separately. The following, evaluation and selection of the best pair (aroma, sterility ratio is 100%) in next crop seasons to get target that is the aromatic and stable sterility 11A/B line. After 6 crop seasons and 4 backcross times, there are three the best 11A/B lines reaching goals (aroma and complete sterility) including the lines No 11-8-6-48-11-1, 11-8-6-48-11-6 and 11-8-6-48-11-7.

Keywords: Aromatic cytoplasmic male, mixed pairs, pollen, phenotype.