

# **A PROTOCOL FOR AGROBACTERIUM –MEDIATED TRANSFORMATION IN BAC THOM 7 RICE VARIETY**

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## **ABSTRACT**

Bac Thom 7 rice variety is a good quality rice variety and is widely used in production. However, the biggest disadvantage of this rice variety is the severe leaf blight. Therefore, the improvement of disease resistance characteristics of Bac Thom 7 is very necessary. In order to apply genome editing technology to this variety, we have to build a gene transfer process for it. In this study, we successfully developed the gene transfer process of the Bac Thom 7 rice variety with the gene transfer efficiency of 24.32%. This procedure was optimized with the use of a bacteriological concentration of 0.03 and combination of 200 mg/l cefotaxime and 100 mg/l vancomycin. The regenerative yield of transgenic rice cultivars is up to 75% and regeneration rate of transgenic plants is 85.36%.

Từ khóa: *Agrobacterium tumefaciens*, Bac thom 7, protocol, transgenic