

TÁCH DÒNG PHẦN TỬ GEN MÃ HOÁ PEROXIDASE TỪ HAI GIỐNG DƯA CẠN (*CANTHARANTHUS ROSEUS* L.)

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TÓM TẮT:

Catharanthus roseus (L.) is a dicotyledonous plant which has the ability of producing alkaloids. Research on improvement of alkaloid content in periwinkle plants by approach of application of gene technology aims provide sufficient materials for medicinal purposes has been set out in the strategy of medicinal plant research in Vietnam. In this article, we present the results of cloning and determining the nucleotide sequencing of CrPrx cDNA isolated from mRNA of *Catharanthus roseus* plants have pink-purple flower and *Catharanthus roseus* plants have white flower collected at Thainguyen province. CrPrx cDNA isolated from two periwinkle sample is 993 nucleotides in length, encoding of peroxidase including 330 amino acids, participating in the last reaction chain of vindoline biosynthetic process. Comparative alignment of sequence of CrPrx cDNA between two sample Pink-purple flower and White flower in Vietnam showed in 12 different location in nucleotide sequence of CrPrx cDNA. Sequence of deduced amino acid of two periwinkle samples had 12 different location in amino acid sequence of Prx. CrPrx cDNA is used to development of plant transgenic vector in the aim of increasing the alkaloid content in *Catharanthus roseus* plants.