In Situ Hybridization and Expression Patterns of Antifungal Protein from Capsicum annuum

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Hyoung Suk Wee* and Chung Sun An

School of Biological Sciences, Seoul National University, Seoul,151-742, Korea

Plants have evolved complex recognition and response mechanism to counter attack by pathogen. To probe the mechanism further, We previously studied that an antifungal protein cDNA clone(designated *CaAFP*) which was isolated from cDNA library of hot pepper, *Capsicum annuum* L encodes for 85 amino acid including 8 cysteine residues and Southern blot analysis showed that the *CaAFP* is present as a single copy and *CaAFP* mRNA is highly expressed in leaves and flower bud but not in roots. To detect the localization of *CaAFP* mRNA in flower bud we performed in situ hybridization. *CaAFP* mRNA is highly expressed in sepal and ovule. The transcript level of *CaAFP* was induced by JA and ethephon, but not SA.

Keywords: Capsicum annuum, In Situ Hybridization, JA, ethephon, SA