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Isolation and expression analysis of a cDNA encoding for phosphoenolpyruvate carboxylase in thermogenic skunk cabbage, *Symplocarpus renifolius*

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Skunk cabbage, *Symplocarpus renifolius*, is known to produce enough heat to melt the snow in early spring. We have isolated a cDNA that encodes a phosphoenolpyruvate carboxylase, termed as *SrPEPC* from thermogenic florets of skunk cabbage. *SrPEPC* is a 110.5 kDa protein that contains conserved amino acid regions such as phosphorylation and catalytic domains. Expression of SrPEPC mRNA was highly abundant in the petal and pistil of thermogenic florets. Interestingly, the expression was very low in non-thermogenic tissues including spathe and leaf. Our data suggest that *SrPEPC* plays a role for tissue-specific heat production in the skunk cabbage.

Biography

Md Abu Sayed is currently pursuing his PhD from United Graduate School of Agriculture, Iwate University, Japan. He has been serving as an Assistant Professor in the Department of Biochemistry and Molecular Biology, Hajee Mohammad Danesh Science and Technology University (HSTU), Dinajpur, Bangladesh since 16 May, 2012.

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