

Functional Analysis of ESTs from the Flower Bud of Korean Ginseng

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In order to study gene expression in a reproductive organ, we constructed a cDNA library of immature flower buds in Korean ginseng and generated expressed sequence tags (ESTs) of 3,360 clones randomly selected. The ESTs could be clustered into 1,844 non-redundant groups. Similarity search of the non-redundant ESTs against public non-redundant databases of both protein and DNA indicated that 1,254 groups show similarity to genes of known function. These ESTs clones were divided into sixteen categories depending upon gene function. The most abundant transcripts were unknown protein (72), chlorophyll a/b-binding protein (48), and stylar glycoprotein. There are no useful informations of gene expression during the development of flower bud in Korean ginseng. These results could help to understand the development of flower bud in Korean ginseng.