E803

Induction of Lipoxygenase Gene(6C02E12) by Methyl Jasmonate in Corn Seedlings

Oksoo Han*, Youngseon Kim
Hormone Research Center, Institute of Biotechnology,
and Department of Genetic Engineering

Exposure of corn(*Zea mays saccaruta*) seedlings to atmospheric methyl jasmonate induced the expression of 6C02E12, the putative lipoxygenase gene, in corn seedlings. Spectrophotometric measurement of conjugated diene formation indicated that methyl jasmonate caused an increase in the amount of lipoxygenase activity. Analysis of time course of 6C02E12 gene expression revealed that the methyl jasmonate-responsive increase of lipoxygenase activity was closely related to the expression of the putative lipoxygenase gene, 6C02E12. Partial sequence of 6C02E12 is reported and heterologous expression of 6C02E12 gene in *E.coli* is in progress.