P20

Cloning of low temperature-iducible genes using suppression subtractive hybridization method from *Glycin max* L.

Kee-Young Kim, Seong-Whan Park, Ja-Woong Kim, Min-Ho Hwang and Jai-Heon Lee

Faculty of Natural Resources and Life Science, Dong-A University e-mail: jhnlee@mail.donga.ac.kr

A thousand low temperature-inducible clones were isolated using suppression subtractive hybridization method from soybean. Among them, 100 clones were screened by colony blot hybridization. Sequence analysis and database search revealed that low temperature-induced clones encodes variouse kinds of genes, including ABC transforter, RNA helicase, glycolate oxidate, NADH hydrogenase, nodulin-like protein, senescence-associated protein, retroelement, cytochrom P450 monooxygenase, nonsymbiotic hemoglobin, and cold stress protein, etc. Northern blot hybridization and reverse hybridization conformed that asparaginase, eEF-1a and CRC1 homologue are strongly induced by low temperature treatment.