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Molecular Cloning of Oxygen-Evolving Enhancer Genes Induced by Salt Treatment in a Halophyte, *Salicornia europaea* L.

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Abstract: To understand the function of oxygen-evolving enhancer proteins (OEEs) in PSII, we cloned the complete nucleotide sequence of three OEE genes from *Salicornia europaea* cultured in a 3% NaCl solution and determined the effect of salt treatment on the expression levels of the OEE genes. The three OEE proteins were 89-74% identical to those of spinach. The expression of OEE1 gene was increased by NaCl treatment but not changed in OEE2 and OEE3. Therefore, the increases in the expression levels of *Salicornia* OEE1 gene may be important in maintaining the PSII activity in the presence of NaCl.

Keywords: [Halophyte](#), [OEEs](#), [Oxygen-evolving enhancer proteins](#), [Salicornia europaea](#)
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