

## Molecular evaluation of telomerase activity in sunflower under various salt stress conditions

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Telomerase activity is highly regulated, abundant in animal rapidly dividing cells and reproductive organs, but undetectable in most other differentiated tissues. Little is known about the activity of telomerase in plants, whose development differs in fundamental ways from that of animals, especially through stressed conditions. Telomerase synthesizes the plant telomere repeat sequence TTAGGG. To examine the possible involvement of telomerase activity in plants under stress, we used Molecular assay to screen telomerase activity. Experimental samples were taken from the leaves of *Helianthus annuus* under various salt stress conditions, include 2, 5 and 8 ds.m at 6, 12 and 24 hours of growth. Using Real time RT-PCR showed decreased expression of the gene coding telomerase, TERT in all plants under salinity stresses.

Telomerase with decreased levels from salinity treated tissues might sheds light a correlation between telomerase activity and salt stresses as one of a probable mechanism, affected by this stress.

### Speaker Biography

Maryam Parvini has completed her PhD at the age of 31 years from Islamic Azad University, science and research branch, Tehran, Iran. After 3 years research in Royan institute (for my Ph.D thesis), whose ranking is the first for stem cells and Developmental biology researches in Iran, She achieved a thorough understanding of every aspect of these areas, especially neural patterning and achieving the different neural progenies from human embryonic stem cells. Her most recent position as scientific staff in Islamic Azad University, Urmia, Iran, has provided me with 1 year supervisory experience as leader of M.Sc students. She is also keen to express my deep interest to Plant science, especially for molecular aspects. It was extreme and enough cause to bigen my cooperation with Prof. Dr Reza Darvishzadeh, who is plant biotechnologist. Since this field obviously take a great leap forward, she need to go on with learning and experiencing as to assist me in this feild more and more. She is a reviewer of some Iranian journals.

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