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**EVALUATION OF FREEZING TOLERANCE ABILITY OF GARLIC ECOTYPES (*ALLIUM SATIVUM* L.) IN SEEDLING STAGE UNDER CONTROLLED CONDITIONS**

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This study assessed the freezing tolerance ability of garlic (*Allium sativum* L.) under controlled conditions and in a factorial completely randomized design with three replications at Ferdowsi University of Mashhad. Treatments consisted of two planting dates (late September and late October) in four ecotypes of garlic occurring (khaf, Torbat, Nishapur and Bojnurd ) with eight temperature treatments including zero temperatures , -3, -6, -9, -12, -15-, -18, -21 ° C), respectively. In order to acclimation, 3-4 leaf stage plants were grown in pots in a natural environment. Pre- stress qualities such as fluorescence, photosynthesis, stomatal conductance and leaf relative water content were the number of bushes. The pots were transferred to freezer thermogradient were exposed to experimental temperatures. Stability of cell membrane electrolyte leakage was evaluated using the index and the lethal temperature for 50 % of the samples (LT50el) were determined based on. Between ecotypes in terms of photosynthesis, stomatal conductance and relative water content, there was no significant difference. The results showed that the percentage of electrolyte leakage was also significantly effects by treatments.