

عنوان مقاله:

The effect of methyl jasmonate on the germination of lemon seeds under the influence of salinity stress

محل انتشار:

مجله علوم محیط زیستی و نوآوری تکنولوژی آسیای مرکزی، دوره 2، شماره 3 (سال: 1400)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

In order to find the best treatments to accelerate the germination of lemon seeds, a factorial study with 15 in 3 replications was conducted in a completely randomized design. In order to find superior treatments to accelerate the germination of lemon seeds, research was conducted in the Qasr Shirin Azad University of Kermanshah in 2016. Environmental stresses such as salinity reduce germination percentage and speed, reduce root and stem growth, seedling weakness and as a result non-uniformity of field cover and yield loss. The first factor includes different concentrations of methyl jasmonate (zero, 0.5 and 1.5 mM) and salicylic acid (zero, 1 and 2 mM) and the second factor includes different concentrations of sodium chloride (zero, 5 and 10 mM). Des Siemens per meter). After pre-treating the seeds with the priming solutions mentioned above, the seeds are carefully placed in petri dishes with dimensions of 9 × 10 cm in a germinator with a temperature of 25 °C and relative humidity of 70-65 for 30 days. Was placed. For each of the petri dishes, 10 ml of sodium chloride with concentrations of zero, 5 and 10 dS was used. In all experiments, the percentage of germination, the number of days required for germination, the germination of the first seed, the maximum value, the average daily germination and the germination value were calculated. Based on the results, primed seeds with a concentration of 1.5 mM methyl jasmonate that was in normal condition and also primed seeds had the highest germination percentage under salinity stress. The first germination is observed on the ninth day of the experiment. The germination energy of primed seeds with a concentration of 1.5 mM methyl jasmonate was normal .under normal and stress-free conditions

کلمات کلیدی:

lemongrass, Methyl jasmonate, salinity stress, Germination

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