

The Influence of Regulators on the Seeds of Species Concerning to *Cupressus* L. Type

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Aim of the study: Our aim is to learn the influence of regulators on the growth and gaining of sprouts from the seeds concerning to *Cupressus* L. types. At that scientific work the experiment was carried out on the evergreen cypress type (*Cupressus sempervirens* L.) of cypress species.

Materials and Methods: The experiments on research work were carried out in the laboratories of Dendrology Institute. Working solutions were prepared using sodium salt of organic acid at various percents (0,001% and 0,0001%-li). The stimulation ability is referred to organic acids containing C₁₂-C₁₈. Evergreen cypress seeds (*Cupressus sempervirens* L.) are soaked by keeping them in prepared solution. In the experiment the distilled water was taken as the control variant. The soaking of seeds continued 36 hours. The soaked seeds were kept in the light room at 18-20° temperatures planting in the mixture of peat, sand, turf by 1:2:2 ratio. In containers the growth of sprouts has been observed. The results of experiments were studied in 15-35 days. The influence of sodium salt solution of organic acid on the weight and sprouting of seeds were compared with control variant. The results of experiments were as follows. The weights of 50 seeds initially were 0,40 gr. in the 1st Petri dish, in the 2nd 0,47gr, in the 3rd 0,40gr, in 36 hours their weights accordingly were 0,54 gr, 0,57gr, 0,46 gr. after soaking the seeds in 0,0001% solution in the 1-st dish, in the 2-nd dish 0,001%, in the 3rd dish in distilled water. The influence of sodium salt working solution on sprouting ability of seeds was so. In 20 days there were 9 sprouts in the 1-st variant, in the 2-nd and control the number of sprouts was 10. Accordingly in 35 days the number of seeds and their height were 14 (4,5 sm) in the 1-st variant, in the 2-nd 12 (4,0 sm), in control 14, (4,4 sm).

Result: It concluded on that, 0,0001 %-percent sodium salt solution of organic acid impacts positively on the cypress seed weight, the number of sprouts and height compared with 0,001%-percent working solution and distilled water. As the influence of sodium salt organic acid on the initial development of plant seeds was studied, it is important to learn its further influence on the development stages. It can be supposed that, the seeds soaked with the working solution of sodium salt organic acid will be steady against ecological factors (drought, frost, light, soil fertility) and pests in future.

Keywords: Plant, seed, organic acid, sodium salt, regulators, growth