

## *Annotation*

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### ***Getting of sterile culture of Camelina Sativa L.***

*Results of the research for choosing the optimal scheme of explants sterilization of Camelina Sativa L. were introduced in the article. Such chemical compounds for the main sterilization as ethanol, sodium hypochlorite, hydrogen peroxide, potassium permanganate were used. Sterilization was done by various exposure and concentration of sterilizing agents.*

*The lowest efficiency of explants sterilization was observed by using of 70 % ethyl alcohol. In the research variant, outlet of sterile biomaterials while seeds using was 59,6–60,3 % and seedlings using — 10,4–10,6 %.*

*Sodium hypochlorite at high concentrations caused a high percentage of explants necrosis. This index for seeds by treatment duration of 10 minutes was 17,6 % and at exposure of 20 minutes increased to 22,3 %. Low concentrations of sodium hypochlorite provided a high index of destruction of unwanted microflora. Exposure of 20 minutes by seeds treatment was optimum — efficiency of sterilization was 90,6 %. Sterilization of seedlings held the fullest by duration of 10 minutes — outlet of sterile viable explants was 64,3 %.*

*Duration of seeds treatment by hydrogen peroxide did not affect the efficiency of sterilization; outlet of sterile viable explants was 69,3–73,0 % in average. Efficiency of sterilization for seedlings at a ten-minute treatment was at the level of 59,0 %.*

*Use of potassium permanganate proved to be optimal in concentration of 1,0 %. Efficiency of sterilization by seeds treatment under different exposures did not vary significantly and was 90,6–94,3 %. The highest outlet of sterile viable explants (82,7 %) for seedlings was observed at exposure of 10 minutes. Extension of sterilization time caused necrosis in the half of explants.*

*Intensity of culture growth at the initial stages of cultivation is equally important index which indicates successful choosing the conditions of sterilization.*

*The highest relative increase in biomass of Camelina Sativa L. was observed at explants sterilization by ethanol.*

*Potassium permanganate and hydrogen peroxide had equivalent stress effect on explants of Camelina Sativa L. Relative growth of the culture received from the seeds was 15,3 points in average while using  $H_2O_2$  and 14,7 points while using  $KMnO_4$ , and these indexes for seedlings were significantly lower and were 9,8 and 9,1 points respectively.*

*The most intensive suppression of Camelina Sativa L. was observed under sodium hypochlorite using. Relative increase of biomaterial by seeds cultivation varied from 10,3 to 12,8 units and seedlings — 4,3–5,7 units depending on the concentration of sterilizing factor and treatment exposure.*

*Use of solution of 1,0 % potassium permanganate at 10 minutes exposure is the most optimum scheme of explants sterilization of Camelina Sativa L.*

**Key words:** *Camelina Sativa L., efficiency of sterilization, relative increase of biomaterial, explants, sterilants.*