

## Comparative analysis of presowing treatment of sunflower seeds with various petroleum products

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### Abstract

A comparative analysis of the effect of various petroleum products on such parameters of germination of sunflower seeds of ordinary *Helianthus annuus* L. as germination (total and daily, during 7 days of observation of the experiment), germination energy and length of plant stems was carried out. The negative effect of petroleum products on agrophytocenoses in this work was observed after germination of sunflower seeds treated with various petroleum products within seven days. According to the results of the experiment, a negative effect of oil products on the growth of stems and other vegetative organs of the plant was noted. When soil is contaminated with oil products, its physico-chemical composition changes, as a result of which the amount of carbon in it increases dramatically, but the property of the soil as a nutrient substrate for plants deteriorates; soil capillaries are filled with oil and hydrophobic particles of oil impede the flow of moisture to the roots of plants, which leads to their physiological changes; phytotoxicity increases due to the development of micromycetes in it, which produce toxins, and ultimately is accompanied by a strong negative effect on plants.

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