

ГАЛАХИМ III International Scientific Conference "Sustainable and efficient use of energy, water and natural resources - SEWAN-2021"



Development of a method for intensive reclamation of landfills for burial of solid household waste using biological products of prolonged action based on complexones with oxyethylene diphosphonic acid and phenyldiacetic acid derivatives

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Keywords: bioavailability, heavy metals, phytoremediation, sarepta mustard

Research Objective: Development of methods for cleaning contaminated soil with heavy metals on the example of the Levoberezhny landfill







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Results

For copper and nickel, the best accumulation result can be noted in 3 experiments, where only 10 mmol/l of K2OEDP was used as an additive.

Nickel glows better when adding 10 mmol/l of K2OEDF, at a concentration of 5 it decreases sharply. When a very low concentration of OEDF is applied, the plant absorbency values improve, but only slightly.





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Conclusions

The results of the experimental data confirmed the analysis of the articles that Sarepta mustard is an accumulator plant.

The addition of 10 mol/l to 2 OEDF was best shown, increasing the ability of mustard to accumulate heavy metals in the ground part of the plant. The use of an iron chelate supplement reduces this ability.

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Thank you for your attention!

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