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STUDY OF INCREASING SOIL FERTILITY INTO A SITE WITH HIGH ELECTRIC FIELD AROUND USING POLYMERIC CONDITIONING AGENT

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Abstract

This paper discusses the applications of synthetic PONILIT GT-2 anionic polyelectrolyte as soil conditioning agent into a site with high electric field around. All experimental data conclude that the use of a polymeric conditioning agent was increased the soil ability to support vegetation expressed as germination degree for some grass species (e.g., Raigras aristat). The performed values for germination degree increase from 3.05 % to 12.20 % when was added fertilized soil, and respectively, 38.98-73.17 % when is added polymeric agent. Moreover, the experimental data concludes that the use of lower polyelectrolyte concentration is indicated (e.g., < 5 mL polyelectrolyte solution of 0.5 % per 1 Kg soil). The negative environmental impact of high electric tension into the investigated site can be attenuated if is used a soil conditioning agent as Ponilit GT-2 anionic polyelectrolyte.

Key words: PONILIT GT-2 anionic polyelectrolyte, soil conditioning agent, germination degree, soil fertility, Raigras aristat

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