

Creating new agrotextile with nourishing properties

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The development of modern analytical methods has exposed a huge problem of environmental pollution, especially food. Currently, a search is underway for technological solutions that provide similar production efficiency, but are safe for the environment. The solution can be modern agrotextiles based on biodegradable materials that do not generate waste [1, 2].

In our research, an attempt was made to create a new agrotextile with nutritional properties and water retention in the soil. To ensure the competitiveness of this solution, were used cheap and commercially available materials such as starch, borax and glycerin. All substances used are biodegradable and do not have any harmful effects on the environment. Moreover, they are an ecological fertilizer. The mechanical properties, the ability to swell, biodegradability, the process of thermo-oxidative aging, and others have been investigated.

References

- [1] P. Roshan, High Performance Technical Textiles. Wiley Online Library. 2019 s. 279-318.
- [2] P. Wakelyn et al. Encyclopedia of Chemical Technology. Wiley Online Library (2012) 8.