produce phytohormones, in particular gibberellins. In addition, they increase the solubility of rhizosphere nutrients, for example phosphates, iron, magnesium (Tyśkiewicz, 2022).

Trichoderma is a highly effective biological agent that combines the ability to antagonistic action against pathogenic microorganisms with a beneficial effect on plant growth and resistance. Its wide range of mechanisms - from hyperparasitism and synthesis of secondary metabolites to activation of plant immune responses - makes it promising for use in agronomic biotechnology. In addition to protection against pathogenic fungi, *Trichoderma* has demonstrated the ability to degrade toxic substances, as well as to suppress nematodes and insect pests. Its symbiotic interaction with plants not only contributes to increased disease resistance, but also stimulates crop growth by producing phytohormones and improving nutrient availability. Due to these properties, *Trichoderma* is becoming an important component of sustainable agriculture, ensuring increased yields and reduced use of chemical fungicides.

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APPLICATION OF BACTERIAL CELLULOSE IN THE MEDICAL FIELD

Introduction. Bacterial cellulose (BC) is an innovative material that attracts considerable attention from researchers due to its unique properties. It finds application in various fields, including biomedicine, food industry, pharmaceuticals, cosmetology and bioengineering. The use of BC in medicine is particularly promising, where it is used for wound dressing, creation of bio-implants and tissue regeneration. Due to its

biocompatibility, non-toxicity and ability to biodegrade, this material has significant advantages over synthetic analogues. In addition, the potential of BC in the cosmetic and food industries is being investigated, which expands the possibilities of its use in the future (Fernandes, 2020; Picheth, 2017).

The purpose of this work is to analyze the use of bacterial cellulose (BC) in the medical field. The main focus is on biomedical applications, such as wound healing, the manufacture of blood vessels, contact lenses and tubes. The analysis shows that BC has a number of advantages, such as biocompatibility, non-toxicity and biodegradability. Its use as dressing materials is particularly promising due to its high water retention capacity and ability to absorb exudates. BC is also actively used in tissue engineering to create matrices for bone implants and even synthetic veins. The use of BC as subcutaneous implants is important, where it has demonstrated good biocompatibility. The problem of storing probiotics is solved by encapsulating them in BC, which improves stability and resistance to adverse conditions. In the cosmetic industry, BC is used to make face masks that deliver active substances to the skin. Overall, the BC study shows great potential for this material in medical and cosmetic applications (Portela, 2019; Pértile, 2012).

Bacterial cellulose is proving to be a very promising material for use in the biotechnology and medical industries due to its unique properties and advantages. First, it is a biodegradable material, which reduces the negative impact on the environment during its use and recovery. Second, bacterial cellulose has high strength and mechanical stability, which makes it an ideal candidate for the production of biomedical materials such as artificial skin or biosensors. Third, the advantage lies in its biocompatibility, which allows it to be used in medical applications without causing rejection by the body. In addition, bacterial cellulose can be grown under controlled conditions, which makes its production more stable and predictable. The application of this technology can also help solve the problem of raw material shortages, as it can be grown from various wastes such as agricultural waste or biological residues. As a result, bacterial cellulose has significant potential both in environmentally friendly production

and in the development of new biomedical and biotechnological products (Chen, 2022; Chang, 2016).

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MOBILE APPLICATIONS FOR LEARNING FOREIGN LANGUAGES: STUDENT EFFECTIVENESS AND MOTIVATION

The modern development of society requires the use of new innovative approaches to student education in higher educational institutions, allowing future professionals to be more competitive in the job market. According to Bystrova (2015), the concept of "innovative teaching methods and tools" is multi-component, as it integrates all new and effective ways of the educational process (acquisition, transmission, and production of knowledge) that contribute to the intensification and modernization of learning, develop a creative approach, and enhance the personal potential of higher education students. One of the innovative learning tools includes online platforms and mobile applications such as MyEnglishLab, LinguaLeo, SkyEng, FluentU, Easy Ten, Duolingo, and Busuu.