THE ABILITY OF ACTINOBACTERIA FROM SILT SEDIMENTS OF THE LAKE SYSTEM "LA IZVOR" (CHISINAU) TO DELAY THE GROWTH OF PHYTOPATHOGENIC MICROORGANISMS

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Actinobacteria represent one of the most diverse groups of filamentous bacteria that are usually isolated from soils, however, in the last decade, cultures isolated from rivers, lakes, seas, and oceans have attracted special attention. In recent years, they have been considered potential biocontrol agents. From the silt sediments of the lake system La Izvor, 36 strains of actinobacteria were isolated, in which their antimicrobial activity was determined against a number of phytopathogenic bacteria and fungi. It has been established that strains of genus *Actinomadura* are able to inhibit the growth of phytopathogenic fungi by zones from 10.0 to 23.0 mm, g. *Actinoplanes* - from 10.0 to 26.0 mm, g. *Frankia* - from 14.0 to 18.0 mm, g. *Geodermatophilus* - from 10.0 to 21.0 mm, g. *Micromonospora* - from 12.0 to 35.0 mm, g. *Nocardia* - from 10.0 to 30.0 mm, g. *Rhodococcus* - from 10.0 to 18.0 mm, g. *Streptomyces* - from 16.0 to 33.0 mm. From g. *Micromonospora* 2 out of 6 strains caused the formation of a zone of no growth of test bacteria from 9.0 to 14.0 mm, 1 strain of g. *Nocardia* - zones from 12.0 to 15.0 mm, 3 out of 6 strains *Streptomyces* - from 9.0 to 16.0 mm. The studies carried out will make it possible to identify new strains that are of interest as producers of new biopesticides or substances that contribute to better storage of finished agricultural products and as potential biocontrol agents.

Key words: actinobacteria, silt sediments, antimicrobial activity, phytopathogenic bacteria and fungi, biocontrol agents