

## СЕКЦІЯ 5. БІОЛОГІЧНІ НАУКИ

### ANTIBIOTIC SENSITIVITY BACTERIA OF THE GENUS *PSEUDOMONAS*

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Despite the formation in microorganisms of universal protection systems for the action of unfavorable environmental factors, their functional adaptive capabilities are limited. Microorganisms with biochemical activity towards pollutants that can be used as the basis of biological products for environmental clean-up should be tested for resistance to antibiotics. The purpose of the work is to determine the sensitivity of bacteria of the genus *Pseudomonas* (*P. fluorescens* ONU328, *P. maltophilia* ONU329, *P. cepacia* ONU327) to antibiotics. The listed strains possess phenol-destructive activity [1, 2]. Experimentally detected the sensitivity of bacteria of the genus *Pseudomonas* to erythromycin, oleandomycin, chloramphenicol. The *P. maltophilia* ONU329 strain was highly sensitive to tetracycline. All studied strains of microorganisms are resistant to ampicillin, polymyxin, and are insensitive to neomycin. The antibiotic resistance of bacteria of the genus *Pseudomonas* increased during the transition from the strain *P. maltophilia* ONU329 to the strain *P. cepacia* ONU327. Resistance to bacteria of the genus *Pseudomonas* to various classes of antibiotics, which was found to varying degrees, and their lack of synergistic effect, suggests using them as part of an association for the manufacture of a biological preparation for purifying water from phenolic compounds.

#### List of references:

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2. *Патент України* №126114. Спосіб мікробіологічної очистки води від фенолу / Іваниця В.О. та ін.. Оpubл. 11.06.2018., Бюл. №11/2018.