

Exercise 4.

Cylindrical aerobic, Gram-positive bacteria producing endospores.

Genus: *Bacillus*

Theoretical issues:

Characteristics of bacteria of the genus *Bacillus*

- Morphology
- Physiology
- pathogenic species – pathogenicity
- the role of bacteria in food poisoning

Anthrax diagnosis

Practical part:

Liquid cultures:

- *Bacillus cereus*
- *Bacillus megaterium*
- *Bacillus subtilis*

Performing the thermoprecipitation test according to Ascoli.

Microscopic examination:

- Gram staining
- staining by the Schaeffer-Fulton method

Breeding study:

- inoculating bacteria on nutrient agar

Discussion of the culture results and their interpretation.

Overview of the features of single bacterial colonies: *Bacillus cereus*, *Bacillus megaterium*, *Bacillus subtilis*