

Exercise 2

Rod-shaped, Gram-negative bacteria.

Family: *Enterobacteriaceae*

Genus: *Salmonella*

Theoretical issues:

Characteristics of bacteria belonging to the genus *Salmonella*

- Morphology
- Physiology
- Differentiation
- Pathogenicity

Diagnostics of diseases caused by bacteria of the genus *Salmonella*.

Isolation and identification of *Salmonella* - mandatory tests carried out in accordance with PN-EN ISO 6579-1:2017-04.

Overview of the media used for the detection of *Salmonella*.

Overview of the serotyping scheme.

Practical part:

Broth bacterial cultures - *Escherichia coli*, *Salmonella* Anatum, *Proteus vulgaris*

Microscopic examination - the Gram method.

Breeding study - inoculation of bacteria on: nutrient agar, MacConkey agar, Kligler agar, Christensen medium, Rappaport- Vassiliadis medium, MSR/V Medium (Semi-Solid Rappaport Medium), Mueller Kauffmann Tetrathionate Novobiocin Broth (MKTn), Xylose Lysine Deoxycholate agar (XLD agar), Brilliant Green Agar (BGA agar).

Discussion of the culture results and their interpretation.

Serological test - slide agglutination for salmonellosis.