ABSTRACT

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Title: Biochemical identification of Enterobacteriaceae - development and

comparison of methods.

Bachelor's thesis

Charles University in Prague, Faculty of Pharmacy in Hradec Králové

Course of study: medical laboratory technician

Objective of the thesis: The topic of the thesis is to describe and simultaneously compare the most important biochemical methods used for diagnosis of *Enterobacteriaceae*. The emphasis is put mainly on the development and progress in the field of microbiology.

Key findings: Biochemical tests are now performed mainly automatically. The advantages of the automated form of diagnosis are simplicity, speed, increased sensitivity and accuracy, and a reduced need for sample quantity. The main disadvantages are incomplete database of microorganisms and the inability to test sensitivity to all antibiotics.

Conclusion: Despite the far reaching development of molecular biological methods, biochemical tests still have an important role in the identification of *Enterobacteriaceae*.