

## **ABSTRACT**

Mňuková D.: Natural compounds potentially influencing neurodegenerative diseases. Diploma thesis, Charles University in Prag, Faculty of Pharmacy in Hradec Králové, Department of Pharmacognosy and Pharmaceutical botany, Hradec Králové 2022, 88 s.

This research diploma thesis draws mainly from foreign professional literature. It provides an overview of important natural substances that potentially influence neurodegenerative diseases.

The first part describes the most common neurodegenerative diseases, their characteristics, epidemiology, pathogenesis and clinical picture. These diseases include Alzheimer's disease, Parkinson's disease, Lewy body dementia, multisystem atrophy, Pick's disease and other tauopathies, Huntington's disease, spinocerebellar ataxia and amyotrophic lateral sclerosis. The second part of diploma thesis presents natural substances that have been studied in preclinical and clinical studies in the last two decades for their potential to positively affect neurodegenerative diseases. The last part discusses the contribution of these natural substances for therapy and prevention of neurodegenerative diseases.

Keywords: neurodegenerative diseases, natural compounds, Alzheimer's disease, bioactive compounds