arvensis have been reported to exhibit antioxidant activity, which was correlated to their phenolic content.

Among all the extracts, the ethanolic extracts of C.phrygius showed the highest antioxidant activity (55.41 ± 3.06%) followed by methanolic (50.35 ± 3.01%) >acetonic (30.58 ± 2.09%)> benzenic (28.71 ± 5.03%). The reason of the same plant's extracts showing different antioxidant activity may be due to the polarities of the solvents.

The highest free radical scavenging activity (53.28 ± 0.51%) was recorded on the ethanolic extracts of C.phrygius,extracted with 1 mg/ml concentration. The following free radical scavenging activities were determined as: methanolic (50,02 ± 3,11%), acetonic (24,53 ± 2,60%) and benzenic (24.08 ± 4.02%).

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DSC STUDIES OF SOLID COMPLEXES BETWEEN CYCLODEXTRINS AND FLAVONOIDS

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Cyclodextrins (CDs) − a cyclic oligosaccharides contain mostly six (CD), seven (CD) or eight (CD) glucose residues − have a relatively nonpolar cylindrical cavity, which can bind and solublize a wide variety of hydrophobic molecules like flavonoids for example quercetin and rutin. Quercetin is a flavonoid widely distributed in nature. It is a naturally-occurring polar auxin transport inhibitor, a plant-derived flavonoid found in fruits, vegetables, leaves and grains. It also may be used as an ingredient in supplements, beverages or foods. Rutin, also called rutoside is the glycoside

between the flavonol quercetin and the disaccharide rutinose. Rutin inhibits platelet aggregation as well as decreases capillary permeability, making the blood thinner and improving circulation what makes it useful in medicine and veterinary medicine. Quercetin and rutin are flavonoids with low solubility in water. To increase the bioavailability of those oral-taken drugs it is worth to check influence of the cyclodextrins on those substance. Cyclodextrins are able to improve solubility of the guest drug inserted into their cavities and make the drug absorption in the gastrointestinal tract more effective.

One of the methods to examine the complex formation between drugs and cyclodextrins is differential scanning calorimetry (DSC111). The set of parameters of interaction given by these experimental method brings information about the strength and the energetic aspects of complex formation between guest and host molecules. In this work the stability parameters from DSC111 measurements like enthalpy of melting and descomposition of *β*-cyclodextrin with quercetin and rutin are presented. The parameters are compared with each other and with available literature and the conclusions are made.

INTERACTION BETWEEN B – CYCLODEXTRIN AND SELECTED FUNGICIDES IN WATER

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Cyclodextrins are inexpensive enzyme-modified starch derivatives, which have been industrialny produced. Most popular consist of 6, 7 or 8 glucose units combined with α-1,4-glicoside bonds forming a torus structure. These compounds, due to their characteristic structure, hydrophobic interior and external polar part of molecule, includes hydrophobic ligands. Binding strength depends on how well the 'host–guest' complex fits together and on specific local interactions between surface atoms This unique property of CDs which stems from their cavitary structures led to wide uses in pharmaceuticals, foods, chemicals, cosmetics and pesticides. Cyclodextrins are able to increse solubility of the guest fungicides inserted into their cavities .

Plant protection products play a very important role in agriculture. Pesticides are used in public health to kill vectors of disease, such as mosquitoes, and in agriculture, to kill pests and fungi that damage crops. These compaunds are necessary in closed cultures where high humidity and favorable temperatures cause rapid growth of many species of fungi. Fungicides