Flavones Extracts Antioxidative Activity Evaluation In Order To Obtain And Characterise Sophorae Flores
100 Mg Extract/Tablet Obtained By Direct Compression

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The aim of this work is to establish a correlation between total polyphenolic content, antioxidative capacity in order to used the selected extract for direct compression tablet obtaining. Because flavones act as antioxidants and oxidative stress characterises inorganic lead poisoning [1] we analysed the antioxidative capacity of Sophorae flores extracts by different methods (FRAP, TEAC, photochemiluminiscence methods) [2 - 4] and we also determined the total polyphenol content (Folin Ciocelteu method) [5]. The Sophorae flores extract 100 mg/tablet direct compression obtaining used different excipients (Avicel PH 102, α-lactose monohydrate 100 mesh, Sodium Starch glycolate (Primojel), silicium dioxide 200, magnesium stearate) and two different formulas and quality control analysis were done according to pharmacopoeial standards (macroscopic characteristics – visual and olfactory properties - aspect, homogeneity, colour, smell, taste, shape and dimensions, mass uniformity, desintegration time, hardness, content of quercetol in tablets using a spectrophotometric method) [6, 7]. The greatest antioxidative capacity correlated with the total polyphenol content was established for extract B (methanol 40% extraction, acid hydrolysis of the methanolic solution, aglycon extraction with ethyl acetate at a raw material-solvent ratio 1/10, hydrolysis time of 15 hours) that was used for Sophorae flores extract 100 mg/tablet direct compression obtaining.

References