

Spectrophotometric analysis of phenolic compounds medicinal calendulas (*Calendula officinalis* L.). Revision study of existing methods.

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Abstract

Revision study of spectrophotometric methods of analysis of phenolic compounds in *Calendula officinalis* L., including pharmacopoeia, regulatory and others, previously proposed for the study of this plant species has been conducted. It was revealed that none of the existing methods will allow for proper and quantitative analysis of phenolic compounds in *C. officinalis*. A new method for the quantitative analysis of flavonoids and phenylpropanoids using solid phase extraction and spectrophotometry has been developed. Validation studies have shown that the method has satisfactory performance correctness, accuracy, linearity and repeatability.