

Phenolic Extracts from Meadowsweet and Hawthorn Flowers Have Antioxidative Properties

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From the flowers of meadowsweet and inflorescence of hawthorn the whole set of phenolic acids and flavonoids was analysed by TLC. Phenolic compounds were determined both as free ones and those liberated by hydrolysis. Moreover, ethyl ether and ethyl acetate extracts obtained from the analysed plants before and after alkaline and enzymatic hydrolyses were evaporated under reduced pressure and residues were analysed for their antioxidative properties. The weakest antioxidative activity was observed with the remaining residue after evaporation of ethyl ether extract obtained from enzymatically (β -glucosidase) hydrolysed hawthorn inflorescence water extract. The strongest antioxidative activity was noticed with the remaining residues after evaporation of ethyl ether extracts obtained from non-hydrolysed and hydrolysed in alkaline conditions of meadowsweet flower water extracts.

The residues from meadowsweet flowers exhibited stronger antioxidative properties than residues obtained from hawthorn inflorescence and can be recommended as margarine preservatives.