Table of Contents

Editorial Board

For Authors

- Authors Declaration
- Instruction to Authors
- Guide for Authors
- Copyright Statement
- Submission

For Reviewers

- Guide for Reviewers
- Reviewers Login

Subscription

Czech J. Food Sci.

Radojčić Redovniković I., Delonga K., Mazor

S., Dragović-Uzelac V., Carić M., Vorkapić-Furač J.: Polyphenolic content and composition and antioxidative activity o different cocoa liquors

Czech J. Food Sci., 27 (2009): 330-337

Cocoa liquor used in the confectionery industry comes from a wide range of geographical areas and may have different chemical compositions, sensory properties, and nutritional values. We found it interesting to study the polyphenolic content and composition of cocoa liquors for their potential use in industrial production. Six defatted samples originating from different countries were extracted with aqueous methanol (70%, v/v), and the polyphenolic profiles were determined using RP-HPLC method. According to our results, all samples of cocoa liquors have similar polyphenolic profiles, however, quantitatively varied. In the

samples, about 13 compounds were identified by comparison of their retentior times and UV spectra, and the quantified peaks were (+)-catechin, (–)-epicatechir (–)-gallocatechin, (–)-epigallocatechin, caffeic acid derivative, caffeine, and theobromine. Also, several peaks were identified as oligomeric procyanidins. Th free-radical scavenging activity was determined by the DPPH• (1,1'-dipheny-2-picrylhydrazyl) and Oxygen Radical Antioxidant Capacity (ORAC) assays. Th order of antioxidant activity of the cocoa liquors studied was the same with both methods (Madagascar > Mexico > Ecuador > Venezuela > Sao Tome >