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PII: S0308-8146(18)30087-6
DOI: https://doi.org/10.1016/j.foodchem.2018.01.078
Reference: FOCH 22267

To appear in: *Food Chemistry*

Received Date: 29 September 2017
Revised Date: 5 December 2017
Accepted Date: 10 January 2018

Please cite this article as: de Andrade Neves, N., Stringheta, P.C., Gómez-Alonso, S., Hermosín-Gutiérrez, I., Flavonols and ellagic acid derivatives in peels of different species of jabuticaba (*Plinia* spp.) identified by HPLC-DAD-ESI/MS^n, *Food Chemistry* (2018), doi: https://doi.org/10.1016/j.foodchem.2018.01.078

Flavonols and ellagic acid derivatives in peels of different species of jabuticaba (*Plinia* spp.) identified by HPLC-DAD-ESI/MS^n

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ABSTRACT

Extracts of jabuticaba peels show complex chromatographic profiles at 360 nm, with some peaks presenting UV-Vis spectra resembling those of flavonol glycosides and others resembling that of ellagic acid. The presence and tentative identification of these phenolic compounds were comprehensively studied in four species of Brazilian jabuticaba fruit – *Plinia trunciflora,* variety 'jabuticaba de cabinho'; *P. caulifora,* varieties 'jabuticaba paulista' and 'jabuticaba canaã-açu'; *P. jaboticaba,* variety 'jabuticaba sabará'; and *P. phitrantha*, variety 'jabuticaba branca-vinho' – using HPLC-DAD-ESI-MS^n. Seventeen flavonols derived from quercetin and three from myricetin and eighteen derivatives of ellagic acid and eleven of methyl ellagic acid were detected. Most of them were newly described and mainly occurred in glycosylated and acylglycosylated forms. Some compounds were missing in one variety, such as the absence of methyl ellagic acid derivatives in 'jabuticaba branca-vinho', and others only appeared in one variety, thus suggesting potential capacity for varietal differentiation.

Keywords: jabuticaba; Plinia; Myrciaria; flavonol; quercetin; myricetin; ellagic acid; methyl ellagic acid