

Valorisation of Clementine peels for the recovery of minerals and antioxidants: Evaluation and characterisation by LC-DAD-MS of solvent extracts.

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Description

Six peel samples of Clementine fruits and one sample of Mandarin cultivar peel were studied. Mineral analysis showed that all the fruit peels were good sources of K, Ca, Na and Fe. Phenolic and flavonoid contents presented values between 9686 ± 144 and 11934 ± 312 mg gallic acid equivalents/100 g dw and between 702 ± 68 and 1047 ± 54 mg Catechin equivalents/100 g dw respectively, and in both cases the highest amount was found in Cadoux cv. and the lowest in St Martin cv. whereas for carotenoid contents, the amount varied from 52 ± 1 to 76 ± 1 mg β -carotene equivalents/100g dw and Rocamora cv. was the richest fruit. The LC-DAD-MS analysis of phenolic compounds showed that hesperidin was the major flavonoid, and for the first time natsudaïdain derivative is reported. All Clementine peels exhibited DPPH scavenging activity and reducing power, the Cadoux cv. being the most active one while ...

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