

Free-radical-scavenging and antioxidant activities of secondary metabolites from reddened cv. Annurca apple fruits.

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Forty-three secondary metabolites were isolated and characterized from cv. Annurca apple fruit, an apple variety cultivated in the south of Italy. This apple cultivar undergoes a typical reddening treatment after collection. All of the compounds were characterized on the basis of their spectroscopic data. The compounds were tested for their radical-scavenging and antioxidant activities by measuring their capacity to scavenge DPPH* (2,2'-diphenyl-1-picrylhydrazyl radical), H₂O₂, and NO (nitric oxide) and to inhibit the formation of methyl linoleate conjugated diene hydroperoxides or TBARS (thiobarbituric acid reactive species).