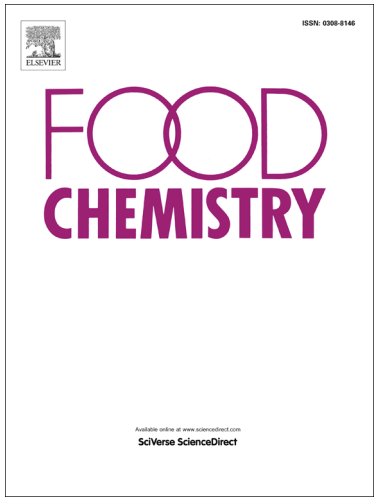

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Iridoid blue-based pigments of *Genipa americana* L. (Rubiaceae) extract: influence of pH and temperature on color stability and antioxidant capacity during *in vitro* simulated digestion

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Abstract

Iridoid blue-based pigments (IBBP) extract of *Genipa americana* L. represents a natural alternative as additive for food applications and also exerts desirable biological effects on human health. In this study the iridoids present in the extract were identified, the influence of pH and temperature on color change (ΔE) of IBBP was evaluated using a central composite design (CCD) and finally the antioxidant capacity was monitored before and after its *in vitro* digestion. Ten glucoside iridoids were detected and the main compounds identified were genipin, genipin 1-β-gentiobioside and geniposide. It was also observed an increasing of 17-18% of antioxidant capacity after the *in vitro* digestion, respectively. Among the conditions tested, the color of extract was more stable at 12 -