

## Sensory Evaluation of Pigmented Flesh Potatoes (*Solanum tuberosum* L.)

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### ABSTRACT

Pigmented potato cultivars were ranked by a consumer panel for overall acceptance, and acceptance of aroma, appearance, and flavor. Potatoes were analyzed for total phenolics, anthocyanins and carotenoids. Concentrations of total phenolics in yellow and purple potato cultivars were 2-fold greater ( $P < 0.001$ ) than in the white cultivar. Anthocyanins were low to non-detectable in white and yellow potatoes. Purple potatoes anthocyanin concentration was 20-fold greater ( $P < 0.001$ ) than in yellow potatoes. Carotenoid concentrations in white and purple potatoes were similar, while yellow potatoes had a 45-fold greater carotenoids concentration compared to white and purple potatoes. Consumers ranked the aroma and appearance of white and yellow potatoes higher than purple ( $P < 0.05$ ). However, no significant differences were observed in overall acceptance between the potato cultivars. These results suggest that consumers may be willing to consume pigmented potatoes, which are beneficial to health due to their higher antioxidant content.

### KEYWORDS

Pigmented Potatoes; Antioxidants; Sensory Evaluation; Sensory Preference; Anthocyanins; Carotenoids

### Cite this paper

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