Impact of freezing on flavonoids/radical-scavenging activity of two onion varieties

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Flavonols, anthocyanins, and radical-scavenging activity of two Portuguese onion cultivars (Branca da Póvoa, white; and Vermelha da Póvoa, red) were evaluated simulating domestic freezing conditions (–18°C). Frozen portions of onions with different periods of domestic storage at ambient temperature presented increased flavonoid content when compared with the respective composition before freezing. No significant differences were observed on radical-scavenging activity. Domestic freezing of onion portions extended its shelf life. Thus, domestic freezing can be a good alternative to prevent the loss of unused fresh onions, preserving its antioxidant capacity, since frozen onions can be a useful natural antioxidant source.

Keywords:

Allium cepa L.; anthocyanins; flavonols; domestic storage; frozen onions

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