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Evaluation of DPPH-Radical-Scavenging Activity and Antimutagenicity and Analysis of Anthocyanins in an Alcoholic Fermented Beverage Produced from Cooked or Raw Purple-Fleshed Sweet Potato (*Ipomoea Batatas* cv. Ayamurasaki) Roots

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We investigated the 1,1-diphenyl-2-picrylhydrazyl (DPPH)-radical-scavenging activity and antimutagenicity of alcoholic fermented beverages produced from cooked or raw purple-fleshed sweet potato (*Ipomoea batatas* cv. Ayamurasaki) roots. The beverage produced from cooked roots had higher DPPH-radical-scavenging activity and antimutagenicity than that produced from raw roots. To compare the anthocyanin quality contained in the beverages prepared with and without cooking, the kinds and relative amounts of pigments in the two beverages were compared. In both samples, we identified 10 peaks. The aglycones of the anthocyanins in both samples were cyanidin and peonidin. The beverage prepared with cooking contained particularly large amounts of acylated anthocyanins, and the beverage prepared without cooking contained large amounts of deacylated anthocyanins.

Keywords: [purple-fleshed sweet potato](#), [anthocyanin](#), [alcoholic beverage](#), [antimutagenicity](#), [DPPH-radical-scavenging activity](#)

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