

研究業績 英文表記

和文	
表題	品種、収穫時期の違いがキクイモの成分 および抗酸化活性に及ぼす影響
著者名	安田みどり、齋木まど香、児島百合子
所属	西九州大学健康栄養学部健康栄養学科
英文	
Title	Effects of Cultivar and Harvest Time on Chemical Components and Antioxidant Activity of Jerusalem Artichoke
Author	Midori Yasuda, Madoka Saiki, Yuriko Kojima
Affiliation	Department of Health and Nutrition Sciences, Faculty of Health and Nutrition Sciences, Nishikyushu University
Abstract	<p>Analyses of the polysaccharide inulin and total polyphenol, and measurement of antioxidant activity were carried out in order to investigate the influence of the cultivar and harvest time on the chemical components and functional properties of Jerusalem artichoke. The inulin and total polyphenol content, and the antioxidant activity were higher in the purple cultivar than in the white cultivar. With respect to the harvest time of the white cultivar Jerusalem artichoke, inulin content decreased with the delay in harvest time, from October to December and February. In addition, inulin was found to be decomposed during long-term storage, as the free sugar and the degree of polymerization of inulin decreased with the delay in harvest time. In contrast, the total polyphenol content and antioxidant activity of Jerusalem artichoke harvested in December and February were higher than those of Jerusalem artichoke harvested in October. This might be due to the defense mechanism in Jerusalem artichoke that protects that plant from low-temperature stress.</p>
keyword	Jerusalem artichoke, inulin, polyphenol, antioxidative activity

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