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Evaluation of Fiber Content According to the Cultivation Period of New Sweetpotato Varieties

Won Park¹, Mi Nam Chung¹, Koan Sik Woo¹, Hyeong-Un Lee¹, Tae Hwa Kim¹, Su Jung Kim¹, Kyo Hwui Lee¹, Sang Sik Nam^{1*}

¹Bioenergy Crop Research Institute, National Institute of Crop Science, Rural Development Administration, Muan 58545, Republic of Korea

[Abstract]

Recently, as one of the major problems in the quality of sweetpotato, occurrence of thin and long fibrous tissues in storage root acts as a negative factor when consumers eat sweetpotato. In this study, the fiber content was compared according to the cultivation period in storage roots of ‘Sodammi’ and ‘Hopungmi’, which were newly bred and developed, and in that of ‘Hogammi’, which contains a lot of fibrous tissues. To isolate of fiber from storage root, the Association Official Analytical Chemists (AOAC) method was applied for quantifying fiber present in storage root of sweetpotato. The fiber contents isolated by this method is calculated by converting the weight of the storage root. The fiber content was measured every 20 days from 60 to 120 days after planting. As a result of this study, the lowest amount of fiber was ‘Hopungmi’ (70~140 mg/100 g), and the highest amount of fiber was observed in ‘Hogammi’ (115~223 mg/100 g). ‘Sodammi’ showed an intermediate level (104~149 mg/100 g) between the fiber content of ‘Hopungmi’ and ‘Hogammi’. The fiber contents of ‘Hopungmi’ was 39% lower than that of ‘Hogammi’. As the increased cultivation periods, the fiber contents showed a tendency to decrease. In the future research, the length, thickness, and fiber contents will be investigated to compare the degree of taste inhibition.

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*Corresponding author: E-mail, ssnam@korea.kr Tel. +82-61-450-0147