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Growth Characteristics and Yield of Sweet Potato by Cultivars in Two Region

Jiyoung Kim^{1*}, Woojae Kim¹, Jeonghyun Kim¹, Chuikyun Chang¹, Seunghyun Ahn², Hyoungho Park¹, Youngjin Kim¹

¹Technology Services Division, National Institute of Crop Science, RDA, Wanju, 55365, Rep of Korea

²International Technology Cooperation Center, RDA, Jeonju, 54875, Rep of Korea

[Introduction]

The Sweet Potato (*Ipomoea batatas*(L.) Lam) is one of the most important food crops in the world. It widely grown in tropics and subtropics areas. It is a root crop that provides food, industrial application a large segment of the world. Sweet potato is higher in nutritious value than most carbohydrate foods in vitamins, minerals, protein and energy contents. This study was carried out to investigate growth characteristics and yield of six sweet potato cultivars in two region (Haenam, Jeonnam and wonju, Gangwon). The object of this study is compared growth characteristics and yield of in two region and selected suitable cultivars for each region.

[Materials and Methods]

This study was conducted during 2021-2022 in two regions. Six cultivars ('Sodammi', 'Jinyulmi', 'Danjami', 'Hogammi', 'Pungwonmi', and 'Beniharuka') was cultivated for same experimental cultivars in two region. Cut planting was carried out on May 4~7th in two region during 2021-2022, and then planting distance was 70x20 cm. This study was investigated growth characteristic (vine length, number of nod, number of branch, vine weight, number of marketable tuberous root, and weight of marketable tuberous root) and yield (marketable yield and total yield). We were investigated in accordance with Agriculture Science and Technology Survey Standards of the Rural Development Administration.

[Results and Discussion]

In Wonju, total yields in 2021 were highest in the order of 'Pungwonmi', 'Hogammi', 'Danjami', 'Jinyulmi', 'Beniharuka' and 'Sodammi'. It ranged from 2,301 to 4,737 kg/10a. In 2022, total yields were highest in the order of 'Hogammi', 'Sodammi', 'Pungwonmi', 'Beniharuka', 'Danjami' and 'Jinyulmi'. It ranged from 1,754 to 4,825 kg/10a. In Haenam, total yields were highest in the order of 'Hogammi', 'Pungwonmi', 'Sodammi', 'Jinyulmi', 'Danjami' and 'Beniharuka'. It ranged from 4,107 to 8,279 kg/10a. In 2022, total yields were highest in the order of 'Pungwonmi', 'Hogammi', 'Sodammi', 'Jinyulmi', 'Beniharuka' and 'Danjami'. It ranged from 1,896 to 3,746 kg/10a. Both region was showed that high total yield of 'Pungwonmi' and 'Hogammi' in two years. As a result, yields differs depending on climate situation by year. It is judged that difference according to the degree of water management after cut planting.

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*Corresponding author: E-mail. kjoy0860@korea.kr Tel. +82-63-238-5374