

Adaptability and yield of Korean chipping potato varieties (*Solanum tuberosum* L.) in vietnam conditions

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Abstract

The experiments were carried out in open experimental field of Field Crops Research Institute, Hai Duong, Vietnam in Winter Spring seasons 2015-2016 and 2016-2017 for finding high yielding of Korean chipping potato varieties which are adaptable to Vietnam condition. Six varieties of Korean potato (G1, G2, G4, G10, B1, B2) were experimented. The control variety (G6) was Atlantic which has long been a standard chip variety. The results showed that, for a hill, there was positive correlation between number of stems and number of tubers. The hill yield also showed highly relation to the plant height and number of tubers. Even though the growth and yield of potatoes grown in the season 2016-2017 were significant higher than these of potatoes grown in the season 2015-2016, their percentages of tubers infected by scab disease were much higher. This is probably because of irregular soil moisture content at the tuber forming duration. While G1, G6 and B1 are white flesh varieties, the remaining are yellow flesh varieties. There are two shapes types among experimented varieties: oblong (G1, G10, B1) and round shape (G2, G4, G6, B2). The total yields of varieties G1, G2, B1, B2 were higher than the total yield of the control variety from 16.5-49.4% in the season 2015-2016 and from 39.8-75.6% in the season 2016-2017. (Acknowledgement: Research supported by the Cooperative Research Program for Agriculture Science & Technology Development (Project title #PJ01264602, Project #PJ012646) Rural Development Administration, Republic of Korea, the Golden Seed Project (#213009-05-1-WT421), Ministry of Agriculture, Food and Rural Affairs (MAFRA), Ministry of Oceans and Fisheries (MOF), Rural Development of Korea (RDA), and the Korea Forest Service (KFS).

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