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## Variability of yield components of adzuki bean (*Vigna angularis* (willd.) Ohwi & Ohashi)) cultivars as affected by change of sowing time

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Generally, it is advantageous for machine harvesting to use combination of crops of upright type. Upright type adzuki beans are those varieties that were developed for machine harvesting and it has high processing efficiency. And, it is very urgent to improve existing cultivation method for high-reliability production in new plant type crops. In the existing research, the planting spacing of the upright type of adzuki beans and the contrast varieties are as follows; Chungju:  $70 \times 20$  cm, Arari: h  $70 \times 15$  cm, and Hongen:  $70 \times 10$  cm. Based on previous studies, here in this study, we tried to find proper sowing time for stable production of upright type red beans and contrast varieties. The sowing time was investigated at 5 levels in 2015, and 6 levels in 2016 (including additional tests). The investigation was based on the growth characteristics and yield components. The results showed that late sowing time had significant negative effects on the tested varieties of red bean, relative to stem length, stem thickness, pod no. per plant, seed no. per plant. However, the lodging was decreased and increased during one hundred seed weight. The sowing time showed a sensitive reaction to the change of weather in the cultivation environment. The highest yield quantity was found in case of sown on June 25 in each variety. Looking at these results, cultivation of adzuki bean at southern region in South Korea is basically based on the optimum sowing time, which can be from  $20^{th}$  June as of June  $25^{th}$  for stable production of beans.

## **Biography**

Jongsoo Ryu has completed the Doctor's degree from Chungnam National University, Korea. He is an active member of National Institute of Crop Science (NICS). At present, he is working as a Researcher in Crop Production Technology Research Division of NICS, Miryang, Korea and studying labor saving cultivation of red bean, sorghum and millet. He joined the institute in 2007 and heading for new scientific career. He is interested in improvement of the cultivation method for enhancing functional materials in grains. He is always eager to participate in the national and international conferences. He is also looking forward to meeting scientific personnel.

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