P156

Effects of different split application and adapted fertilization cultivation for established GAP guide book in acorus graminens S.

Myeong Seok Kim[1)]*, Ho Sub An[1)], Gil Ja Kim[1)], Yong Soon Kim[1)], Jin Gyung Choi[1)], Heung Gyu Park[1)], Hyun Woo Kim[1)], Seong Il Kim[1)], Young Guk Kim[2)], Chun Geun Park[2)] and Jae Gi Chang[2)]

[1)]Crop Research Division, Jeollanamdo Agricultural Research and Extension Services, Naju 58213, Korea.
[2)]Department of Herbal Crop Research, National Institute of Horticultural and Herbal Science, RDA, Eumseong 27709, Korea.

Abstract

This study is to investigate the effect of split application and adapted fertilization application cultivation in stable medicinal herbs production of *Acorus graminens* S. And it accomplished one's purpose to GAP guide manual established standard method of cultivation technology, contribute to the enlargement of farm's income. Method of fertilization application were conducted under five condition compose to standard application(N-P-K-Compost: fermented mixed oil cake fertilizer applied at 4-2-6-300㎏.10a$^{-1,}$ twofold application(N-P-K-Compost applied at 8-4-12-600㎏.10a^{-1}) cultivation. Compost (fermented mixed oil cake fertilizer) and fused phosphate applied at 100% of basal fertilizer in April 14. The split application level of standard application and twofold application(N-K) applied at 100%, 50%, 40% of basal fertilizer in April 14, 50% and 40% of top dressing were three times application (N-K) in June 1, July 15, August 15, 25% and 20% respectively. Transplanting with Naju varieties in May 12 by growing pot seedling for 40 days in 2015. Planting density were spaced 30 ㎝ apart in rows 30 ㎝ apart with black vinyl mulching on open cultivation. Plot design randomized block 3 repetition. Therefore, growth characteristics by 50% and 40% of top dressing were three times application (N-K) compared to standard application and twofold application (N-K) applied at 100% basal fertilizer, aerial part as a result were so many such amount of growth as number of leaf per plant, etc., Length of diameter and main root of subterranean part growth increment rising highest. Dried roots yields treated standard fertilizer 100% application(250 kg.10a^{-1}) compared to 100% from twofold application (N-K) applied at 50% basal fertilizer, 50% and 40% of top dressing were three times application increased by 16%, 20%. respectively.

Keywords : *Acorus graminens* S, fertilizer application, GAP guide book, growth characteristics

Corresponding author*
Myeong-seok Kim
Address : Jeollanamdo Agricultural Research and Extension Service, Naju-si, 58213, Korea
Tel and Fax : (Phone) +82-61-330-2533, (Fax) +82-61-336-8177
E-mail : kims5180@korea.kr