



Sreening of Mungbean (*Vigna radiata* L.) genotypes for nutrient stress tolerance

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Abstract:

Generally nutrient deficiency of a soil is corrected through application of chemical fertilizers. Fertilizers on one hand are costly and on the other hand it may lead to water pollution by nitrogen and phosphorus from agricultural land. Screening of genotypes for nutrient stress tolerance could be the best alternative to overcome the situation. The present study evaluates the plant growth characters with emphasis on root growth and nutrient uptake of selected mungbean genotypes and examines the efficiency of certain growth parameters for predicting their adaptation in sub-optimal nutrient environment. Some genotypes (VC 6153B, GK3 & VC 6144A) were found to be high nutrient acquiring genotypes and some (PDM 54, IPSA 25 & VO 1443 A-G) were low nutrient acquiring genotypes.

Key words: Mungbean, genotypes, nutrient stress.

Biography:

Mohammad (Md) Altaf Hossain has completed his PhD in 2004 from Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Gazipur, Bangladesh. He is a Principal Scientific Officer in the Soil Resource Development Institute (SRDI) under the Ministry of Agriculture, a premier Land and Soil Resources Service Organization since 20 December 1989. He has published more than 22 papers in peer reviewed journals in home and abroad, 15 popular articles in reputed dailies, weeklies and quarterlies and has also published 2 monographs from LAP, Germany. He has been serving as an Editorial Board Member of reputed journals. Presently he is acting as Editorial Board Member for the Soil Atlas Asia, an initiative of GSP, FAO. He is an expert in plant nutrition, soil survey and land classification for enhancing sustainable agricultural production through advocating Sustainable Land Management Practices. He has also great zeal for climate change impact studies. (Up to 100 words)

Publication of speakers:

1. Foster-Powell K., Holt S. H. A., Brand-Miller J. C. International table of glycemic index and glycemic load values. *Am J Clin Nut.* 2002; 76(1): 5-56.
2. Ayo J. A., Olawale O. Effect of defatted groundnut concentrate on the physicochemical and sensory quality of



“fura”. *Nutr & Food Sci.* 2003; 33(4):175-183.

3. Kure O. A., Bahago E. J., Daniel E. A. Studies on proximate composition and effect of flour particle size of acceptability of biscuits produced from blends of soyabeans and plantain flours. *Namida Tech-Scope J.* 1998; 3:17-21.
4. Wolever T. M. S., Jenkins D. J. A., Jenkins A. L., Josse R. G. The glycemic index: methodology and clinical implications. *Am J Clin Nut.* 1991; 54(5): 846-854.
5. Jenkins D. J., Kendall C. W., Augustin L. S., Franceschi S., Hamidi M., Marchie A., Jenkins A. L., Axelsen M. Glycemic index: overview of implications in health and disease. *Am J Clin Nut.* 2002; 76(1): 266S-273S.
6. Liu S., Willett W. C., Stampfer M. J., Hu F. B., Franz M., Sampson L., Hennekens C. H., Manson J. E. A prospective study of dietary glycemic load, carbohydrate intake, and risk of coronary heart disease in US women. *Am J Clin Nut.* 2000; 71(6): 1455-1461.
7. Dalgetty D. D., Baik B. K. Fortification of bread with hulls and cotyledon fibers isolated from peas, lentils, and chickpeas. *Cereal Chem.* 2006; 83(3): 269-274.
8. Rupa A. Z., Hussain I., Goni O. Production of potato breads. *Bang J Sci Industr Res.* 2013; 48(3): 201-204.
9. Yanez E., Ballester D., Aguayo M., Wulf H. Enrichment of bread with soy flour. *Arch Latinoam Nutr.* 1982; 32(2):417-428.
10. Mashayekh M., Mahmoodi M. R., Entezari M. H. Effect of fortification of defatted soy flour on sensory and rheological properties of wheat bread. *Int JFood Sci Tech.* 2008; 43(9): 1693-1698.

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