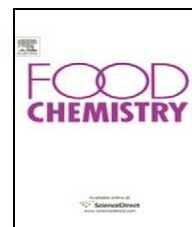




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Effects of intercropping, Bradyrhizobium inoculation and chicken manure fertilisation on the chemical composition and physical characteristics of soybean seed

Elsiddig A.E. Elsheikh ^a, Somya S.M. Salih ^b, Adil A. Elhussein ^c, Elfadil E. Babiker ^{d,*}^a Department of Soil and Environment Sciences, Faculty of Agriculture, University of Khartoum, Shambat 13314, Sudan.^b Biofertilization Department, Environment and Natural Research Institute, National Center for Research, Sudan.^c Botany Department, Faculty of Science, University of Khartoum, Khartoum, Sudan.^d Department of Food Science and Technology, Faculty of Agriculture, University of Khartoum, Shambat 13314, Sudan.

abstract

A field experiment was carried out to investigate the effect of two Bradyrhizobium strains (local and imported), chicken manure fertilisation (7 t/ha) and intercropping with sorghum on the chemical composition and physical characteristics of soybean seed. For both monocropping and intercropping systems, moisture content slightly increased for both systems and for all treatments, while ash, fibre and carbohydrate contents fluctuated for both systems and treatments. The protein content of the seeds was significantly ($p \leq 0.05$) increased for all treatments. Tannin content was increased significantly ($p \leq 0.05$) with a concomitant decrease in protein digestibility for both systems and for all treatments. The seed weight (100 seeds), hydration coefficient and cookability were increased for all treatments. Mineral composition of the seeds was increased and the increment varied with different treatments.

Keywords: Intercropping, Inoculation, Fertilization, Chemical composition, Soybean.

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Elsiddig A.E. Elsheikh, Somya S.M. Salih, Adil A. Elhussein, Elfadil E. Babiker **Volume 112, Issue 3**
pp. 525-766 (1 February 2009)