

Performance of Soybean Genotypes Under Rhizobia Inoculation Across Three Agro Ecologies of Nigeria

Kehinde Dele Tolorunse

Email: kehinde.tolorunse@futminna.edu.ng

Department of Crop Production,
Federal University of Technology,
Minna, Nigeria.

Abstract

There is need to improve soybean yield potentials per unit area in the tropics, at least to the world average productivity level. To achieve this, attention has to be paid to the selection of high yielding and stable genotypes through plant breeding improvement programmes. Twenty-four soybean lines were investigated across three agro ecological zones in Nigeria to determine their productivity.

In each of the sites, the experiments were laid out in randomized complete block design with three replications. Data were collected on growth and yield parameters. Results indicated that seven lines (TGx 1987-10F, TGx 1990-55F, TGx 1990-46F, TGx 1990-57F, TGx 1989-49FN, TGx 1989-48FN and TGx 1989-40F) were identified to be high yielding in both Northern and Southern Guinea Savannah, while TGx 1989-40F was high yielding in Sudan Savannah. This indicates that environmental differences could be responsible for soybean productivity from one agro ecology to another. Therefore, soybean lines could be recommended for cultivation according to their performances in a given environment

Biography:

Kehinde Dele Tolorunse has completed his PhD at the age of 34 years from Federal University of Technology Minna, Nigeria. He is a Lecturer at the Department of Crop Production, Federal University of Technology Minna, Nigeria. He has published more than 15 papers in reputed journals and has been serving as an editorial board member of repute.