Adaptation of Jatropha curcas L. in the agroecological environments of Kenya: genotype × environment interactions analysis

Ngugi, Kahiu; Nabiswa, Alex; Kinama, Josiah

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Abstract:

Jatropha curcas L. has the potential for becoming an important feedstock for biodiesel and bioenergy in Kenya. The objective of this study was to evaluate the e"ects of genotype X` environment interaction and to determine the stability of performance of the currently grown genotypes. Methodology: A field trial consisting of 49 genotypes was laid out in a lattice design of two replications in two contrasting agroecological environments, namely Thika and Kibwezi, for 2 years. The Eberhart and Russell stability method was used to measure the performance of yield components of the 49 genotypes. Results: Environmental variance influenced the performance of genotypes for all the traits measured and genotype#×#environment interactions were important in determining their performance.