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RAPD based assessment of genetic diversity in 16 cultivated accessions of *Sorghum* in Morocco

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Sorghum (*Sorghum bicolor*) is one of the most wide spread cultivated grass species in the world. In this study, we analysed the diversity and genetic relationship among 16 accessions of local Moroccan sorghum (*Sorghum L Moench bicolor*) by using 40 random Amplified Polymorphic DNA (RAPD) markers. 315 alleles were detected ranging between 225 and 2995 bp, 189 (60%) were polymorphic and informative to differentiate the accessions. The number

of alleles per locus varied, depending on the accession, from 3 to 11 with an average of 8.66 alleles per locus. The dendrogram, based on UPGMA analysis using similarity of Jaccard coefficient grouped the accessions according to their geographical origin. RAPD markers proved to be a reliable, rapid and practical technique of revealing phylogenetic diversity, which is, should prove valuable for sorghum breeding programs.

Biography

Rajae Alloudane is a PhD student working in the Biotechnological Valorization of Microorganisms, Genomics and Bioinformatics laboratory at Abdelmalek Essaadi University of Tangier Tetouan, Morocco. Her thesis project is the study of the genetic diversity of cultivated sorghum by molecular markers.

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