

Genetic Diversity of Iraqi Date Palms Revealed By Microsatellite Polymorphism

Hussam S.M. Khierallah¹

University of Baghdad, College of Agriculture, Date Palm Research Unit, Abu-Ghraib, Baghdad, Iraq

Saleh M. Bader

State Board of Agricultural Researches, Ministry of Agriculture, Baghdad, Iraq

Michael Baum

The International Center for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria

Alladin Hamwiah

The International Center for Agricultural Research in the Dry Areas (ICARDA), Aleppo, Syria

Genetic diversity in 30 date palm (*Phoenix dactylifera* L.) cultivars in Iraq representing 24 female and six male cultivars was investigated using 22 microsatellite [simple sequence repeat (SSR)] primers. The tested SSR markers showed a high level of polymorphism. A total of 188 alleles were detected at the 22 loci ranging from three to 21 with an average of 8.54 alleles per locus. The average of heterozygosity for all cultivars was 0.503; genetic distance among cultivars varied from 0.171 to 0.938 indicating diverse relationships. The cultivar Ghanami Akhder was highly divergent from 'Ghnam Ahmer', whereas 'Jamal Al-Dean' was very closely related to 'Qitaz'. Unweighted pair group method arithmetic average ordered date palm cultivars into two main clusters. Principal coordinate analysis exhibited the similar clusters of cultivars as in the dendrogram.

Key Words: *Phoenix dactylifera* • SSR markers • molecular characterization

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التنوع الوراثي لنخيل التمر العراقي الذي تظهره الأختلافات في التوابع القصيرة المتكررة لدينا

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