

**A PCR BASED APPROACH TO IDENTIFY DNA  
POLYMORPHISM AMONG ECONOMICALLY IMPORTANT  
DATE PALM (*PHOENIX DACTYLIFERA* L.) VARIETIES  
GROWN IN HOFUF REGION.**

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There are over 400 cultivars of dates in Kingdom of Saudi Arabia spread throughout the country. Our observation is mainly centered on economically important cultivars of date palm grown in Hufuf region. There are nearly 35 cultivars grown in this region. The Ruziz variety accounts for about 55-60% of total date production in this area. Khlas which is regarded as one of the best cultivars grown in this region come next and constitutes 15% of total production with Shaisi (5%) and shbibbi (5%) and all other accounting for the rest. In the present communication we are reporting a PCR-based approach to identify DNA polymorphism in six economically important date palm cultivars grown in Hofuf region. A marked variation in amplification products with four different sets of primers, was observed among the cultivars studied. Restriction digestion pattern of these PCR amplified fragments also revealed a cultivar specific variation in restriction profile. A variation in amplification product of the cultivars upon use of different sets of primers provides a possibility for their use in developing probes, which can be used to differentiate the economically important date palm cultivars at the DNA level, while variation in restriction profile of PCR amplified product can be exploited to develop sex specific markers. A facile method for isolating genomic DNA from different plant part of date palm along with standardization of PCR conditions are discussed.