Exported Abstract record(s)

Rapid DNA isolation and ISSR-PCR optimization for fibrous leaf tissues of wild palms of southern Peninsular India. Umesh Madar; Devarajan Thangadurai; Suyamindra Kulkarni; Pramod Gai; Jeyabalan Sangeetha ; University of Agronomic Sciences and Veterinary Medicine of Bucharest , Bucharest , Romania , Scientific Bulletin. Series F. Biotechnologies , 2019 , Vol. 23 , pp. 42-48

http://biotechnologyjournal.usamv.ro/pdf/2019/Art6.pdf
https://www.cabdirect.org/cabdirect/abstract/20209904887

Isolation of pure DNA is a significant component for PCR amplification and DNA fingerprinting analysis of plant species. Leaves of wild palms are generally hard, enormously fibrous, and are difficult to grind. The 25 species belong to 9 genera such as Areca (one species), Arenga (one species), Bentickia (one species), Borassus (one species), Calamus (fifteen species), Caryota (one species), Corypha (one species), Phoenix (three species) and Pinanga (one species) of the family Arecaceae and were collected from various parts of Southern India. An experiment was done to isolate the high molecular weight DNA from fibrous young leaves of twenty five wild palm species followed by several modifications in the novel CTAB DNA isolation method. DNA was isolated with slight modification in the CTAB method with liquid nitrogen and the quantification of obtained DNA was measured using a spectrophotometer and 0.8% agarose gel electrophoresis. DNA was further diluted with T10E1 buffer and optimized for ISSR-PCR amplification. Hence, the described protocol has proven to be advantageous due to its simple, efficient, affordable reagents resulting in a high molecular weight DNA of good quality from leaf fibrous tissues.