

MICROSATELLITE MARKERS (SSR'S) FOR REVEALING POLYMORPHISM AND IDENTIFICATION AMONG WILLOWS CLONES

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Received-02.09.2019, Revised-22.09.2019

Abstract: Microsatellite markers (SSR's) were found effective in revealing polymorphisms among twenty two different species/clones of Willows. Out of 10 SSR primers only seven primers produced SSR profiles with intense banding pattern and generated a unique set of amplification products. Out of the total 24 scorable bands, 16 showed polymorphism and eight bands exhibited monomorphism with an average of 3.43 bands per primer. A unique band of approximately 100 bp was generated by SB-80 for *S. udensis*. Jaccard's similarity correlation coefficient values was highest value (0.98) between two male genotypes of *Salix tetrasperma* [*S. tetrasperma* (TFB) and *S. tetrasperma* (LNM)] and lowest (0.64) between *S. udensis* and *S. nigra*, *S. udensis* and *S. tetrasperma* (TWE) and between *S. matsudana* (PN-722) and *S. pierotii* and 799. The dendrogram exhibited six clear clusters with *S. udensis* coming out as an outline. SSR primer namely SB-80 produced unique band present only in *S. udensis*. This information could be used for characterizing particular genotypes.

Keywords: Clones, Microsatellite markers, Willows

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