

Development of DNA Fingerprints in Selected Medicinal Plants of India

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Abstract : Conventionally, morphological descriptors are routinely used for establishing the identity of varieties. But these morphological descriptors suffer from many drawbacks such as influence of environment on trait expression, epistatic interactions, pleiotrophic effects etc. Furthermore, the paucity of a sufficient number of these descriptors for unequivocal identification of increasing number of reference collection varieties enforces to look for alternatives. Therefore, DNA based finger-print based techniques were selected to define the systematic position of the selected medicinal plants like *Plumbago zeylanica*, *Desmodium gangeticum*, *Uraria picta*. DNA fingerprinting of herbal plants can be useful in authenticating the various claims of medical uses related to the plants, in germplasm characterization and conservation. In plants it has not only helped in identifying species but also in defining a new realm in plant genomics, plant breeding and in conserving the biodiversity. With world paving way for developments in biotechnology, DNA fingerprinting promises a very powerful tool in our future endeavors. Data will be presented on the development of microsatellite markers (SSR) used to fingerprint, characterize, and assess genetic diversity among 12 accessions of both *Plumbago zeylanica*, 4 accessions of *Desmodium gangeticum*, 4 accessions of *Uraria Picta*.

Keywords : *Plumbago zeylanica*, *Desmodium gangeticum*, *Uraria picta*, microsaetllite markers

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