



## Assessment of Variation for Pterostilbene in Heartwood of *Pterocarpus marsupium* Roxb., a Vulnerable Medicinal Tree from Central India

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**Abstract:** Variation studies for the Pterostilbene, a highly reliable quality control marker for antidiabetic *Pterocarpus marsupium* was carried out to identify the appropriate populations for conservation. Heartwood core samples were extracted from different forest divisions of Madhya Pradesh and subjected to quantification employing HPLC technique. Analysis revealed that highest average percent of pterostilbene was recorded in samples from Sara (0.47%) followed by Lamta (0.42) and Barha (0.41). Bahoriband population recorded highest range of variation i.e., 0.12- 0.97% for pterostilbene followed by Lamta (0.15-0.98%) whereas, lowest was recorded in samples from Barha population (0.11-0.56). In consonant with the range, estimates of the coefficient of variations also exhibited similar trend. Highest CV was recorded in samples from Bahoriband followed by Lamta and lowest in Barha. Considering vulnerable status of *P. marsupium* and importance of heartwood, Bahoriband and Lamta populations are the suitable candidates for conservation as both harbours large variation for pterostilbene.

**Keywords:** Indian kino, Marker, Conservation, Heartwood, Endangered

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