

ORIGINAL RESEARCH ARTICLE

# Optimizing harvest time of *Cassia angustifolia* Vahl Pennel. for maximum total sennoside content: A fast UV spectrometric analysis approach

SNEHA A<sup>2#</sup> • NIRANJANA KUMAR A<sup>1#</sup> • KOTESH KUMAR J<sup>1\*</sup> • SATYA SRINIVAS KVN<sup>1\*</sup>  
KIRAN BABU GD<sup>1</sup> • VENKATESH B<sup>1</sup> • JNANESHA AC<sup>1</sup> • VINUTHA K<sup>2</sup>

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## Key Words

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Plant Parts

Senna

Total Sennosides Content

UV-Vis Spectrophotometer

## ABSTRACT

*Cassia angustifolia*, commonly known as Senna, is a well-known medicinal plant used in Ayurvedic formulations as a natural laxative. The medicinal property of Senna is primarily attributed to dimeric anthraquinone glycosides, known as sennosides. The qualitative and quantitative expression of secondary metabolites in medicinal and aromatic plants is influenced by various factors, including harvesting time, geographic location, seasonal changes, and cultivation practices. In this study, we investigated the impact of different harvesting times on the Total Sennosides Content (TSC) in different parts of Senna. The plant was harvested at five different time intervals during a three-and-a-half-month period from December 2019 to March 2020. The TSC was determined by using UV-Vis Spectrophotometer. Our results showed a significant increase in TSC in all parts of the plant with an increasing harvesting time of up to 105 days. This study provides new insights into the effect of harvesting time on the quality and quantity of sennosides in Senna, which could help optimize the harvesting practices and improve the therapeutic potential of this valuable medicinal plant.