



# Phytochemical, UV-Visible and FTIR Assessment along with *in vitro* Antioxidant Activity of Methanolic Extract of *Tephrosia purpurea* Linn Root

Pranita S. Jirvankar <sup>at</sup>, D. Khobragade <sup>at</sup>, S. Chandewar <sup>at</sup>, A. Pimpale <sup>at\*</sup>,  
R. Gawali <sup>at</sup>, A. Lokade <sup>at</sup>, A. Maske <sup>bt</sup> and R. Agrawal <sup>bt</sup>

<sup>a</sup> Department of Pharmaceutical chemistry, Datta Meghe College of Pharmacy, Datta Meghe Institute of Medical Sciences (Deemed to be University), Wardha-442004, Maharashtra, India.

<sup>b</sup> Bajiraoji Karjekar College of Pharmacy, Sakoli-441802, Maharashtra, India.

### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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### ABSTRACT

**Aims:** The original phytochemical, UV-Visible, and FTIR Spectral estimation of *Tephrosia purpuria* root was the subject of this study. Natural phytoconstituents were all found in methanolic extracts from the root of *Tephrosia purpuria*.

**Study Design:** Experimental research work.

**Methodology:** Furthermore, using UV Visible spectrophotometer equipment, the extract was scanned in the range of 380 to 900 nm, and the characteristic peaks were identified.

**Results:** The UV-VIS data indicated peaks at 382.70, 413.68, 536.18, 610.37, and 664.61 nm, with absorption values of 2.7930, 2.5932, 0.3114, 0.4185, and 1.5966 respectively. The presence of Natural phytoconstituents is confirmed by FTIR spectra. The findings confirm that this plant has key bioactive elements that are beneficial to our health, indicating that more research is needed.

**Conclusion:** Natural phytoconstituents were all found in methanolic extracts from the root of *Tephrosia purpuria*.

<sup>†</sup> Assistant Professor;

\*Corresponding author: E-mail: [adityapimpale@gmail.com](mailto:adityapimpale@gmail.com);



*Aditya Pimpale*  
Officiating Principal  
Bajiraoji Karanjekar  
College of Pharmacy, Sakoli