

## Editor's Note



**Editor-in-chief**  
**Thomas Efferth**  
Johannes Gutenberg  
University, Germany

### Editor Note on Techniques to Isolate and Characterize Bio Active Compounds

Medicinal and aromatic plants Volume 5, Issue 3, comprises of 12 research articles and 3 editorials.

$\beta$ -Lapachone (3, 4-dihydro-2,2-dimethyl-2H-naphthol [1,2-b] pyran-5,6-dione) is aliphilic ortho-naphthoquinone, having antifungal, antimicrobial, antitumor, antiviral and anti-trypanosomal activities. It is originally isolated from the lapacho tree of South America. The current study deals with the isolation of  $\beta$ -Lapachone accomplished by preparative TLC, further the compound was characterised by  $^1\text{H}$  NMR, Mass and FT-IR spectral analysis. A significant antifungal activity was recorded against *Candida albicans* and *Aspergillusnigrus* species [1].

The aim of this study is to investigate the analgesic, antipyretic and anti-inflammatory activities of aqueous extracts of *Aloe volkensii* and scientific validation of its efficacy. Results of the study articulate that the opioids of *Aloe volkensii* have contributed to the analgesic effects and the phytochemicals contributed to the anti-inflammatory and antipyretic activities. This study is in line with the traditional use of *A. volkensii* to treat various diseases associated with pain, fever and inflammation [2].

Baharetha et al. investigated the anti angiogenic effect of the *Nigella sativa* seeds extracts prepared from varying extraction pressure and temperature. GC-MS analysis study reveals the presence of antioxidant compounds and its anti-angiogenicactivity confirmed by the cell viability study on human umbilical vein endothelial cells [3].

The study developed by Sathelly et al. discusses about the effective protocol for the in vitro plantlets multiplication from leaf disc explants of *Piper longum* L., a medicinally important plant. They have developed MS medium supplemented with 2 mg/l BAP+1 mg/l kinetin+3% Glucose is found to be the best combination for maximum multiple shoot induction frequency. Author proposed this is a most suitable plant tissue culture method for the economically important medicinal plant [4].

### References

1. Karthikeyan R, SaiKoushik O, Kumar PV (2016) Isolation, Characterisation and Antifungal Activity of  $\beta$ -Lapachone from *Tecomariacapensis* (Thunb.) Spach Leaves. *Med Aromat Plants* 5: 239.
2. Safari VZ, Kamau JK, Nthiga PM, Ngugi MP, Orinda G, et al. (2016) Antipyretic, Anti-inflammatory and Analgesic Activities of Aqueous Leaf Extract of *Aloe volkensii* in Albino Mice. *Med Aromat Plants* 5: 240.
3. Baharetha HM, Nassar ZD, Ahamed MK, Aisha AFA, Alfadly SO, et al. (2016) Use of *Nigella sativa* Linn. Supercritical Carbon Dioxide Extract for Targeting the Angiogenesis Cascade. *Med Aromat Plants* 5: 241.
4. Sathelly K, Podha S, Pandey S, Mangamuri U, Kaul T (2016) Establishment of Efficient Regeneration System from Leaf Discs in Long Pepper an Important Medicinal Plant (*Piper longum* L.). *Med Aromat Plants* 5: 248.