

## Phytotherapy of hypertension in Morocco

**Mohamed Eddouks**

Moulay Ismail University, Morocco

There is an increasing interest in the health and wellness benefits of herbs and botanicals. The reason behind this interest is the fact that herbs and botanicals might offer a natural safeguard against the development of certain pathological conditions and are used in several cultures as a putative treatment for some diseases. One such area may be the lowering of blood pressure activity. Ethnopharmacological surveys in Morocco demonstrated the use of 21 plant species belonging to different families in the treatment of ailments related to high blood pressure. Our review establishes the fact that most plants used in the traditional treatment of hypertension effectively reduce blood pressure when used with different extraction procedures and protocols. In most cases, the hypotensive effect is accompanied by a diuretic activity or a vasorelaxant effect. This study confirms the richness of our traditional medicine and supports the use of plants in the treatment of hypertension in Morocco.

### Biography

Mohamed Eddouks is Professor at Moulay Ismail University, Morocco. After his post-doctoral fellowship at Department of Physiology, Faculty of Medicine of Montreal, Canada, he is working for the last 12 years on medicinal plants. His contribution to this field includes 3 international books and more than 70 peer-reviewed articles and book chapters of international repute. He is serving as editorial member of some prestigious journals. He has been the Dean of Polydisciplinary Faculty of Errachidia from 2008 to 2012.

## Comparative hepatoprotective and *in-vivo* antioxidant activities of selected Indian medicinal plants

**Mohammed Fazil Ahmed<sup>1</sup> and A. Srinivasa Rao<sup>2</sup>**

<sup>1</sup>Nizam Institute of Pharmacy & Research Center, India

<sup>2</sup>Bhaskar Pharmacy College, India

The present study deals with comparative evaluation of hepatoprotective and *in-vivo* antioxidant activities of *Melia azedarach* Linn., *Catharanthus rosea* and *Brassica oleracea* L. var. *capitata* ethanolic leaves extracts against simvastatin induced hepatotoxicity in rats. Hepatotoxicity in rats was induced by simvastatin (20 mg/kg p.o. for 30 days) and the protective effect of *Melia azedarach* Linn., *Catharanthus Rosea* and *Brassica oleracea* L. var. *capitata* (300 mg/kg/p.o. and 500 mg/kg/p.o.) was identified by estimating marker enzymes. Simvastatin treated rats shows significant changes in biochemical parameters and in antioxidant enzymes, i.e., increases in serum glutamate pyruvate transaminase (SGPT), serum glutamate oxaloacetate transaminase (SGOT), alanine phosphatase (ALP), serum bilirubin and decrease in total proteins content, and cause decrease in the antioxidant enzymes such as glutathione peroxidase (GPx) glutathione-s-transferase (GST), superoxide dismutase (SOD) and catalase (CAT) which were restored towards normalization in extracts treated rats. The results revealed that the ethanolic extracts of *Melia azedarach* Linn., *Brassica oleracea* L. var. *capitata* and *Catharanthus rosea* (300 mg/kg/p.o. and 500 mg/kg/p.o.) exhibited potent hepatoprotective and *in-vivo* antioxidant. The hepatoprotective effect of extracts was further confirmed by histopathological studies of liver, which shows normal architecture of liver cell than compared with hepatotoxicant group. Possible mechanism for hepatoprotective activity may be due to free radical scavenging potential in extracts.

### Biography

Mohammed Fazil Ahmed has completed his M.Pharmacy (Pharmacology) at the age of 25 years from Annamalai University and submitting Ph.D. thesis in October 2013, specialization in Pharmacology from Jawaharlal Nehru Technological University Hyderabad. He is the associate Professor, of Nizam Institute of Pharmacy, India. He has published more than 20 papers in reputed journals and serving as a reviewer for many international and national journals.