



---

**ROLE OF BIOENHANCER IN THE TREATMENT OF ASTHMA****M. ASHOKA SHENOY<sup>1\*</sup>, A.R.SHABARAYA<sup>1</sup>, KARUNAKAR HEGDE<sup>1</sup>**<sup>1</sup>Srinivas College of Pharmacy Valachil, Farangipete Post, Mangalore – 574143\*Corresponding Author: E Mail: [shenoyscp@gmail.com](mailto:shenoyscp@gmail.com)Received 25<sup>th</sup> Oct. 2017; Revised 2<sup>nd</sup> Nov. 2017; Accepted 18<sup>th</sup> Dec. 2017; Available online 1<sup>st</sup> April 2018**ABSTRACT**

The alcoholic extract of *Moringa oleifera* at 200 and 400 mg/kg doses were tested for anti-asthma activity against passive paw anaphylaxis by measuring paw volume using plethysmograph, mast cell stabilization by *ex-vivo* challenge of antigen in sensitized rat intestinal mesenteries and vascular permeability induced by acetic acid in mice. Dexamethasone, Prednisolone and Indomethacin were used as standard reference drugs. *Moringa oleifera* exhibited significant anti-asthmatic activity in all above three models and activity was comparable with standard drug. The findings from various studies reveal that the anti-asthmatic activity of *Moringa oleifera* may be due to the mast cell stabilizing potential, suppression of IgE, and inhibition of release of inflammatory mediators.

**Keywords: Moringa oleifera, antiallergic, anaphylaxis, mast cell stabilization, vascular permeability**

**INTRODUCTION**

Asthma remains the most common chronic respiratory disease in India affecting a major portion of the population. Although asthma is often believed to be a disorder localized to the lungs, current evidence indicates that it may represent a component of systemic airway disease involving the entire

respiratory tract, and this is supported by the fact that asthma frequently coexists with other atopic disorders, particularly allergic rhinitis<sup>1</sup>.

Despite significant improvements in the diagnosis and management of asthma over the past decade, as well as the availability of