Application of microwave-assisted extraction to the fast extraction of plant phenolic compounds in *Lafuensia pacari* A. St.-Hil

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The aim of the present study was to evaluate the antiasthamatic activity of extract obtained from seeds of the *Vigna mungo* L. Hepper. Supercritical carbon dioxide extract of seeds were prepared. Antiasthamatic activity of SCE was evaluated by using various experimental models like milk induced leucocytosis and eosinophilia, mast cell degranulation in mice, histamine induced bronchospasm in guinea pigs, studies on isolated guinea pig tracheal strip preparation and passive paw anaphylaxis in rats. VMSCE (100 mg/kg) and VMSCE (200 mg/kg) showed significant inhibition of leucocytosis and eosinophilia induced by milk. VMSCE (200 mg/kg) and VMSCE (400 mg/kg) showed significant protection against degranulation of mast cells. Study on isolated guinea pig trachea indicated a relaxant effect of VMSCE (2 mg/ml) on histamine-contracted isolated guinea pig tracheal smooth muscles. VMSCF extracts showed dose dependant inhibition of edema induced in the rat paw. Percentage inhibition of edema in VMSCE (200 mg/kg) is 71.19±1.06 and VMSCE (400 mg/kg) is 84.5±0.22. VMSCE showed significant antiasthamatic activity in the animal models. It may be due to ability of extract to reduce in leucocyte and eosinophil count, protection against degranulation of mast cells, relaxation of tracheal smooth muscles. Glycosides, saponins, flavonoids, etc., present in VMSCE might be responsible for the antiasthamatic activity.

Biography
Dhumal Jeevan Suresh has completed his MPharm in Pharmacognosy from Savitibai Phule Pune University and he is pursuing PhD from Savitibai Phule Pune University at Amrutwahini College of Pharmacy. He is an Assistant Professor of Pharmacognosy in Rajmata Jijau College of Pharmacy, Dudulgaon, Pune. He has published more than 3 papers in reputed journals and presented posters in more than 5 conferences.

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