

## Abstract

Sunbhanich, M.; Trisdikul, P. and Bumrungwong, N. (1999): Comparative Study of Bronchodilatation and Cardiotoxicity of Medicinal Plants Used in the Treatment of Broncheal Asthma , Research Report.

A number of medicinal plants have been claimed to be effective in the treatment of broncheal asthma, a chronic disorder of the respiratory tract. The problem of asthma therapy with some drugs concern with cardiotoxicity of the agents which can act on both trachea and heart. The problem may be life threatening especially in asthmatic patients with cardiac diseases. Objectives of the present investigation were to screen the pharmacological effects of medicinal plants on guinea-pig atrial and tracheal preparations. Eleven medicinal plants were used in the study , i.e. *Portulaca oleracea* Linn., *Schefflers venulosa* Harms., *Trianthema portulacastrum* Linn., *Millingtonia portulacastrum* Linn., *Eupobia hirta* Linn., *Zingiber cassumunar* Roxb., *Randia siamensis* Craib., *Vernonia cinerea* Less., *Bambusa spp.*, *Zingiber ottensii* Veleton and *Coccinia grandis* (L.) Veigt. Eight of them can relax tracheal smooth muscle, mechanism of smooth muscle relaxing action might be different. Only four of them showed selectivity for tracheal smooth muscle.

**Key Words:** asthma, medicinal plants , cardiotoxicity