

## HYPOTENSIVE ACTIVITY OF CRUDE EXTRACT OF MARINE RED ALGAE, *GRACILARIA* SP. IN RATS

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### Abstract

*Hypotensive properties of the crude extract of Sri Lankan marine red algae Gracilaria sp. of the family Gracilaraceae were investigated on anaesthetized rats using two doses (250 or 500mg/kg) given intraperitoneally. The results show that the crude extract possesses antihypertensive properties. The extract induced an immediate fall in systolic blood pressure (within 5 min) which was short-lived with the lower dose and sustained with the higher dose. The precise mode of the antihypertensive action is uncertain but is likely to be mediated via decreased sympathetic activity.*

**Key words :** *Gracilaria* sp, red algae, hypotensive, antihypertensive, rats, crude extract, sympathetic activity.

### 1. Introduction

We have initiated a screening programme of Sri Lankan red algae for potential biomedical and recently reported gastroprotection activity in a crude extract prepared from *Jania* sp (Family Corallinaceae) on ethanol-induced gastric lesions in rats (1).

In this paper we wish to report blood pressure lowering activity of a crude extract of *Gracilaria* sp. (Family Gracilaraceae) one of the commonest red algae found on the rocky reefs of southern coastal waters of Sri Lanka.

### 2. Materials and Methods

Fresh specimens of red algae, *Gracilaria* sp. (Family Gracilaraceae) were collected from the rocky reef of Beruwala on the southern coast of Sri Lanka.

The thallus of this algae (length usually between 3-9cm) has compressed axes with characteristic branching emanating from the sides of the flattened axes. A voucher specimen is deposited at the Museum of the Department of Zoology, University of Colombo, Sri Lanka (Registration No. R. A. 10).

6 Kg of this algae was air dried for 24h in shade and stored in 1:1 dichloromethane, methanol (Petroleum Corporation, Colombo, Sri Lanka) solvent system (10L) at  $30 \pm 1^\circ\text{C}$ . After 14 days, the solvents were decanted off and