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**ABSTRACT 214**

**ANTIHYPERTENSIVE EFFECT OF ORTHOSIPHON STAMINEUS EXTRACTS IN SPONTANEOUS HYPERTENSIVE RATS: A PRELIMINARY STUDY**

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**INTRODUCTION**

The effect of active phenolic and flavonoid components in OS includes a continuous decrease in systolic blood pressure by virtue of a vasodilating action, a decrease in cardiac output and the diuretic action in eliminating sodium.

**OBJECTIVE**

The main objective of the study was to investigate the effectiveness of standardized methanol extracts of OS as anti hypertensive agent at different dosages.

**METHODS**

The antihypertensive effects of OS extracts were examined by treating different groups of SHR with a single oral administration (10 ml/ kg) for 14 days. The rats were randomly divided into five different groups; Group 1 received Irbesartan (IR) drug (20 mg/kg), Group 2 received distilled water; and treatment groups (Group 3, 4 and 5) were treated with OS extracts at three different doses of 250 mg/kg, 500 mg/kg and 1000 mg/kg respectively. Systolic blood pressure (SBP) was measured by using tail cuff method on the day 0 (before initiating treatment) and at the end of observation period (day 14).

**RESULTS**

The SBP was reduced significantly at the end of treatment (day 14) compared to the pre treatment day (day 0) at these dosage: 250 mg/kg (p-value: 0.012); 500 mg/kg (p-value: 0.006); 1000 mg/kg (p-value: 0.044).

**CONCLUSION**

Standardized methanol extracts of OS was an effective anti hypertensive agent in reducing blood pressure of spontaneous hypertensive rats even at a minimal dose of 250ml/kg.

Key words: Orthosipon stamineus, antihypertensive effects