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P36: IN VIVO ANTI-PYRETIC ACTIVITY OF THE AQUEOUS CRUDE EXTRACT OF APONOGETON RIGIDIFOLIUS

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Background: Plants based medicinal system have been used for thousands years. Side effects of allopathic medicines have led to use the herbal products as the ailment for various diseases. *Aponogeton rigidifolius* is an endemic aquatic plant to Sri Lanka. It has been consumed as green leafy vegetable. Previously reported the anti-inflammatory and anti- nociceptive activity of the aqueous extract of flowers and stalks of *A. rigidifolius*. Inflammation is associated with fever.

Objective: This study was aimed to assess the anti-pyretic activity of the *A. rigidifolius* aqueous extract.

Method: Flowers and their stalks of *A. rigidifolius* were collected from Ratnapura, Sri Lanka. Powder material were used for the extract preparation. Extract was prepared by the conventional ayurvedic method. Brewer's yeast induced pyrexia in Wistar rats model was used to determine the anti-pyretic activity. Healthy adult male Wistar rats in negative and positive control groups were orally administered 1.0mL of distilled water and 1.0 mL of 100 mg/kg b.w. of acetyl salicylic acid respectively. The test group received 1.0 mL of 90 mg/kg b.w of *A. rigidifolius* aqueous extract which was found as the effective dose in the anti-inflammatory activity. Temperature was measured every hour for 4 hours after drug administration.

Results: Sub cutaneous injection of yeast caused the elevated temperature in all rats used in this study. Acetyl salicylic acid showed the significant reduction in temperature at the 2^{nd} , 3^{rd} and 4^{th} hour whereas *A. rigidifolius* extract showed significant temperature reduction at the 3^{rd} and 4^{th} hour. Percentage reduction in temperature at the 4^{th} hour was seen in 65.5 and 60.4 in acetyl salicylic acid and *A. rigidifolius* extract respectively.

Conclusion: This study confirms the aqueous extract of flowers and their stalks of *A. rigidifolius* extract possess the anti-pyretic activity in yeast induced pyrexia model in Wistar rats.

Key words: *in-vivo*, anti-pyretic, *Aponogeton rigidifolius*