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**ABSTRACTS**

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## ANTI-HISTAMINE ACTIVITY OF *Acronychia pedunculata* LEAVES

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*Acronychiapedunculata* ("Ankenda" in Sinhala, Family: Rutaceae) is a small evergreen tree widely distributed in rainforests in Sri Lanka. The leaves, stems, roots and fruits have been used for centuries in folk medicine for the treatment of various diseases such as sores, asthma, cough, diarrhoea, rheumatism, swellings, pain and itchy skin, the disorders associated with inflammatory process. Our previous studies have shown that 70% ethanol extract of *A. pedunculata* leaves has significant anti-inflammatory activity on carrageenan induced rat paw oedema model which is widely used for determining the acute phase of the inflammation characterized with involvement of different chemical mediators such as histamine, serotonin and prostaglandins. This study was carried out as there is no published data on *in-vivo* studies to investigate the mechanisms of anti-inflammatory activity of leaves of *A. pedunculata*. Histamine induced wheal formation inhibition test was used to evaluate the anti-histamine activity of test plant extract. Healthy adult male, Wistar rats weighing 150-200g were used for experiment. The negative and positive control groups were orally administered 1.0 mL of 0.5 % carboxymethyl cellulose (CMC) and 0.67 mg of chlorpheniramine/kg b. w in 1.0 mL of 0.5 % CMC respectively. The test group received 200 mg per kg of body weight of the 70% ethanol extract of *A. pedunculata* leaves (EEAP) in 0.5% CMC. The results showed that the treatment with 200 mg/kg of EEAP significantly ( $p < 0.01$ ) inhibited the wheal formation on the skin of the rat following injection of histamine when compared with the negative control group by 28.6% reduction, whereas, 66.7% was observed in the positive control which received chlorpheniramine. Hence, the present study has demonstrated that the 70% ethanol extract of *A. pedunculata* leaves has anti-histamine activity which may be contributing to the anti-inflammatory activity observed earlier.

**Keywords:** *Acronychiapedunculata*, Histamine, Wheal formation